

BANK OF GREECE

ANNUAL REPORT

2002



ATHENS 2003

BANK OF GREECE

ANNUAL REPORT

2002

PRESENTED TO THE 70th GENERAL MEETING
OF SHAREHOLDERS ON 22 APRIL 2003
BY GOVERNOR NICHOLAS C. GARGANAS



ATHENS 2003

BANK OF GREECE
21, E. Venizelos Avenue
GR-102 50 Athens

www.bankofgreece.gr

Tel. +30 210 320 2392

Fax +30 210 323 3025

Printed in Athens, Greece
at the Bank of Greece Printing Works

ISSN 1105 - 0527

This is the English translation of the Annual Report for 2002,
originally published in Greek.

GENERAL COUNCIL

NICHOLAS C. GARGANAS	Chairman - Governor
PANAYOTIS A. THOMOPOULOS	Deputy Governor
NICHOLAS D. PALEOCRASSAS	Deputy Governor

G. AKKAS	Member
I. GOZADINOS	»
V. DROUKOPOULOS	»
O. KYRIAKOPOULOS	»
G. KYRIOPOULOS	»
C. LIAKOPOULOS	»
A. MANTZAVINOS	»
G. OIKONOMOU	»
C. SAKELLARIDI	»

M. PAPADONICOLAKI	Government Commissioner
-------------------	-------------------------

C O N T E N T S

CHAPTERS	PAGE
I. FINANCIAL RESULTS FOR 2002	15
II. THE GREEK ECONOMY: DEVELOPMENTS, PROSPECTS AND POLICY CHALLENGES	
1. Introduction	20
2. Macroeconomic developments in 2002 and prospects for 2003	22
2.1 The international economic environment and the euro area	22
2.2 Economic activity	24
2.3 Employment and unemployment	26
2.4 Inflation	28
2.5 Balance of external transactions	32
2.6 Economic prospects in 2003	35
3. Fiscal developments	37
3.1 The evolution of the general government deficit	39
3.2 The evolution of public debt	40
4. Monetary and financial developments and monetary policy in the euro area	41
5. Money, credit and capital markets in Greece	43
5.1 Monetary aggregates and interest rates	43
5.2 Credit developments	44
5.3 Capital markets	45
6. The euro cash changeover	46
7. The stability of the banking system	47
8. The Greek economy in EMU: prospects and needs for adjustment	53
8.1 Economic benefits	53
8.2 Challenges and further reforms	56
8.3 Macroeconomic policy	58
8.4 Structural reforms	63
III. ECONOMIC ACTIVITY AND EMPLOYMENT	
1. Expenditure and national income	69
1.1 Summary of developments in 2002 and the outlook for 2003	69
1.2 Consumer demand	73
1.3 Investment demand	82
2. Primary and secondary production	88
2.1 Overview	88
2.2 Agricultural production	89
2.3 Manufacturing	95

2.4 Mining and quarrying	103
2.5 Electricity-natural gas-water	105
3. Services	111
4. Employment-unemployment	115
 IV. INFLATION, WAGES AND BUSINESS PROFITS	
1. Inflation	126
1.1 Price developments in 2002	126
1.2 Inflation determinants	130
1.3 The inflation differential between Greece and the euro area	136
1.4 Recent developments in prices and the outlook for inflation	141
2. Wages and salaries	144
3. Business profits	158
 V. MONETARY POLICY AND MONETARY AND CREDIT DEVELOPMENTS IN THE EURO AREA	
1. The single monetary policy in 2002	160
2. The evolution of M3 and its components	164
3. The counterparts of M3	167
4. Money market interest rates	168
5. Retail bank interest rates	171
6. Yields on long-term government bonds	171
7. Issuance of bonds and other debt securities	173
8. Stock market developments	173
APPENDIX: Chronology of main monetary policy measures of the Eurosystem	176
 VI. MONETARY AND CREDIT DEVELOPMENTS IN GREECE	
1. Monetary developments	179
2. Credit developments	185
2.1 Total credit expansion and bank financing of general government	185
2.2 Bank credit to enterprises and households	186
3. Bank rates	192
 VII. THE CAPITAL MARKETS	
1. The market for government paper	198
1.1 The primary market	198
1.2 The secondary market	199
2. The stock market	204
3. The mutual funds market	210
 VIII. PUBLIC FINANCE	
1. The public sector borrowing requirement and its financing	214

2. Fiscal aggregates	219
2.1 The government budget	219
2.2 Social security and welfare funds	229
2.3 Public enterprises	231
2.4 Public debt	233
3. The budget for 2003	236
3.1 The central government budget	236
3.2 The budget of public enterprises and social security and welfare funds	239
APPENDIX: Tax policy measures	240
Table: Income tax scale for natural persons	240
IX. BALANCE OF PAYMENTS	
1. Current account	244
1.1 Introduction	244
1.2 Trade balance	246
1.3 Services balance	251
1.4 Income account	255
1.5 Transfers balance	255
2. Financial account	259
2.1 Introduction	259
2.2 Direct investment	260
2.3 Portfolio investment	262
2.4 Other investment	263
3. International investment position	263
X. THE BANKING SYSTEM AND ITS SUPERVISION	
1. The Greek banking system: key aggregates and structural features	265
1.1 Introduction	265
1.2 Banks' key aggregates	265
1.3 Credit system structure and conditions of competition	266
1.4 Presence of Greek credit institutions abroad	270
2. Developments in the main determinants of the banking system's stability	272
2.1 Developments in the profitability of Greek banks	272
2.2 Banking risks	274
2.2.1 Credit risk	274
2.2.2 Market risk	278
2.3 Capital adequacy	278
3. The institutional framework of banking supervision	281
3.1 International developments	281
3.2 Cooperation with foreign supervisory authorities	283
3.3 Developments in the domestic institutional framework	284

4. Other supervisory issues	286
4.1 International Accounting Standards and their relevance for banking supervision	286
4.2 Security and operational reliability of information systems	288
4.3 Prevention and suppression of money laundering	288
5. Payment systems	289
5.1 Oversight of payment systems	289
5.2 Retail payment systems	289
5.3 The HERMES payment system	290
APPENDIX: Bank of Greece decisions concerning the establishment and operation of credit institutions and the supervision of the financial system	292
GLOSSARY	296
ANNUAL ACCOUNTS OF THE BANK OF GREECE	299

TABLES

III. 1. Gross expenditure of the economy and gross domestic product	70
III. 2. Retail sales value index	74
III. 3. Gross value added at basic prices	88
III. 4. Production of basic agricultural products	89
III. 5. Producer prices and input prices	90
III. 6. Industrial production	96
III. 7. Manufacturing production	100
III. 8. Import penetration and export performance of basic manufacturing industries ...	102
III. 9. Population, labour force and employment	117
III.10. Population, labour force, employment and unemployment: second quarter	118
III.11. Private sector employment flows	122
IV. 1. Inflation indicators	127
IV. 2. Prices and costs in Greece and the euro area	140
IV. 3. Earnings, unit labour costs and productivity: 1995-2002	145
V. 1. Adjustment of key ECB interest rates	160
V. 2. Components of M3 in the euro area	165
V. 3. Main counterparts of M3 in the euro area	167
VI. 1. Greek contribution to the monetary aggregates of the euro area	180
VI. 2. Total credit expansion in Greece	186

VI. 3. Breakdown of credit supplied by domestic MFIs to domestic enterprises and households	188
VI. 4. Lending rates in the euro area and Greece	195
VII. 1. Breakdown of Greek government paper issues	199
VII. 2. Value and structure of transactions in government securities in HDAT	201
VII. 3. Stock market aggregates	207
VII. 4. Value and structure of stock market transactions	208
VII. 5. Mutual funds: number and assets	211
VII. 6. Portfolio structure of mutual funds	213
VIII. 1. General government balance	214
VIII. 2. Public sector net borrowing requirement	216
VIII. 3. Sources of financing the public sector borrowing requirement	217
VIII. 4. Revised general government deficit and debt data	219
VIII. 5. Ordinary budget revenue	222
VIII. 6. Outlays under the ordinary budget and the public investment budget	225
VIII. 7. Financial results of social security funds and their financing	230
VIII. 8. Financial results of public enterprises and their financing	232
VIII. 9. Consolidated debt of general government	234
VIII.10. Breakdown of changes in the government debt ratio	235
VIII.11. Revenue, expenditure and deficit under the overall government budget	237
VIII.12. Financial account of Greece with the European Union	238
IX. 1. Balance of payments	244
IX. 2. Breakdown of external trade by product category	247
IX. 3. Effective exchange rate and export prices	248
IX. 4. Country breakdown of Greek external trade	249
IX. 5. Balances on services, income and transfers	252
IX. 6. Financial account balance	260
IX. 7. Country breakdown of Greek residents' direct investment abroad	261
IX. 8. Country breakdown of non-residents' direct investment in Greece	262
IX. 9. International investment position	264
X. 1. Banks' key balance sheet aggregates	266
X. 2. Structure of the Greek credit system	267
X. 3. Number of banks in the top 100, based on total assets	269
X. 4. Presence of Greek banks in South-Eastern Europe	270
X. 5. Subsidiaries and branches of Greek credit institutions in South-Eastern Europe ..	271
X. 6. Banks' operating results	273

X. 7. Annual percentage changes in bad credit record data	278
X. 8. Payment traffic in the HERMES and TARGET systems	290

CHARTS

II. 1. Economic growth rates in Greece and the euro area	24
II. 2. Unemployed persons and unemployment rate	26
II. 3. Harmonised index of consumer prices: Greece and the euro area	29
II. 4. Harmonised index of consumer prices excluding energy and unprocessed food: Greece and the euro area	30
II. 5. Harmonised index of consumer prices: Greece and the euro area	31
II. 6. Current account balance	33
II. 7. General government revenue, expenditure and deficit	37
II. 8. General government primary surplus and cyclically adjusted primary surplus	38
II. 9. ECB interest rates and money market overnight rate (EONIA)	41
II.10. Fiscal policy stance: Annual changes in the cyclically adjusted primary surplus ...	59
III. 1. Consumer demand	72
A. Retail sales volume and business expectations	72
B. New passenger car registrations	72
III. 2. Retail sales value index	73
III. 3. Main indicators of investment activity	84
III. 4. Output and business expectations in manufacturing	97
A. Indices	97
B. Percentage changes over same month of previous year	97
III. 5. Indicators of industrial production	98
III. 6. Purchasing managers' index (PMI) for manufacturing	99
III. 7. Activity indicators for services	112
III. 8. Total unemployment rate	116
III. 9. Business forecasts for employment	121
IV. 1. Consumer price index and core inflation	126
IV. 2. Wholesale price index in Greece	128
IV. 3. Import price index and the inverse of the nominal effective exchange rate of the currency	129
IV. 4. Contribution of key components to Greek inflation	131
IV. 5. A. CPI and WPI fuel prices and average price (in domestic currency) of Brent crude oil	132
B. Inflationary contribution of the increase in fuel prices	132
IV. 6. Euro effective exchange rate index, weighted on the basis of Greece's external trade	134

IV. 7. Inflation in EU countries on the basis of HICPs	137
IV. 8. CPI goods and services	139
IV. 9. Inflation differentials between Greece and the euro area	141
IV.10. A. Inflation expectations of consumers and business firms	143
B. Wholesale price index for domestic industrial goods, and inflation expectations of industrial firms	143
V. 1. M3 in the euro area	166
V. 2. Short-term interest rates in the euro area	169
V. 3. Yield curves in the money and bond markets in the euro area	170
V. 4. Ten-year bond yields in the euro area and the United States	172
V. 5. Stock market indices	174
VI. 1. M3 in the euro area and Greece	181
VI. 2. Counterparts of the Greek contribution to M3	182
VI. 3. Percentage contribution of M3 components in Greece	184
VI. 4. Credit expansion to enterprises and households	187
VI. 5. Breakdown of credit expansion to enterprises and households	190
VI. 6. Bank deposit rates in Greece	193
VI. 7. Bank lending rates in Greece	194
VI. 8. Bank lending rate differentials between Greece and the euro area	196
VII. 1. A. Average daily value of transactions in Greek government securities in the book-entry securities system	202
B. Average daily value of transactions in HDAT	202
VII. 2. Yield on Greek 10-year government bond and yield differential over the corresponding German bond	203
VII. 3. A. Share price indices of the Athens Stock Exchange	205
B. Average daily value of transactions	205
C. Monthly marketability of shares	205
VII. 4. Mutual funds: number and assets	210
VIII. 1. Primary surplus of government budget as a percentage of GDP	220
VIII. 2. Composition of outlays under the ordinary budget	226
VIII. 3. Overrun of personnel outlays as a percentage of the budgeted amount	227
VIII. 4. Interest payments on central government debt	228
X. 1. Provisioning coverage (%) of non-performing loans	275
X. 2. Accounting and supervisory provisions: their percentage impact on the CAR	276
X. 3. Evolution of total banks's capital adequacy	279
X. 4. Breakdown of risk-weighted assets (%)	280

BOXES

III. 1. The household savings ratio	74
Table: Household disposable income, consumption and savings	75
III. 2. The EU housing market and recent housing price developments in Greece	76
Table: Prices of dwellings	77
III. 3. Changes in the value of households' assets in Greek government paper	
from 1995 through 2002	79
Table: Evolution of the value of households' assets in Greek government paper ...	80
Charts: Evolution of households' assets in Greek government paper	
and yields of the latter	81
Evolution of households' assets in Greek government paper,	
shares and dwellings as percentages of their disposable income	82
III. 4. Construction industry: developments and outlook	85
III. 5. Mid-term review of the Common Agricultural Policy (CAP)	90
III. 6. Developments in the market for natural gas	105
III. 7. The deregulation of the electricity market	107
IV. 1. Personal income tax, 1989-2001	146
Table: Personal income tax data by occupational group, 1990-2002	147
Chart: Average tax burden by occupational group	150
IV. 2. Productivity indicators, 1996-2002	151
Table: Productivity indicators for the whole economy and for the non-agricultural sector, 1996-2002	152
IV. 3. Wages and labour costs in Greece and the EU	155
IX. 1. The outlook of tourism for 2003: results of a special survey conducted in selected tourist areas of Greece	253
IX. 2. The outlook of transfers from the EU after 2006	256

I. FINANCIAL RESULTS FOR 2002

The Bank's Profit and Loss Account for 2002 shows total revenue of €553.9 million and total operating expenses of €340.7 million. Therefore, net profits reached €213.2 million, compared with €506.3 million in 2001.

Out of these net profits, the General Council proposes to the General Meeting of shareholders that an amount of €8.0 million, corresponding to 12% of the Bank's share capital, be distributed as a first dividend to shareholders under Article 71 of the Bank's Statute. Under the same article, the General Council proposes the allocation of €16.9 million to increase ordinary reserves, so that they will be equal to the share capital. It should be recalled that, following a General Council decision on 26 April 2002 and an approval by the Council of Ministers (Act 32/23 May 2002), the Bank's share capital was raised by €16.9 million, through the issuance of 2,979,733 shares, at a nominal value of €5.6 each. An amount of €10.8 million represents the readjustment of the value of the Bank's land and buildings, while an amount of €6.1 million comes from the provisions account. Accordingly, the share capital of the Bank of Greece came to €66.7 million, corresponding to 11,918,932 shares, of a nominal value of €5.6 each. Shareholders who held shares before 30 May 2002 were allotted one new share for every three old ones. The General Council also proposes the distribution of €18.2 million as an additional dividend. Thus, the total dividend comes to €26.2 million, compared with €28.9 million in 2001. The total dividend per share comes to €2.2, which is 9.18% less than in 2001. From the balance of net profits after the payment of income tax, an amount of €156.0 million shall be paid to the State, in accordance with Article 71 of the Statute, compared with €457.9 million in 2001.

Total revenue from interest, commission fees and other receipts from domestic and foreign transactions, including transactions with the European Central Bank (ECB) and the other members of the European System of Central Banks (ESCB), net of interest and commission payments, decreased by €249.5 million or 31.1% compared with 2001 and came, as mentioned above, to €553.9 million.

Net interest income from claims against the Greek State and domestic or foreign credit institutions dropped by €233.0 million compared with 2001. This is attributable mainly to the decrease in net tax paid by the State and in interest from the investment of foreign exchange reserves in securities and with credit institutions abroad, as well as to the €138.0 million higher payment of interest on the debit balance of the Bank's transaction account with the ECB, in connection with the operation of the TARGET system. In greater detail, net interest from transactions between the Bank of Greece and the Greek State dropped by €204.6 million, reflecting the decrease in interest on loans with a foreign currency clause and on investment in government securities. Specifically, interest from claims with a foreign currency clause dropped by €189.5 million and interest from investment in government paper by €25.9 million, mainly because of the sharp drop in euro area interest rates. These were partly counterbalanced by the €20.6 million lower

interest paid by the Bank on government deposits. Interest from the investment of foreign exchange reserves fell by €173.0 million, owing to considerable interest rate cuts. Interest from refinancing operations to boost the liquidity of banks decreased by €66.4 million. At the same time, interest paid on credit institutions' deposits, including reserve requirements, dropped by €268.2 million, while interest paid on credit institutions' redeposits in foreign currency declined by €163.5 million. This development is related primarily to the full release (within 2002) of the total amount of credit institutions' compulsory redeposits in euro and in foreign currency with the Bank of Greece. Additionally, an amount of €74.4 million concerns the costs incurred by the Bank in the context of the mechanisms for collecting and redistributing monetary income within the Eurosystem.

The net balance of the Bank's financial operations, after amortisation payments, stood at €146.0 million, compared with €275.2 million in 2001; it concerns profits and losses from operations in foreign currency and securities, as well as non-realised losses from the valuation of foreign exchange on 31 December 2002.

Net revenue from commission fees rose by €14.0 million in 2002 compared with 2001 and reached €111.2 million. Other net revenue grew by €98.7 million and came to €173.5 million in 2002. Out of this amount, €31.0 million concerns the participation of the Bank of Greece in the distribution of ECB profits, whereas €102.5 million represents 50% of the value of drachma banknotes which are estimated not to be returned to the Bank by 28 February 2012, the deadline for the conversion of drachma banknotes into euro. Relevant transfers to the 2002 profit and loss accounts have been effected by other euro area national central banks, following an ECB decision to exclude from currency in circulation, as from 1 January 2003, the quantity of national banknotes that have not yet been returned.

The Bank's total operating expenses, excluding amortisation payments, provisions and taxes, grew by €14.6 million to €261.9 million in 2002. Outlays for personnel remuneration and pensions rose by €10.7 million or 7.1%, against 8.5% in 2001. This increase was a result of grade and pay advancement as well as of the implementation of the wage agreements at branch and Bank of Greece levels, the hiring of temporary personnel and the increase in overtime, which was necessary for the withdrawal of drachma banknotes and coins, the completion of the supply of euro to the Bank's branches and credit institutions and, lastly, the full functioning of the Bank's new computerised system of transactions. Administrative and other operating expenses showed a small decrease of €1.3 million in 2002, compared with a €19.5 million increase in 2001. This is attributable mainly to considerably less expenditure for the purchase of raw material for printing euro banknotes, the bulk of which was printed in 2001, as well as reduced expenditure for public information campaigns about the euro.

In the course of 2002, the Bank of Greece recruited 35 employees, among which 19 IT experts, 3 mechanical engineers and 2 chemical engineers to cover Bank of Greece Printing Works (IETA) needs, as well as 4 communications and public relations experts. During the same period, 56 employees retired. Thus, the Bank's staff decreased by 21

members and on 1 January 2003, after another 2 employees retired as they had reached the age limit, it came to 3,067 persons.

Considerable progress was made in 2002 in reorganising and modernising the Bank, with a view to enhancing its efficiency as a member of the European System of Central Banks. In the field of IT, the technical infrastructure that supports the new system of transactions was completed, an alternative computer centre started being prepared, while a policy framework for the security of computer systems, together with an emergency plan and procedures for restoring the Bank's IT functions after disasters, were approved. Investment in equipment and system upgrades were also carried out in other departments of the Bank. In particular, the equipment supporting the Electronic Secondary Securities Market (HDAT) and the repo market was replaced and new software offering very high processing speed was introduced. Additionally, the equipment supporting the operations of the Foreign Exchange Department started being upgraded, while new applications are being installed in the Economic Research Department, which will speed up and facilitate the work of the Publications and Translations Section.

Also in 2002, the mechanical equipment of IETA was upgraded with state-of-the-art machinery. At the same time, the construction of the new Cash Sorting and Handling Centre in IETA and of the Bank's new building on Amerikis street has paced up; both buildings are expected to be ready by the end of 2003.

The Bank of Greece, in order to enhance its contacts and cooperation with central banks in the EU, the accession and South-Eastern European countries, moved to the restructuring and upgrading of the International Relations Service into a Division. Furthermore, two new sections have been formed in the Administration Department: the Secretariat Section and the Communication, Press and Public Relations Section. Combined with other changes, these adjustments in the Bank's organisation chart will promote its operational efficiency and facilitate cooperation and contacts within the Eurosystem.

With a view to improving the professional skills and specialisation of the Bank's staff, as well as familiarising it with new financial products and administration tools, a significant number of the staff attended specialised training programmes in fields related to the Bank's operations. Among the subjects covered were the importance of timely recognition and assessment of market risks for the more efficient supervision of the banking system as well as understanding the new accounting models and risks related to e-banking. Furthermore, the Bank of Greece organised and held custom-made training courses that responded to the specialised needs of the personnel of Balkan, Central and Eastern European central banks.

In the context of further promoting communication and cooperation among central banks of South-Eastern European and Asian countries, the Central Bank Governors' Club met twice in 2002, in May 2002 in Thessaloniki and in October 2002 in Nafplion, under the presidency of the Governor of the Bank of Greece. Distinguished economists and executives of international economic organisations participated as key speakers and discussed monetary, fiscal and exchange rate policies, as well as banking supervision mat-

ters, while they also analysed developments in international money markets and the world economy.

Given the already considerable and expanding activity of Greek banks in the Balkans, further initiatives were taken for the development of central bank bilateral relations in the region. In this context, in December 2002 the Governor of the Bank of Greece and the Governor of the National Bank of Yugoslavia signed a Memorandum of Understanding in Belgrade. Furthermore, the Governor of the Bank of Greece and the Governor of the Bank of Romania signed a Memorandum of Understanding in Bucharest in January 2003. Both memoranda concerned issues pertaining to the supervision of financial institutions.

Between 18 February and 30 March 2003, the Bank of Greece exhibited in the Athens Concert Hall a considerable number of Greek paintings and engravings from its own collection and from other private collections. The show, entitled “The Emergence of Modern Greek Painting 1830-1930”, was organised on the occasion of the Bank’s 75th anniversary and plays a part in its long and comprehensive tradition of contributing to the country’s cultural life. The same works had been presented earlier (30 September-3 December 2002) in Washington D.C., at the Eccles Building of the Federal Reserve Board.

The Bank continued to play an active role in all its fields of competence. As part of the Eurosystem, it participated actively, for the second consecutive year, in the wide range of activities related to the implementation of the single monetary policy, a fact that further enhanced its prestige and reliability both at home and abroad. In particular, it made a decisive contribution to the swift and smooth introduction of euro banknotes and coins in the first two months of 2002 and the gradual withdrawal of the drachma. At the same time, it responded positively to its other competencies, such as the supervision of the banking system and the oversight and management of payment systems.

The Bank’s personnel played a key part in the successful attainment of the Bank’s goals. As always, the Bank’s personnel worked meticulously, with zeal and a high sense of responsibility. I should note that the Bank is staffed with high-calibre and loyal executives, who have demonstrated the capacity to adapt to new conditions and requirements. I would like to thank and congratulate all the employees of the Bank and I invite you to offer them our commendation.

The General Council of the Bank, at its meeting on 27 May 2002, accepted the resignation of Professor Lucas Papademos from the post of Governor, with effect from 1 June 2002. On the same day, the General Council honoured me by proposing to the Council of Ministers my appointment to the post of Governor of the Bank of Greece. By the same decision, the General Council proposed the appointment of Mr Nicholas Paleocrassas to the post of Deputy Governor. Mr Paleocrassas, coming from the permanent staff of the Bank, has been offering his valuable services for many years at all levels and for the past four and a half years he has been a member of the Monetary Policy Council. These proposals were accepted by the Council of Ministers and the appointments were effected on 14 June 2002, by means of a Presidential Decree published in the Government Gazette.

I would like to thank the Vice-President of the European Central Bank, Mr Lucas Papademos, who was Governor of the Bank of Greece for seven and a half years and with whom, as Deputy Governor of the Bank from 5 September 1996 until my appointment as Governor, I was in close and fruitful cooperation in our common effort to improve the role of the Bank of Greece in pursuing monetary policy and prepare the Bank's unhindered integration into the Eurosystem and the introduction of the euro. In recognition of his overall contribution and his appointment as Vice-President of the European Central Bank (which had been already announced), the 69th General Meeting of Shareholders on 29 April 2002, following a proposal by the General Council, decided to grant him the title of Honorary Governor of the Bank of Greece.

Furthermore, the Bank's General Council, at its meeting of 7 January 2003, proposed to the Council of Ministers the renewal of the term of Deputy Governor Panayotis Thomopoulos, which expired on 26 February 2003. This proposal was accepted and Mr Thomopoulos' term of office was renewed on 14 February 2003 by means of a Presidential Decree published in the Government Gazette. I would like to note that I am particularly happy to have the support and collaboration of our two Deputy Governors, who are distinguished for their high professional competency, their long experience, their impeccable ethos and their loyalty to the Bank.

By a Presidential Decree published in the Government Gazette, Professor Georgios Oikonomou was appointed member of the Monetary Policy Council, thus taking the place of Mr Nicholas Paleocrassas for the remainder of his term (up to 10 April 2008). Mr Oikonomou is a distinguished scientist, with profound knowledge and experience in economic and financial matters.

At today's 70th Annual General Meeting, in accordance with Article 21 of the Bank's Statute, the terms of office of General Council members Mr George Kyriopoulos and Mr Christos Liakopoulos expire. Consequently, the General Meeting will be called upon to elect two new General Council members, for a three-year term, i.e. until the Annual General Meeting of 2006.

The outgoing General Council members are eligible for re-election.

II. THE GREEK ECONOMY: DEVELOPMENTS, PROSPECTS AND POLICY CHALLENGES

1. INTRODUCTION

The year 2002 was very important for the countries participating in the euro area, because euro banknotes and coins had to be brought into circulation, in order to complete the transition to the final phase of Economic and Monetary Union (EMU). The systematic preparations and efforts made by the European Central Bank (ECB), the national central banks and competent authorities contributed to the success of this unique undertaking. As a result, the changeover to the new currency, which started on 1 January 2002, was carried out smoothly by 1 March 2002, on which date the national currencies of the euro area countries ceased to be legal tender.

The adoption of the single currency and the high degree of macroeconomic stability and reliability stemming from Greece's participation in EMU have contributed in recent years to the acceleration of the GDP growth rate, which (according to provisional estimates by the National Statistical Service of Greece – NSSG) stood at 4% in 2002, i.e. about the same level as in 2001. This occurred despite the adverse international economic environment, which was characterised by a marked weakening of economic activity in the European Union, increased uncertainty owing to the possibility of a war in Iraq, and the negative impact of the continuing – for the third consecutive year – drop of share prices in world markets.

The sustained strong GDP growth in recent years is also attributable to (i) considerable inflows from the EU Structural Funds, which contributed to the financing of investment in infrastructure, (ii) private and public investment, especially in construction and services in view of the 2004 Olympic Games, and (iii) a number of structural reforms.

Despite the satisfactory growth performance, the increase in employment was small and the rate of unemployment declined at a relatively slow pace. Additionally, inflation was higher than in most euro area countries. The average rate of inflation in Greece (on the basis of the Consumer Price Index – CPI) came to 3.6% in 2002, i.e. it was slightly higher than in 2001 (3.4%), while its differential (on the basis of the Harmonised Index of Consumer Prices – HICP) over the average annual inflation in the euro area widened. However, core inflation remained virtually unchanged in 2002 and its differential over the corresponding rate in the euro area narrowed. To a degree, such a divergence was to be expected, as it reflects faster GDP growth, compared with the euro area, and the considerable increase in productivity in the sectors of tradeable goods and services in Greece. However, should this deviation persist, it could threaten the competitiveness of the Greek economy.

The current account deficit decreased only marginally in 2002, to 6.1% of GDP (from 6.2% in 2001). The existence of a high current account deficit, which reflects a shortfall of domestic saving relative to domestic investment, is to be expected in a fast-

growing economy which is traditionally a net capital importer. However, the deficits recorded in recent years seem to stem also from a loss of price competitiveness. Of course, after the entry of Greece into the euro area, the financing of the current account deficit lost much of its importance as a constraint on the conduct of economic policy but, if the current levels of the deficit persist, they could have negative repercussions on growth and employment.

The above observations indicate that further structural reforms and fiscal adjustment are needed in order to improve the competitiveness of the Greek economy and achieve real convergence towards the other euro area countries. In particular, structural reforms are needed in the product and labour markets. For many years, labour market rigidities have contributed to a faster growth of unit labour costs relative to the euro area as a whole and a relatively slow increase in employment (despite strong economic growth). On the other hand, further fiscal adjustment could reduce inflationary pressure and the current account deficit and public debt (as a percentage of GDP). At the same time, it could provide the economy with flexibility essential for dealing with potential external shocks and should reduce risk premia, leading to a further decrease in interest rates and thus boosting business investment.

For 2003, the Bank of Greece projects that the GDP growth rate will decelerate only slightly compared with the high rates of previous years, as investment expenditure for major infrastructure projects and the preparation of the 2004 Olympic Games will continue to have a positive effect on economic growth. However, owing to the unusually high uncertainty (because of geopolitical tensions) regarding crude oil prices, it is difficult to make reliable forecasts on the average annual rate of headline inflation. Nevertheless, core inflation, which excludes oil and fresh fruit and vegetable prices, is expected to stand at around 2002 levels.

Forecasts included in the present Report have only partly taken into account the consequences of the war in Iraq. It is estimated that the impact of the war on the Greek economy will be limited, also given its relatively short duration.

Therefore, it is estimated that the Greek economy will keep up its strong performance in 2003, despite geopolitical tensions and uncertainty in world financial markets. As was the case in previous years, the expected high growth rate for 2003 will be supported by investment expenditure, which is partly associated with transfers from the EU Structural Funds, the major infrastructure projects and the 2004 Olympics. However, for these high growth rates to be maintained in the future, the private business sector has to undertake considerable investment, mostly in new export-oriented industries, in order to reap the full benefits of euro area participation and EU enlargement. It is also necessary to create favourable conditions for attracting significant foreign direct investment, which are also instrumental in enhancing the export orientation of the Greek economy.

However, to encourage domestic and foreign business investment, it is necessary to eliminate investment-inhibiting factors that still remain in Greece. It is also necessary to eliminate those factors that cause rigidities and distortions in the operation of markets and

to establish a system of constant rules to govern the operation of the economy. It is acknowledged that in recent years progress has been made in this direction. Yet some difficulties and problems remain, which discourage private business investment, especially in manufacturing. For this reason, a number of reforms have to be completed; among these, the most important are the reduction of interventions in economic life which hinder the operation of markets, as well as further measures to eliminate structural rigidities in the labour and product markets and to reduce public debt, which remains high. This will lay the foundations for faster economic growth, higher employment and an improvement in living standards in the years after the 2004 Olympic Games, when transfers from the EU Structural Funds will be gradually reduced.

2. MACROECONOMIC DEVELOPMENTS IN 2002 AND PROSPECTS FOR 2003

2.1. The international economic environment and the euro area

World economic activity recovered in 2002, after the temporary slowdown (or slight contraction in some countries) observed in the course of 2001. However, the recovery was weaker than what was anticipated at the beginning of the year. After a promising start in the last months of 2001 and in early 2002, recovery began to lose momentum during the second half of 2002 and weakened even further towards the end of the year. Overall in 2002, world GDP is estimated to have increased by 3.0%, i.e. at a rate quite faster than in 2001 (2.3%) but markedly lower than its average for the last five years.

Among the factors contributing to the initial revitalisation of world economic activity, particularly influential were:

- first, the completion of the process of destocking, and thus, the upturn of production in order to replenish stocks, and
- second, the easing of monetary and fiscal policies in the advanced economies, most markedly in the United States and the United Kingdom.

These factors continued to have a favourable effect throughout 2002. Over time however, this effect started to be offset by the weakening confidence of consumers and investors caused by the disclosure of important irregularities in the management and auditing practices of large multinational firms, by the virtually uninterrupted fall in share prices and, more recently, by increased geopolitical tensions, particularly in the Middle East. The fall in share prices also had some indirect effects on the financial position of business firms, insurance companies, banks and pension funds, while at the same time tending to increase the costs of finance for new investment. Thus, it dampened the anticipated rise in consumer and investment expenditure in the advanced countries.

In 2002, the pace of economic recovery varied significantly across countries. Among the advanced industrial countries, recovery in the United States, the United

Kingdom and Canada was considerably stronger than in the euro area and Japan. It was even stronger in the emerging economies of Asia and in the accession countries of Central and Eastern Europe. Such differences in growth rates resulted in a further broadening of current account imbalances in major countries, in particular the United States. Combined with the gradual loss of investor confidence in the prospects for a recovery of the share prices of US firms and with the heightened concerns about the consequences of a military intervention in Iraq, the worsening of such imbalances brought about a considerable weakening of the US dollar in international markets, particularly against the euro and the Japanese yen.

In the euro area, the economic recovery recorded in the first quarter of 2002 wore off thereafter and GDP finally grew at a rate of 0.8% for the whole of the year. Investment shrank in 2002, while the main factor contributing to the growth of GDP was activity in the services sector. Despite the economic slowdown, new job creation continued, although at a slow pace, while the increase in the unemployment rate was limited. Fiscal deficits overshot targets for 2002. Specifically, general government total deficit in the euro area is estimated to have risen to 2.2% of GDP in 2002, from 1.6% in 2001, mainly on account of the economic slowdown. Moreover, the declining trend in the ratio of public debt to GDP was interrupted.

The short-term outlook for the world economy is highly uncertain at present, as it is hard to predict the consequences of the war in Iraq. On the basis of the assumption that the situation in Iraq will soon stabilise and that there will be no other tensions in the near future, the IMF forecasts that recovery will continue in 2003, albeit at a rather slow pace, and will come close to the rate of potential output growth, but only towards the end of the year. For the whole of 2003, world GDP is expected to rise by 3.2%, i.e. at a rate slightly higher than in 2002. The factors which will contribute to this moderate acceleration of GDP growth include the gradual strengthening of consumer and investor confidence, the ongoing favourable effects of the economic policy measures taken last year, as well as the continuing growth of inventories. It is expected that, among the industrial countries, recovery will continue to be comparatively stronger in the United States. On the other hand, prospects for Japan and the euro area remain less optimistic.

With specific regard to the euro area, the sluggishness of the recovery and the high uncertainty caused by the geopolitical tensions lead to the estimate that the average annual rate of GDP growth in 2003 will be in the region of 1%.¹

Inflation remained at very low levels in 2002. Consumer prices rose by 1.5% (on average) in the advanced economies and by less than 5.5% in the developing countries.

In the euro area, the fairly minor deceleration in HICP inflation (to 2.2% in 2002, from 2.4% in 2001) mainly reflected the persistence of core inflation at a high level (and particularly the evolution of services prices). On the other hand, the unfavourable effect

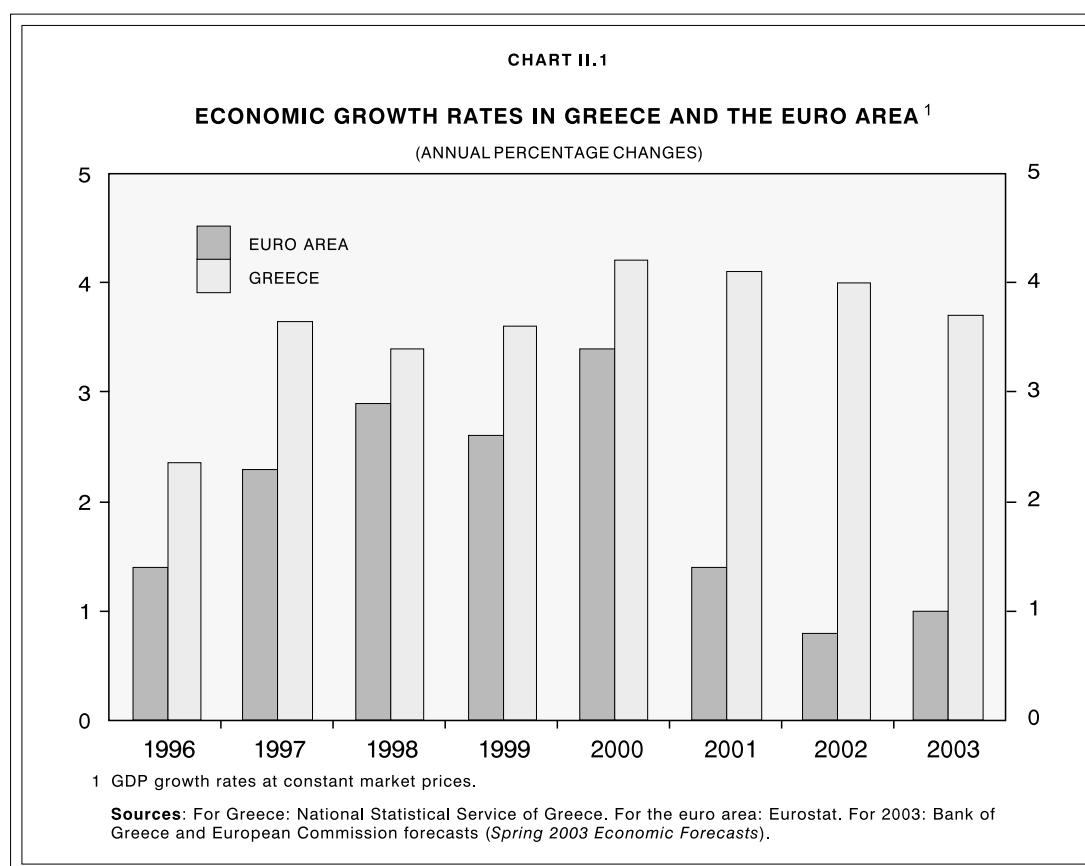
1 See European Commission, *Spring 2003 Economic Forecasts*, 9 April 2003.

of rising oil prices in US dollars was more than offset by the favourable effect of the appreciation of the euro.

For 2003 it is projected that inflation in the euro area will tend to decline further, albeit slightly, mainly as a consequence of the subdued activity growth, but also due to the appreciation of the euro. In almost all the other regions of the world, inflation is expected to remain broadly stable, at comparatively low levels.

2.2. Economic activity

Gross domestic product has been increasing in Greece at a high annual rate during the last few years (3.8% on average over the six years from 1997 to 2002) and markedly faster than in the euro area (2.6% over the same period). In 2002, despite the unfavourable



international environment, and particularly the substantial economic slowdown in the euro area as a whole (0.8% in 2002, compared with 1.4% in 2001), the Greek GDP growth was barely affected and – according to NSSG provisional estimates – came to 4.0% in 2002, i.e. it was the second highest in the EU (see Chart II.1).

The main factor that contributed to the maintenance of a high rate of GDP growth was the increase in private consumer demand, private residential investment and investment by public and private enterprises, particularly in the construction and services sectors. In contrast, investment by private manufacturing firms was reduced, while investment by the general government sector increased (on a national accounts basis) at a very low rate.

The unfavourable effects of the international economic environment were manifested mainly in the decrease in the exports of goods and tourist services, which may have also been affected by the decline in price competitiveness recorded in 2002. Nevertheless, as at the same time goods imports practically remained unchanged and services imports decreased considerably, the contribution of the real external balance to the change in GDP, although negative, was relatively small.

The strong growth performance during the last three years has been supported, *inter alia*, by certain factors that have made the Greek economy less vulnerable to cyclical developments in the international economy. These factors include the decrease in interest rates and the ensuing fast credit expansion that strengthen consumption and investment, as well as the continuing inflow of substantial funds from the EU, which are channelled into the financing of investment in infrastructure.

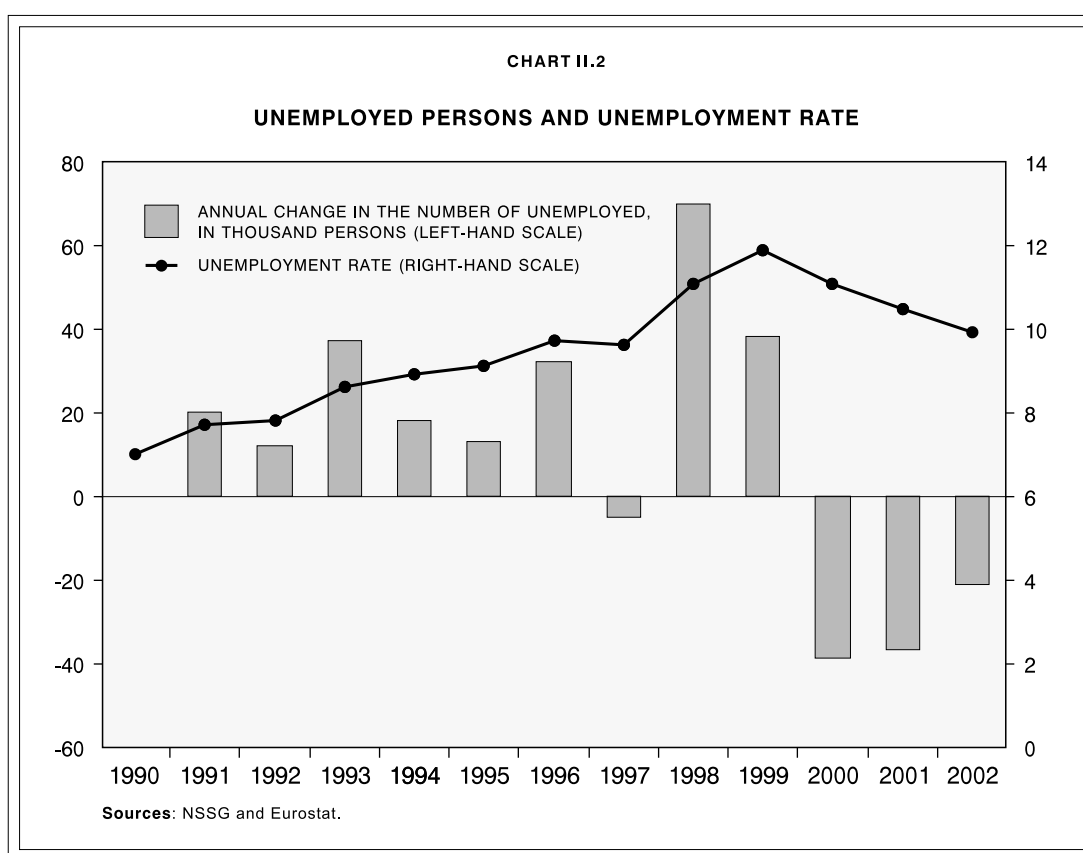
In particular, a key factor contributing to the growth of private consumption recorded in 2002 was the increase in the real disposable income of households, which reflected the higher average real pre-tax earnings of employees, the reduced tax burden and the rise in employment. Furthermore, consumer credit expansion continued to make a considerable positive contribution, despite the deceleration in the annual growth rate of the consumer loans outstanding balance to 24.2% in 2002, compared with 42.5% in 2001. Finally, the effect of the increase in total household wealth is deemed to have been positive (given that the decrease in the current value of shares was more than offset by the increase in the current value of dwellings and bonds).

In addition, the increase in investment expenditure, mainly in the sectors of construction and services (as already mentioned), is linked to the preparations for the 2004 Olympic Games and, more generally, to projects upgrading and expanding the country's infrastructure.

Despite the external shocks, GDP growth remained resilient in 2002, being supported by buoyant domestic demand. The sustained strong growth is also attributable to the strengthening of the environment of macroeconomic stability and confidence, owing to the drastic decrease in inflation and fiscal deficits during the efforts made in the course of the 1990s for achieving nominal convergence, to the country's entry into the euro area in January 2001, as well as to the implementation of some structural reforms in recent years, the most important of which was the deregulation of the telecommunications market. On the supply side, another determinant was the estimated steady increase in total factor productivity – a result of the gradual introduction of new technologies and innovation, but also of the labour-saving policies practised by enterprises.

2.3. *Employment and unemployment*

Total employment (average annual level) increased in 2002 by 1%, or by 38,000 persons, following a decrease or stagnation in the previous three years. At the same time, the number of unemployed decreased by 21,000 persons, so that the rate of unemployment declined and, for the first time since 1997, stood below 10% (namely at 9.9% – see Chart II.2). As a result of these developments, the rate of employment¹ rose by more than one percentage point (to 56.7%).



The rise in employment concerned mainly the 30-64 age group and was larger than the relatively small decrease in the number of unemployed in the same group. This suggests an increase in the labour force participation rate for people aged 30-64, which could be attributed to the favourable cumulative effect from the growth of economic activity over a number of years, as well as the implementation of the special programmes to promote employment.

¹ As defined by Eurostat, i.e. number of employed people aged 15-64 as a percentage of the population aged 15-64.

The decline in the number of unemployed was particularly pronounced for the 15-29 age group, which also showed a small decrease in the number of employed – both developments are mainly connected to the increasing participation of young people in education and in training programmes. This is also reflected in a decrease in the number of “new” unemployed persons (i.e. of people seeking work for the first time), which came to 40.1% of the total number of unemployed persons in 2002, from 45.7% in 2001. The rate of unemployment for young people aged 15-24 fell to 26.5%, from 28.1% in 2001, but remains high. Particularly high is the unemployment rate for young women aged 15-24 – at 34.3%, which is almost double that in the EU as a whole – while the unemployment rate for men aged 15-24 is also higher than the corresponding EU figure (19.6%, compared with 14.6%). Finally, female unemployment in general is also high (15.0% for women aged 15 or over). By contrast, unemployment for men aged 25 or over is lower than in the EU (5.2%, compared with 5.8%). This perhaps explains why the overall high unemployment recorded in Greece does not have a strong social impact similar to that observed in other European countries. Finally, although the long-term unemployed, i.e. those who remain jobless for more than 12 months, decreased in number by 10,000 persons, they still represent more than 50% of total unemployment.

The rise in employment was mainly concentrated in certain branches of the services sector, construction and – in contrast to the long-standing downward trend – agriculture (in the second half of 2002). However, a decrease in employment was recorded in manufacturing, as well as in some other branches of services. Moreover, in practically all branches of economic activity the number of the self-employed who are not employers rose – by 52,000 persons in total – while the number of the self-employed who are employers fell by 18,000 persons. The number of employees increased by 4,000 persons (i.e. by 0.2%, compared with 2.2% in 2001).

This quite small rise in the number of employees (after a considerable increase in the last few years) is at first glance conjunctural and attributable to the decrease in the number of employees in manufacturing, mainly on account of the slowdown recorded in manufacturing production growth, which was also affected by the weaker growth of exports of non-oil manufactures. With respect to the determinants of the considerable increase in the number of the self-employed who are not employers observed in 2002, the following are noted: First, the prolonged period of economic growth may have encouraged the establishment of small personal enterprises and/or the taking-up of independent professional activities. This trend may have been strengthened by certain tax and social security regulations which, as already noted,¹ function as a disincentive to the undertaking of dependent/waged labour. Second, despite the elements of flexibility introduced by Law 2874/2000, some labour regulations may still be forcing enterprises (particularly the larger ones) to avoid hiring personnel in dependent labour positions. Therefore, to the extent

1 See also G. Burtless, “The Greek labour market”, in R.C. Bryant, N.C. Garganas and G.S. Tavlas (eds) *Greece's economic performance and prospects*, Bank of Greece and The Brookings Institution, Athens 2001.

that the supply of such positions is insufficient, several of those seeking employment possibly end up establishing personal enterprises or taking-up independent professional activities. Third, the advancements in telecommunications and information technologies, as well as in production organisation, particularly in the services sector, favour — as has already been observed in more advanced economies — self-employment, i.e. the provision of services by free-lancers, having no permanent dependence on one employer.

Part-time employment rose to 4.5% of total employment in 2002 (from 4.0% in 2001), while the corresponding share for the EU as a whole is much higher (almost 18%). However, the share of part-time employment remained lower than the comparatively high level recorded in Greece in the first quarter of 1999 (6.9%). The decrease in the number of those employed part-time, by 95,000 between the first quarter of 1999 and the last quarter of 2002, mainly reflects the increased opportunities for full-time employment and the increased preference of job-seekers themselves for full-time employment. Indeed, during this period, the number of part-time employed persons who state that they cannot find full-time work decreased by 60,000, whereas the number of those who state that they do not want full-time work decreased by 27,000 persons. Nevertheless, the supply of part-time labour is considerable. In the last quarter of 2002, 54.4% of the unemployed were prepared to work either full-time or part-time, whereas only 38% of them were exclusively interested in full-time employment.

2.4. Inflation

Despite the unfavourable effects from the exceptionally strong increase in fresh fruit and vegetable prices in early 2002 and rising crude oil prices during the year, average inflation in 2002 remained close to the levels forecast at the beginning of the year. Specifically, the average annual rate of CPI inflation for the entire year came to 3.6%, compared with 3.4% in 2001. Be that as it may, for a third consecutive year inflation remained well above the levels deemed compatible with price stability.¹ Furthermore, the deviation of HICP inflation in Greece over average annual inflation in the euro area widened to 1.7 percentage points, from 1.3 percentage points in 2001 and 0.8 percentage point in 2000 (see Charts II.3 and II.5).² This increase in the inflation differential in 2002 on the basis of the general HICP is due to special factors, such as the greater exposure of the Greek economy to the rise in oil prices, the stronger effects — compared with other euro area countries — of the adverse weather conditions prevailing in the December 2001-January 2002 period on the prices of fresh fruit and vegetables, and — to a much lesser extent — the slightly greater (than in the euro area) impact of the upward rounding and/or raising of prices effected on account, or under the pretext, of the euro cash changeover.

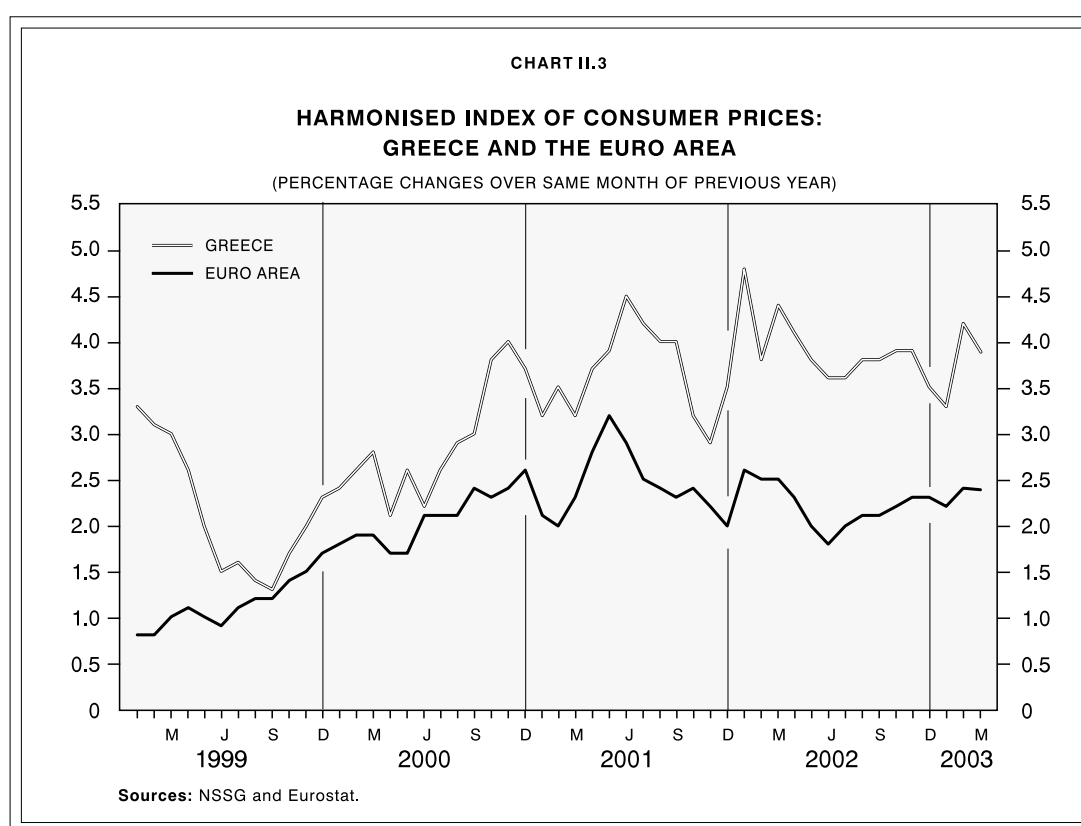
¹ According to the European Central Bank, price stability is defined as year-on-year increases in consumer prices below 2%.

² Euro area data for 2000 and 2001 have been revised.

Core inflation, however, remained practically unchanged in 2002, and its differential over the corresponding figure for the euro area narrowed to 1.4 percentage points, from 1.8 percentage points in 2001 and only 0.7 percentage point in 2000 (see Chart II.4).

The deviation of Greek core inflation reflects not only the country's different cyclical position compared with that of the euro area as a whole, but also some more persistent determinants.

Specifically, in relation to other European economies, Greece is lagging behind as regards the functioning of its goods and services markets. The fact that crucial domestic markets, such as those for fuel and for fresh fruit and vegetables, do not operate effec-

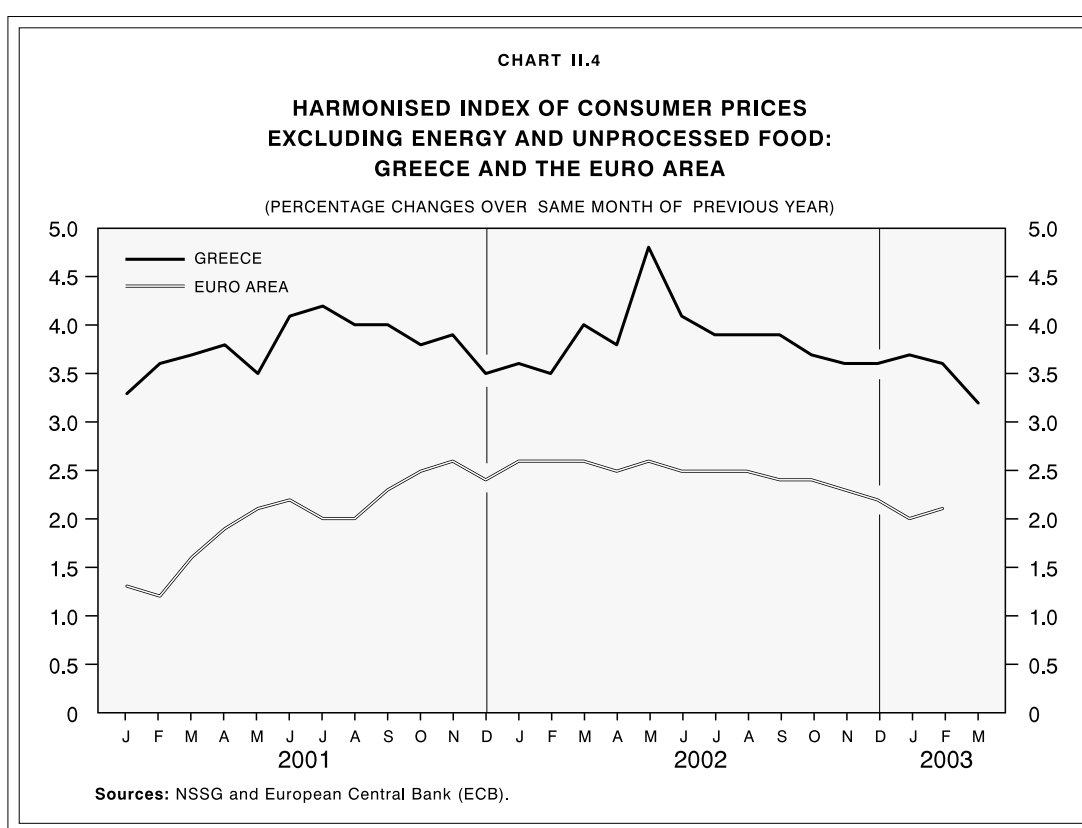


tively results in an intensification of the effects of exogenous or endogenous shocks (e.g. bad weather, increases in world crude oil prices or in any other cost components).

Moreover, to a certain extent it is to be expected that the Greek economy, which exhibits relatively strong growth and is in a process of real convergence, will have a higher rate of inflation than the more advanced economies of the euro area, particularly in the sector of those goods and services that are not tradeable internationally (this is commonly known as the “Balassa-Samuelson effect”¹).

¹ See Chapter IV.1.3.

Last but not least, another country-specific factor contributing to the core inflation deviation is the positive difference witnessed over a number of years between Greece and the euro area as regards the rates of increase in unit labour costs, although this difference has decreased noticeably in the last two years. In part, this positive difference merely reflects the flipside of the inflation differential – i.e. it, too, is attributable to the same factors mentioned above, precisely because these affect inflation and, thus, wage demands. Also in part, however, this positive difference in unit labour cost growth constitutes a self-contained determinant of inflation deviation, to the extent that it reflects the existence of differences in the operating conditions of the Greek labour market (compared with other



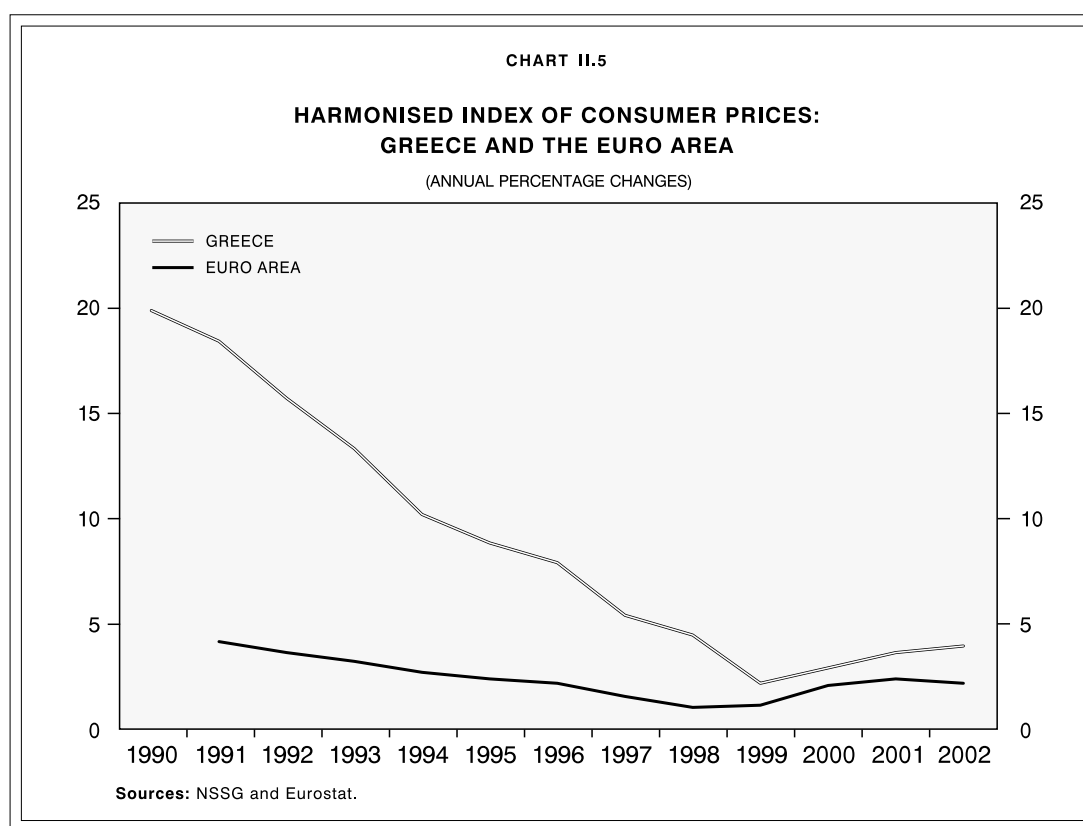
euro area countries) – and principally the rigidities that remain in the legal framework governing employment and industrial relations.¹

In terms of competitiveness, however, what is of particular importance is to eliminate the inflation differential as regards tradeable goods and services. In this respect it is noteworthy that, on the basis of the harmonised indices, the positive difference between Greece and the euro area as regards their average annual rates of increase in the prices of non-energy industrial goods (i.e. an important component of tradeable goods) decreased

¹ See Chapter IV.1.3.

considerably in 2002 – to 1.1 percentage points, from 2.0 percentage points in 2001. By contrast, in the sector of services (which for the most part are not tradeable, except for those related to tourism) the positive difference increased slightly, to 1.4 percentage points in 2002 from 1.2 percentage points in 2001. Finally, in the sector of processed food (yet another important component of tradeable goods), the positive difference rose slightly to 2.4 percentage points in 2002 from 2.3 percentage points in 2001.

Apart from the extraordinary or exogenous factors that, as already mentioned, contributed to the minor acceleration of the average annual rate of inflation in 2002 in Greece, upward inflationary pressures were also exerted by (i) the widening of profit mar-



gins in certain branches of economic activity that weigh heavily on consumer prices and (ii) the relatively high rates of increase in the prices of services provided by the private sector. Such developments imply ineffective operating conditions in the respective markets and insufficient competition in certain sectors, as well as, possibly, excess demand in several cases. Overall, the upward effect of these factors on inflation in 2002 was slightly greater than the downward effect of the low rate of increase in the prices of imported goods (thanks to the appreciation of the euro), as well as –to a lesser extent– of the reduction in telecommunication services prices owing to the intensification of competition in this market following its deregulation.

The rate of increase in unit labour costs for the whole economy was slightly higher¹ in 2002 compared with 2001, while in the business sector it decelerated considerably (because of the higher productivity and the lower non-wage labour costs following the abolition of stamp duties on employee earnings as from January 2002). Nevertheless, in the whole economy, the rate of increase in unit labour costs remained, firstly, above the highest level deemed consistent with price stability (i.e. an annual rate of inflation below 2%) and, secondly, slightly over the corresponding rate for the euro area.

2.5. *Balance of external transactions*

The current account deficit rose in 2002 by €466 million and stood at €8,635 million, or 6.1% of GDP, compared with 6.2% in 2001 and 6.8% in 2000.² The persistence of the current account deficit at levels higher than 6% during the last three years reflects the underperformance of domestic saving compared with total domestic investment and is mainly due to the following factors: First, the Greek economy is growing faster than most of its trading partners and thus domestic demand (for *inter alia* imported goods) grows faster than foreign demand. Second, a competitiveness loss was recorded in 2002, as the rate of inflation and the rate of increase in unit labour costs were higher in Greece than in its main trading partners, i.e. the EU as a whole. Third, despite the progress made, some structural weaknesses have not been eliminated yet and, as a result, the economy's export orientation remains limited, while the number of branches that produce dynamic exportable products, i.e. products with high income elasticity of demand, remains small. Still, it should not be overlooked that there is a dynamic group of Greek businesses which in recent years have made considerable investments in modernisation and have penetrated foreign markets – of some traditional exportable products (e.g. dairy produce, juices), but also of advanced technology products (e.g. chemicals, telecommunications equipment, business machines and automated data processing machines³).

In 2002, the widening of the trade deficit and the decline in gross receipts from services were due, in addition, to the weakening of foreign demand, mainly from the other EU countries, as well as to the partial loss of earlier price competitiveness gains (observed overall during the 1998-2001 period). Particularly in 2002, this loss was due to the upward deviation of inflation and the rate of growth in labour costs compared with that of our trading partners, as mentioned already, as well as to the appreciation of the euro vis-à-vis the currencies of third countries. Indeed, the price competitiveness of Greek products, as measured by the indices of the real effective exchange rate, had improved in 2000 (by 3-5% depending on the index used, mainly on account of the decline in the nominal effec-

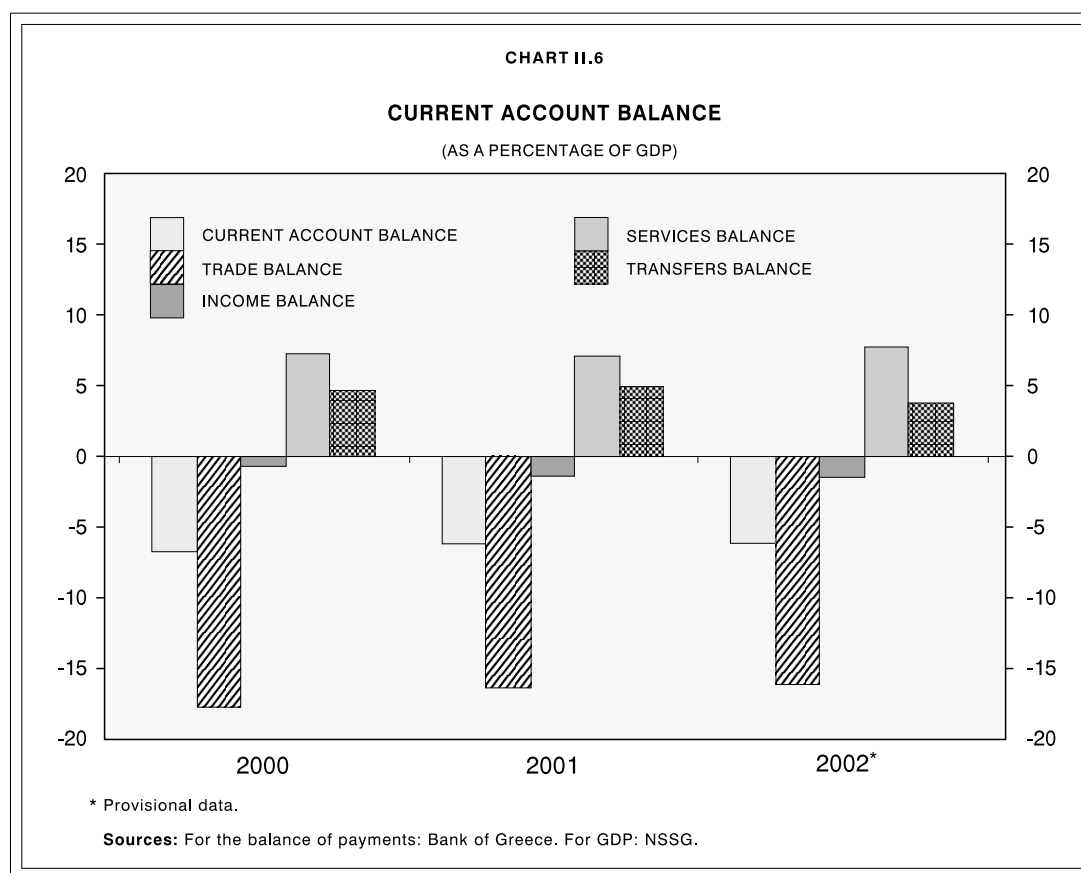
1 Revised data.

2 Revised data.

3 Exports in such product categories grew much faster than the total of industrial exports between 1990 and 2000. See Panhellenic Exporters' Association, *Episimanseis*, No. 14, April 2003.

tive exchange rate of the drachma) and then remained broadly stable in 2001, but receded in 2002 (by 1.8-3.8%).

In 2002, notwithstanding the convergence of interest rates and the narrowing of yield differentials within the euro area, there was a massive inflow of funds for the purchase of Greek bonds by non-residents, resulting in an exceptionally high inflow in the total financial investment account, which more than offset the current account deficit. This inflow – along with the narrowing of the bond yield spread itself – points to the confidence of foreign investors in the positive course of the Greek economy.



The higher current account deficit in 2002 mainly reflected the decrease in the transfers surplus and the widening of the trade deficit, as well as the small rise in the income deficit. Such developments were only partly offset by the considerable growth of the services surplus (see Chart II.6). Furthermore, receipts from exports or from income and transfers decreased in euro terms *even* in the cases involving transactions in US dollars or in other currencies with weakening exchange rates against the euro.

The non-oil trade deficit rose, owing to a considerable decline of 5.9% in export receipts and despite the stagnating payments for imports. At the same time, the net oil import bill increased. Taking also price changes into consideration, it is estimated that the

volume of non-oil exports shrank by approximately 8%, while import volume dropped by less than 1%.

The slight decline in total imports mainly reflects a decrease in imports of consumer durables.¹ It is noted, however, that imports of consumer non-durables rose, broadly in line with the remarkable increase in the real disposable income of households and the strong expansion of consumer loans through credit cards. The increase in capital goods imports was less than what may have been expected on the basis of the considerable increase in gross fixed capital formation. This development could be connected to the fact that the most important increase in investment was observed in the construction sector, which is less import-intensive.

The services surplus rose in 2002, as the increase in net receipts from transport services was more than offset by the considerable growth in net receipts from travel services, as well as by the small decrease in net payments for other services.² The income deficit widened slightly, owing to, primarily, the decrease in net receipts from wages and salaries, and secondly, the small rise in net payments for interest, dividends and profits.

Finally, the decline in the transfers surplus was due to the drop in net receipts of other – than general government – sectors (including emigrants' remittances) and to the reduction of EU transfers. Net receipts of the general government sector (largely, the balance between transfers from, and payments to, the EU) came to €3,790 million in 2002, i.e. they shrank by €265 million compared with 2001.

Total financial investment, i.e. direct, portfolio and "other" investment taken together, recorded a net inflow of €12,293 million, which stemmed almost exclusively from portfolio investment and – only to a very small extent – from other investment and more than offset, as already mentioned, the current account deficit.

Direct investment showed a net outflow. In particular, an increase – albeit marginal – was observed in direct investment abroad by residents. Such investment is directed mainly towards the EU, but also towards countries of Central and Eastern Europe, the economies of which are characterised by relatively high rates of growth. In contrast, (net) inflows of foreign direct investment practically dropped to zero after having increased appreciably in 2001 (a significant decrease – although not of such scale – was observed in other countries as well). Nevertheless, foreign direct investment had been relatively low in previous years too (representing approximately 1% of GDP in 2000 and 2001). It is indicative that, according to the "Inward Foreign Direct Investment Performance Index",³ for the three years from 1998 to 2000, Greece's share in world foreign direct investment was only one tenth of its share in world GDP.⁴ At the same time,

1 It also reflects the decrease in imports of "unclassified" goods (see Table IX.2B).

2 It is noted that, due to the change in the method applied for the collection of travel balance data (see Chapter IX.1.3), it is not possible to reach any conclusions regarding the change in travel receipts and payments in 2002 compared with 2001.

3 This index, compiled by UNCTAD (United Nations Conference on Trade and Development), was published in *World Investment Report 2002*.

4 Based on this performance criterion, Greece ranked 125th among 140 countries, and last among the 28 countries that are either EU Member States or accession countries.

however, the “Inward Foreign Direct Investment Potential Index”¹ (which is based on the evaluation of structural factors that affect the inflow of foreign direct investment and normally ranges between 0 and 1) was relatively low for Greece, but, from an average of 0.301 for the 1988-1990 three-year period rose to 0.414 for the 1998-2000 three-year period.²

In portfolio investment there was a considerable net inflow, amounting to €10.9 billion. This development is linked to the inflow of foreign capital, mainly for the acquisition of Greek bonds (€11.9 billion in 2002 compared with approximately €8.1 billion in 2001) and secondly for the acquisition of shares.

Finally, an inflow of €2.0 billion was recorded in other investment. This development is linked to the sizeable rise in liabilities, which was nevertheless largely offset by an equally substantial increase in assets. Specifically, both residents and non-residents considerably increased their holdings of bank deposits and repos – the former abroad and the latter in Greece. These capital account transfers, which mainly reflected short-term investment in the interbank market and were highly volatile during the year, confirm that Greek financial institutions are actively and increasingly participating in the European interbank market – to which they now have easier access thanks to their enhanced creditworthiness – and are no longer constrained to resort only to the Greek market to meet their liquidity needs. Furthermore, on the asset side, the considerable growth of residents’ holdings of deposits and repos abroad is mainly connected to investment by credit institutions (following the completion of the gradual release of their foreign exchange redeposits with the Bank of Greece).

2.6. *Economic prospects in 2003*

As regards the prospects of economic activity in Greece in 2003, it is expected that domestic demand will continue to underpin GDP growth. The rise in private consumption will be supported by an increase in the real disposable income of households. This increase will be mainly due to the expected rise in employees’ real earnings, the reduction of income tax, as well as the increase in employment. In more precise terms, the expected rise in employment in those sectors of the economy which are connected to the preparations for the 2004 Olympic Games – primarily in construction projects – will offset the potential decrease or no change in employment in other sectors – such as manufacturing or tourism – which are more directly affected by both the increased uncertainty and the projected worsening of the economy’s price competitiveness (due to reasons presented below). In addition, a considerable further increase is expected in pri-

1 Also compiled by UNCTAD.

2 In addition, among the 140 countries covered by this index, Greece climbed from the 40th place in 1988-1990 to the 35th place in 1998-2000, while among the 28 countries that are either EU Member States or accession countries, it climbed from the 21st place in 1988-1990 to the 18th in 1998-2000.

vate residential investment, as well as in public and business investment connected to the Olympic Games.

On the other hand, the negative contribution of the change in the real external balance (i.e. the difference between exports and imports of goods and services) is expected to be greater this year compared with 2002, for the following reasons:

First, economic recovery in our major trading partners and in the countries of origin of tourists visiting Greece will be relatively sluggish.

Second, the price competitiveness of Greek goods and services will decrease further, as long as the positive inflation differential between Greece and the other euro area or EU countries persists and because the euro is appreciating against the other major currencies.

Third, initially the uncertainty about the possibility of war in Iraq and then its actual outbreak and continuing uncertainty about what might follow have already affected tourism unfavourably.

In the light of the preceding analysis, the Bank of Greece estimates that economic growth in Greece will remain strong this year, at 3.7%, i.e. at a level only slightly lower than in 2002.

Regarding the course of inflation this year, a most important element to be taken into consideration is the prevailing uncertainty about crude oil prices, since these are subject to the consequences of the war in Iraq, as well as about further developments in the exchange rate of the euro, although the data available so far suggest a continuing appreciation of the euro throughout 2003. Moreover, the projected decline in euro area inflation implies a deceleration of the already low rate of increase in the prices of goods and services imported from EU countries. While unit labour costs in the whole economy will increase this year at a rate slightly lower than in 2002, a clear acceleration is expected in the business sector.

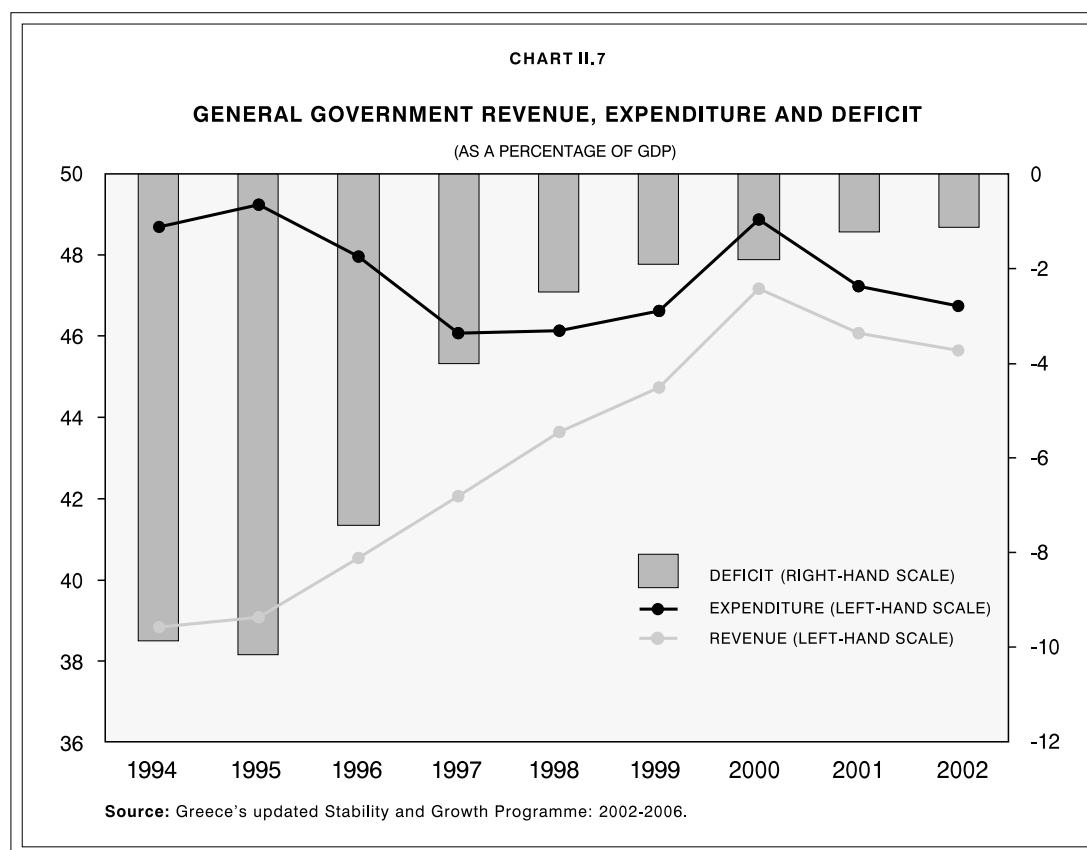
Taking these factors into consideration, an extrapolation of current forecasts and trends suggests, in principle, that this year the average rate of increase in the CPI will be higher than in 2002 (when it rose to 3.6%). Still, this estimate involves a high degree of uncertainty. A probably more reliable estimate is the one related to core inflation: it is estimated that in 2003 the average rate of change in the CPI excluding fuel and fresh fruit and vegetables will not be considerably different from that of 2002 (i.e. 3.6%).

The foregoing projections regarding economic activity and inflation incorporate the unfavourable effects of international uncertainty, which had already become manifest in the domestic economic aggregates and the climate of confidence before the outbreak of the war in Iraq. The magnitude of the war's consequences for the Greek economy will eventually be determined by the economic conditions that will arise once the conflict is over. In any case, the impact on the Greek economy — compared to other euro area economies — will probably be stronger in terms of tourism, but weaker in terms of overall developments in domestic demand and GDP growth. Nevertheless, as mentioned before, the satisfactory growth performance can be sustained in 2003 as well, despite the conse-

quences of the war and the increased uncertainty, given that GDP growth relies on endogenous factors, which are favourable.

3. FISCAL DEVELOPMENTS

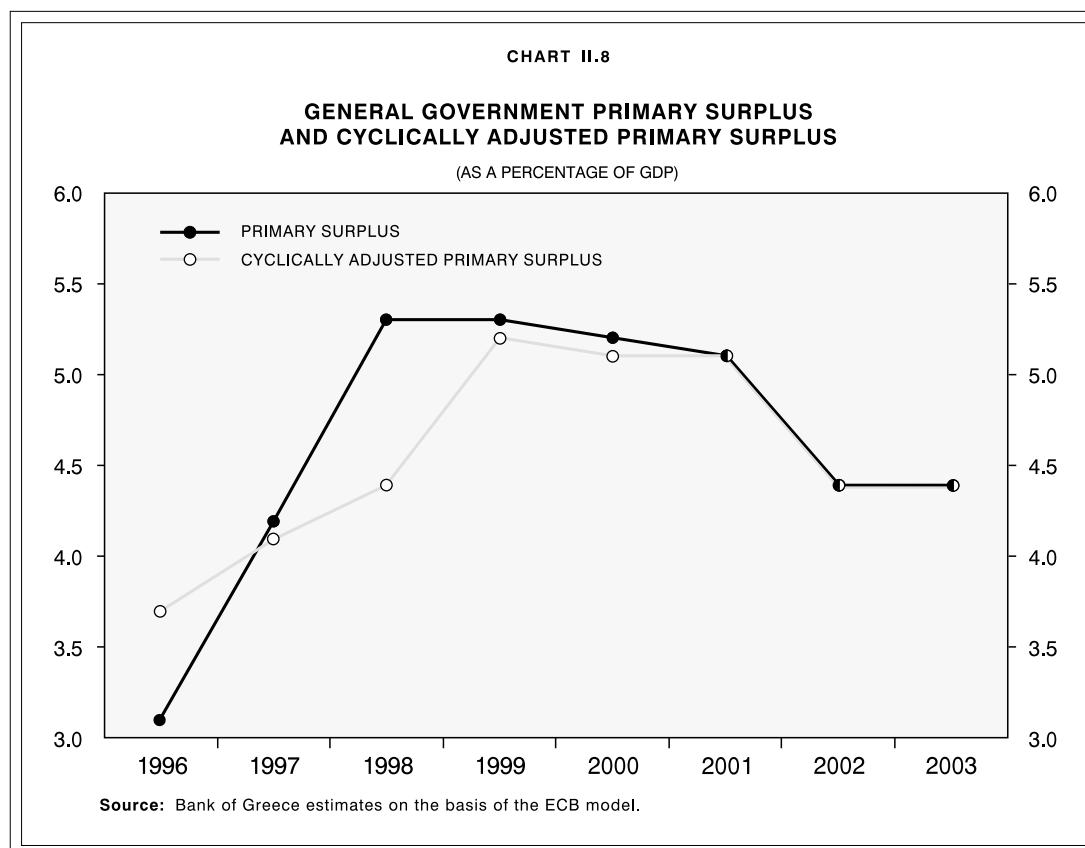
The systematic fiscal consolidation efforts made over a number of years have resulted in a spectacular improvement in Greece's fiscal position and helped to maintain a high degree of macroeconomic stability in the first two years after the country's entry into the euro area.



A very impressive fiscal adjustment took place in the period prior to the assessment of the Greek economy in the first half of 2000, in view of its entry into the euro area in January 2001. The general government deficit as a percentage of GDP fell to 1.8% in 1999 from 9.9% in 1994 (see Chart II.7). To some extent, the downward trend observed in budget deficits during that period stemmed from a gradual rebound in economic activity, following the recession of the early 1990s, as well as from declining interest rates, which con-

tributed to a reduction in the costs of public debt servicing. To a larger extent, however, it is related to the tight fiscal policy pursued during that period.

Nevertheless, the recent revision¹ of key fiscal aggregates reveals that the improvement recorded after 1999 was in fact considerably smaller. In more detail, based on revised data, the general government balance for 2001 and 2002 has shifted from surplus to deficit. Also, the decrease in this deficit between 2000 and 2002 was limited to



0.6% of GDP, compared with an initial estimate of 2.3%, thereby bringing the deficit-to-GDP ratio down to 1.2% in 2002, from 1.8% in 1999. The effect of the revision is also reflected in the ratio of the general government primary surplus to GDP for the same

¹ In 2002, Eurostat revised and completed the definitions and rules of the European System of Accounts 1995 (ESA 1995), as a number of fiscal transactions were not adequately covered, making it necessary for certain budget items to be reclassified. Against this background, in November 2002 the National Statistical Service of Greece (NSSG), in agreement with Eurostat, revised deficit and debt figures to ensure consistency with the new definitions and practices applicable across EU countries. The revision mainly focused on capital transfers to public enterprises, guarantees called in, as well as on certain modern types of financial transactions (e.g. revenue securitisation, bonds convertible to equity and exchangeable bonds), which were not covered by the definitions and rules of ESA 95. In February 2003, minor further revisions were made in deficit and debt data (in the context of the Excessive Deficit Procedure, pursuant to Article 104 of the consolidated version of the Treaty establishing the European Community).

period, which, although still significant, turned out to be considerably lower than initially estimated¹ (2000: 5.1%, 2001: 4.9%, 2002: 4.3%). Moreover, general government debt (rather than decreasing, as initially estimated) rose both in 2000 and 2001 and is now estimated to have been 7.4 percentage points of GDP higher at the end of 2001 than the initial figure. Debt developments have been influenced significantly by liabilities assumed by general government, which, although not affecting the fiscal deficit, burden the debt.

It should be noted that, while in 2001 and 2002 most euro area countries had fiscal deficits that were well above their respective budgetary targets (the most typical cases being those of Portugal and Germany, where the general government deficit overshot the 3% of GDP reference value stipulated by the Treaty), Greece has come close to meeting the Stability and Growth Pact's requirement of a fiscal position "close to balance or in surplus", although the government budget is being burdened with large outlays both for financing the 2004 Olympic Games preparations and for national defence.

The 2003 budget would *prima facie* seem as another step forward in the sense that it is aimed at further reducing the general government deficit-to-GDP ratio to 0.9% in 2003 from 1.2% in 2002. Yet, as suggested by the examination of the cyclically adjusted primary surplus (see Charts II.8 and II.10), the 2003 budget, if executed without any slippage, will imply a neutral fiscal stance this year. Thus, it may be considered that the current economic conjuncture (combining strong growth and low interest rates) is not sufficiently utilised in order to speed up fiscal adjustment.

3.1 *The evolution of the general government deficit*

According to available provisional data, the general government deficit-to-GDP ratio, on a national accounts basis, dropped to 1.2% in 2002 from 1.4% in 2001.

This small decrease stemmed from a decline of 0.8 percentage point of GDP in interest payments, which however was largely offset by a drop of 0.6 percentage point of GDP in the primary surplus. The decline in the primary surplus came as result of a shortfall in revenue and an overrun of primary expenditure and led to a commensurate decrease in the cyclically adjusted primary surplus. It should be noted that the 0.2 percentage point decline in the general government deficit fell short of the targeted reduction of 0.7 percentage point.

Developments at the level of general government actually reflect developments in the government budget. All in all, in 2002 the government budget deficit exceeded by 0.6% of GDP the budgeted deficit for that year, owing to an overrun of ordinary budget expenditure and a large shortfall in revenue under the public investment budget. These developments were largely offset, however, by a cut in public investment expenditure.

¹ The initial estimates for 2000 and 2001 had been 6.1% and 6.3% respectively. For 2002, the 2001-2004 Updated Stability and Growth Programme of December 2001 initially projected a primary surplus of 6.4% of GDP.

In more detail, the central government budget deficit (on an accrual basis) stood at 3.4% of GDP, compared with an initially budgeted 2.9% of GDP. This represents an overrun of €797 million, which would have been much larger, but for the considerable reduction in public investment expenditure as well as for extraordinary revenue from the settlement of pending tax cases. The increase in the deficit came as a result of an overrun in ordinary budget expenditure and a large shortfall (of 36.1%) in revenue under the public investment budget, the latter causing a complete revision of investment budget figures.

Specifically, relative to the previous year, in 2002 ordinary budget expenditure (including tax refunds) grew at a rate (7.2%) nearly double the budgeted one (3.7%). Of this overrun, 86% was accounted for by ordinary budget primary expenditure (especially “tax refunds”, “personnel outlays”, “grants”, “other outlays”) and was offset by a drastic cut (of €1,828 million) in expenditure under the public investment budget. As a result, investment expenditure (rather than increasing by 14.1% as forecast) decreased by 9.2% in 2002, compared with a year earlier, and overall expenditure under the 2002 government budget was contained below the targeted level.

In contrast to expenditure, ordinary budget revenue rose by 6.8% to €39,065 million, i.e. slightly higher than projected (€38,920 million). However, this amount includes extraordinary revenue of €1,061 million from the introduction of two tax amnesties (namely “imputation of gross turnover and respective VAT” and “settlement of pending tax cases for the 1993-1998 period”), which was not included in budget forecasts. Without this extraordinary revenue, there would be a shortfall in ordinary budget revenue in the order of 0.8% of GDP.

Public investment budget revenue declined by 6.6% to €2,610 million in 2002, from €2,795 million in the previous year. This amount is €1,475 million (or 36.1%) lower than its budgeted level.

3.2 The evolution of public debt

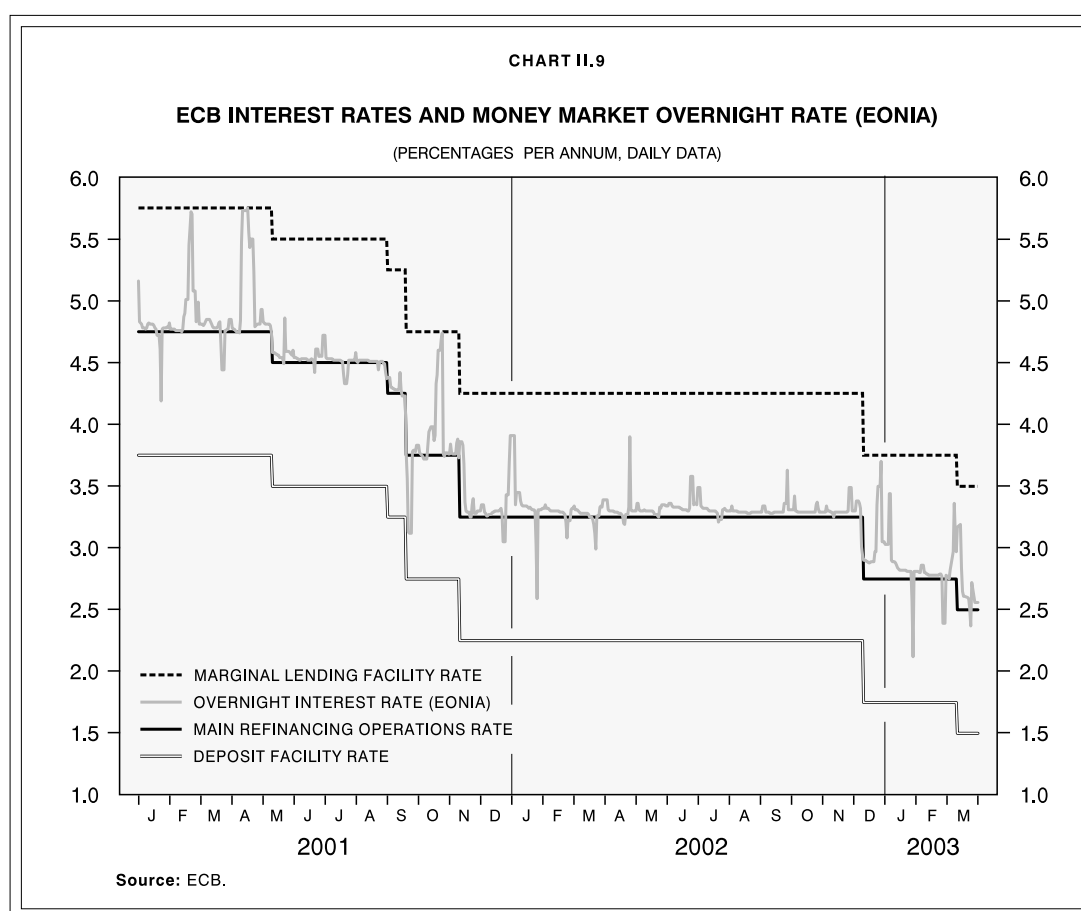
According to revised data, the consolidated gross debt of general government as a percentage of GDP increased in both 2000 and 2001, reaching 106.2% and 107.0% respectively. However, in 2002, debt resumed its downward course, declining by 2.1 percentage points to 104.9% of GDP (see Table VIII.9). Notable as it may be, this decline is still smaller than what would be expected given the level of the primary surplus (4.3% of GDP) and the downward effect (2.4% of GDP) on debt from GDP growth and falling interest rates. The fact that debt dropped by only 2.1 rather than 6.7 percentage points of GDP as it would be expected implies the assumption of other liabilities, which, although not included in the fiscal deficit, affect the debt (“stock-flow adjustment”) and make its faster reduction difficult¹ (see Table VIII.10). Owing to its relatively slow decline, the general government debt-to-GDP ratio remains much higher (104.9%) than the EU or euro area

¹ It should be noted that the “stock-flow adjustment” is the algebraic sum of off-budget liabilities less the privatisation proceeds that are used to reduce public debt.

average (62.5% and 69.1% respectively), which also indicates that fiscal policy has not been sufficiently tight.

4. MONETARY AND FINANCIAL DEVELOPMENTS AND MONETARY POLICY IN THE EURO AREA

The year 2002 was the second year of implementation in Greece of the Eurosystem's single monetary policy, the primary objective of which is to maintain price stability in the euro area over the medium term. Uncertainty prevailed and signals about inflation



prospects were at times mixed and subject to change during most of the year. Against this background, the Governing Council of the ECB kept its key interest rates unchanged until early December 2002, at the levels set on 8 November 2001 (see Chart II.9).¹

¹ The minimum bid rate in the main refinancing operations was then set at 3.25%, the rate on the marginal lending facility at 4.25% and the rate on the deposit facility at 2.25%.

At its meeting on 5 December 2002 the Governing Council of the ECB judged that the prospects of reducing and stabilising inflation below 2% during 2003 had improved, given the slow economic recovery and the appreciation of the euro, and decided to cut the key interest rates by 50 basis points. On 6 March 2003 the key interest rates were further reduced by 25 basis points. Thus, the minimum bid rate in the main refinancing operations was set at 2.50%, the rate on the marginal lending facility at 3.50% and the rate on the deposit facility at 1.50%. This decision reflected the Governing Council's assessment that the outlook for price stability over the medium term had improved in recent months, mainly owing to the sluggish pace of economic growth and the appreciation of the euro, and that the outlook for economic growth in 2003 had weakened compared with earlier expectations. At its meeting on 3 April 2003 the Governing Council noted that it was not possible at that juncture to assess what effect the military operations in Iraq would have on the global economy and on economic developments and the medium-term outlook for price stability in the euro area. Therefore, it decided to leave the key interest rates unchanged.

Reflecting the stability of the ECB's key interest rates for the most part of 2002, short-term money market rates in the euro area remained broadly stable. Regarding longer maturities, in the first five months of 2002 the favourable outlook for economic growth and expectations of an increase in short-term rates resulted in a general upward trend of money market rates in the euro area. However, this trend was reversed from June onwards owing to the downward revision of expectations about growth and short-term interest rates. Following the decision made by the ECB on 5 December 2002 to reduce the key interest rates by 50 basis points, the money market rates embarked on a downward path, which continued in the first few months of 2003.

Developments in money market rates were mirrored by both bank rates and bond yields. The latter fell after May, reflecting, *inter alia*, portfolio shifts towards safer investments amid stock market uncertainty, expectations about the evolution of short-term interest rates and economic growth, as well as similar developments in the US bond market. Bond yields continued to decline in early 2003.

Throughout 2002 the annual growth rate of money (M3) in the euro area – in spite of a slight slowdown to 7% in the fourth quarter of 2002, from 7.4% in the same quarter of 2001 – remained above the reference value, which was set by the ECB's Governing Council at the same level as in the previous three years (4.5%). This was mainly attributed to the preference of investors for safer and more liquid assets included in M3, owing to the fall of stock prices and strong uncertainty in stock markets. The low short-term interest rates were an additional factor that contributed to the high growth rate of M3. However, the slowdown in credit expansion to the private sector to 4.8% in the fourth quarter of 2002, from 6.9% in the same quarter of 2001, in conjunction with weak economic growth, confirmed the ECB's assessment that monetary developments did not signal risks to price stability.

5. MONEY, CREDIT AND CAPITAL MARKETS IN GREECE

5.1 Monetary aggregates and interest rates

In 2002 the significant slowdown of the annual growth rate of the Greek contribution to the euro area's monetary aggregate M3 continued. This rate was gradually limited to 2.1% in the fourth quarter of 2002, from 4.4% in the same quarter of 2001, while it turned negative (−0.2%) for the first time in December. Throughout 2002, the rate of change in the Greek M3 stood at very low levels and corresponded to approximately one third of the respective growth rate of the overall M3 of the euro area. The drop in the growth rate of M3 in Greece was due to the slowdown of credit expansion to enterprises and households. It was also due to the shift of savings funds from repos (the yields of which were again subject to taxation as from January 2002) to longer-term deposits (not included in M3) and government paper.

Most bank rates fell in 2002. This was due to competition between credit institutions and to the drop of 50 basis points in the ECB key interest rates on 5 December, the changes in which affect, with a relatively small time lag, bank rates in euro area countries. In particular, the average interest rates on deposits and repos were reduced in 2002 by 0.3 percentage point. However, as inflation remained in 2002 well above that average rate, real interest rates turned negative, especially on shorter maturities.

Lending rates also fell in 2002. The average short-term lending rate dropped by 0.6 percentage point and its spread over the respective euro area rate narrowed further (to 1.3 from 1.5 percentage points). By contrast, the interest rate on personal loans (which is the most comparable with the rate on consumer loans in the euro area) remained at the level of December 2001 and its spread over the euro area rate increased to 2.1 percentage points in December 2002 (from 1.8 percentage points in December 2001), since the latter declined slightly. Housing loan rates were also reduced further in 2002. The steepest decline (of 0.5 percentage point) was observed in the fixed-rate loans with a maturity of more than 5 years, which in December 2002 stood lower than the average euro area rate (4.9% and 5.1% respectively), while the decrease in the interest rate on floating-rate housing loans was smaller (0.3 percentage point). Since the decline (of 0.7 percentage point) in the (weighted) average rate applied by banks to new loans was faster than that in the average deposit rate (of 0.3 percentage point) in 2002 as well, the spread between these two rates narrowed further. This spread, which has been following a downward path in the last few years, fell by about 3 percentage points between end-1998 and end-2002.

Regarding the evolution of bank rates, it is useful to underline that, following the liberalisation of international transactions and the banking market in the mid-1990s, monetary policy is conducted (until the end of 2000 by the Bank of Greece and thereafter by the ECB) in accordance with the principle of an open market economy with free competition. In this context, it is not possible — or advisable — for the Bank of Greece to intervene by setting maximum or minimum bank rates, as was done in the past. Bank rates are

determined on the basis of interbank rates, which are in turn influenced by monetary policy, and can vary across banks and loan types depending on the operating costs of individual banks, the risks entailed by each specific type of loan and competitive conditions in individual banking market segments.

5.2 Credit developments

The overall financing of the economy by Monetary Financial Institutions (MFIs – i.e. banks and money market funds) increased by 8.5% in 2002, compared with 9.3% in 2001. This reflects a slowdown of credit expansion to enterprises and households (16.9% in 2002 from 24.8% in 2001). On the other hand, the financing of general government declined, albeit at a slower pace than in 2001 (2002: –1.3%, 2001: –4.6%). The weakening of credit expansion to enterprises and households is mainly associated with the limited increase in credit to enterprises, while credit expansion to households decelerated less rapidly. In particular, bank credit to enterprises increased by 9.6% in 2002, compared with a growth of 18.5% in 2001. This significant deceleration reflected a decrease in the outstanding balance of loans to agriculture,¹ as well as the weaker growth of loans to the non-agricultural sectors, with the exception of industry and tourism. This development should not, however, be seen as causing problems to the financing of enterprises, given that the growth rate of business loans was in 2002 higher than that of nominal GDP (7.1%) and almost three times higher than the respective euro area figure (3.5%). In the first two months of 2003, the annual rate of credit expansion to enterprises increased slightly and stood at 11.2% in February (12.0% for the non-agricultural sectors).

Credit expansion to households (i.e. mostly consumer and housing loans) declined to 32.2% in 2002, from 40.4% in 2001, but continues to stand at high levels (32.2% in February 2003). The annual growth rate of consumer loans fell to 24.2% in 2002, from 42.5% in 2001, as there are indications of gradual saturation of the consumer credit market, but remains high (26.2% in February 2003). This is associated with the still relatively low level of outstanding consumer loans compared with national income, with the significant fall in their interest rates, as well as with strong competition between banks in the field of consumer credit. The growth rate of housing loans (2002: 35.6%, 2001: 38.9%) was faster than that of consumer loans and remained high in February 2003 (34.4%). The expansion of housing loans is due to their historically low interest rates, as well as to the relatively rapid increase of real estate prices and the associated increase in the financing needs of purchasers. In addition, the changes announced in the tax treatment of interest on housing loans from 2003 onwards led many people to take out loans during 2002, thus boosting demand.

Credit expansion to households absorbed 61.4% of total credit expansion in 2002, compared with 46.7% in 2001 and 34.7% in 2000. Moreover, the outstanding balance of

¹ The outstanding amount of loans to the non-agricultural sectors increased by 11.4% in 2002, compared with 19.8% in 2001.

loans to households made up 36.4% of total lending to enterprises and households at the end of 2002, compared with 32.2% at the end of 2001 and 28.6% at the end of 2000. As a percentage of GDP, the liabilities of households vis-à-vis the banking system stood at 22.3% at the end of 2002, compared with 47% in the euro area. Therefore, the indebtedness of Greek households cannot be considered to be high. This is corroborated by a sample survey commissioned by the Bank of Greece to a private firm. The results of the survey¹ show that borrowing is significantly concentrated among households with the highest levels of income and wealth and that, on average, the outstanding loan balance of households does not exceed their annual income, even in the lowest income brackets, while loan servicing obligations do not seem to cause any major difficulty in relation to household income.

In any event, the Bank of Greece, taking also into account the potential risks to banks implied by the high growth rate of their loans, especially consumer loans, raised by 10 percentage points the ratios of provisions for loans overdue for more than one year and for doubtful loans. It also made special arrangements for the formation of provisions for housing and consumer loans.

5.3 Capital markets

In 2002 developments in capital markets, especially in the stock market, were generally in line with those in the euro area and US markets. Favourable conditions prevailed in the markets for government paper, while the performance of the stock and mutual fund markets was negative. In particular, increased uncertainty about the recovery of the global economy and the unfavourable conditions owing to the crisis in Iraq in the last few months of the year resulted in portfolio shifts to government bonds, which are seen as less risky. The rise in bond prices in all maturities and the significant increase of transactions in the secondary market reflect these developments.

In more detail, the yield on the 10-year Greek government bond (which moves broadly in line with the respective euro area bond yield) declined from 5.28% at the end of December 2001 to 4.44% at the end of December 2002 and to 4.29% at the end of March 2003. The yield differential between the Greek and the German 10-year bond remained on average at 35 basis points in the ten months between January and October 2002, compared with 34 basis points at the end of December 2001. Later on however, owing to the upgrading of the country's credit rating,² the yield differential declined to the very low levels of 23 basis points at the end of December 2002 and 22 basis points at the end of March 2003. The government paper yields for other maturities also dropped, most markedly for medium maturities. The government paper yield curve shifted downwards, reflecting a general fall in yields. The positive yield differential between the 10-year and

¹ See Section 7. Also see Bank of Greece, *Monetary Policy 2002-2003*, March 2003, Annex to Chapter VI.

² On 4 November 2002 Moody's upgraded the country's long-term credit rating to A1 from A2.

12-month government securities narrowed, but the positive yield differential between 10- and three-year bonds increased.

Transactions in the secondary market (HDAT) for government securities showed an impressive increase in 2002, which continued in the first quarter of 2003. The average daily value of transactions in 2002 increased by 77% to €2.3 billion, from €1.3 billion in 2001.

Share prices on the Athens Stock Exchange (ASE) followed a downward course in 2002 for the third consecutive year. Between end-December 2001 and end-December 2002, the ASE composite index fell by 32.5% (compared with a decrease of 23.5% in the preceding twelve-month period), while the declining trend of stock prices continued in the first quarter of 2003 (when prices fell by 16.1%). The average daily value of transactions in shares declined by 40% in 2002 to €100 million, from €166 million in 2001. In addition, the significant fall in stock prices and increased uncertainty in the stock market during 2002 limited the ability of enterprises to raise funds through that market (2002: €353 million, 2001: €836 million). During 2002, a significant decline and high volatility were also seen in stock prices in the euro area markets (with the Dow Jones Euro Stoxx index falling by 34.5% in 2002, following a decrease of 19.7% in 2001) and in the United States (with the Standard and Poor's index falling by 23.4% in 2002, after a drop of 13.0% in 2001). These developments reflected concerns about the course of the world economy, the accounting irregularities of major US companies, the reduced corporate profits and, in the last few months of the year, the crisis in Iraq. The domestic stock market was also adversely affected by the decrease in the pre-tax profits of many ASE-listed companies (especially in the financial sector). As a result, the P/E ratio fell at the end of 2002 for all ASE-listed shares, while it increased slightly for banking sector shares.

Activity in the Greek mutual funds market declined further in 2002. The fall in both the number and, mainly, the prices of outstanding mutual fund units led to a decrease in mutual fund asset value. The steepest decline in assets was experienced by equity-type mutual funds, owing to the significant fall in stock prices and, to a smaller extent, by bond-type and mixed-type mutual funds. By contrast, the asset value of money-market mutual funds increased, reflecting investors' interest in placements that combine relatively satisfactory returns with lower risk.

6. THE EURO CASH CHANGEOVER

Euro banknotes and coins were launched in Greece, as in all other euro area countries, on 1 January 2002. Although Greece had a transitional period of only one year (as it joined the Monetary Union on 1 January 2001), compared with three years for the other euro area countries, the euro cash changeover was successfully completed by the end of February 2002. During that period, the Bank of Greece, in collaboration with the Ministry of Economy and Finance and other competent bodies, provided for the production of euro banknotes and coins, the completion of the necessary adaptation of national legisla-

tion, the elaboration and application of the “National Plan for the Euro Cash Change-over”, the planning and implementation of the supply of the banking system and the market with euro banknotes and coins and, finally, the application of a comprehensive communication programme.¹ The positive acceptance of the euro by the public played an important role in its successful introduction.

To ensure a smooth and fast changeover to the euro, the Bank of Greece established a dense distribution network throughout the country.² In the last few months of 2001, euro banknotes and coins³ were frontloaded to commercial banks and enterprises to enable them to make transactions in euro as from the first day of 2002. In particular, euro banknotes and coins of a total value of €6,097.4 million (i.e. approximately 70% of the currency in circulation at the end of 2001⁴) were frontloaded to 3,233 branches of credit institutions and post offices before the end of 2001. On 1 January 2002 credit institutions ceased to pay drachmas at their counters and adjusted Automated Teller Machines (ATMs) to take euro. The launch of the euro and the withdrawal of drachmas at a fast pace is also evident from market transactions, over 90% of which were conducted in euro by the end of January 2002.⁵

The withdrawal of drachma banknotes and coins was also done at a fast pace. At the end of the dual circulation period (28 February 2002), the total amount of drachmas withdrawn was 2.7 trillion drachmas (€7.8 billion) or approximately 90% of currency in circulation on 31 December 2001. As in the other euro area countries, the pace of drachma withdrawal dropped after the first two months of 2002. At the end of March 2003, the total amount of drachmas withdrawn reached 2.84 trillion drachmas (€8.3 billion) or about 96% of currency in circulation at the end of 2001.

7. THE STABILITY OF THE BANKING SYSTEM

In recent years, Greek banks, operating in a deregulated environment, have broadened the range of their products and services and have expanded dynamically in the area of retail banking, where competition has been intensifying. Moreover, the major Greek banks have enhanced their business abroad, mainly in the Balkans, and have strengthened

1 Information activities moved mainly along two axes: The Bank of Greece participated in the Euro 2002 Information Campaign organised by the ECB in co-operation with the national central banks of the Eurosystem. The Bank also undertook independent communication activities (production of additional television spots, entries in the Press, informative events, production and distribution of the “Euroraces” board game and the “Eurognosia” comic) to cover specific information needs of the Greek public.

2 The euro distribution network consisted of the head office of the Bank of Greece and its 27 branches, as well as 96 branches of the National Bank at which the Bank of Greece keeps cash reserves.

3 The public was frontloaded only with euro coins in starter kits.

4 In this section, “currency in circulation” refers to drachma banknotes and coins held outside the Bank of Greece. Currency in circulation at the end of 2001 corresponded to approximately €8,708 million.

5 According to data based on a survey by Metron Analysis, presented by the Ministry of Economy and Finance at the meeting of the National Coordination Committee at Zappeion on 1 February 2002.

their position in the domestic market through mergers, acquisitions and strategic alliances. The favourable international economic conjuncture up to the end of 2000, as well as the convergence of the Greek economy towards the rest of the EU in the period from 1998 to 2000 in preparation for entry into the euro area, led to significant declines in interest rates and sharp increases in the prices and trading volumes in the Athens Stock Exchange and the government bond market. These developments boosted impressively the profitability of banks and strengthened their capital base; as a result, their risk-adjusted capital adequacy ratio almost doubled between end-1996 and end-2000 to exceed 15%. The favourable economic environment also facilitated banks in their efforts to upgrade the quality of their loan portfolios by increasing their loan loss provisions and write-offs and by improving their lending policies, which led to a considerable decrease in their overdue loans to total loans ratio.

As a deregulated and competitive banking environment requires increased alertness in monitoring banking risks, notably credit and market risks, the Bank of Greece called upon banks to improve their risk management and internal control systems accordingly. Thus, the strengthened financial position of Greek banks served as a buffer, safeguarding their stability against the impact of the downturn in the Athens Stock Exchange that began in late 1999, the reversal of positive trends in the global economy in 2001 and the ensuing uncertainty and drop in international capital markets.

The continued economic slowdown in the EU in 2002 and the further considerable declines in major stock markets worldwide had an adverse impact on the performance of credit institutions across the EU, with some of the major banks recording substantial losses. In Greece, despite strong economic growth, banks' pre-tax profits declined considerably in comparison with 2001, mainly due to a significant drop in trading and other non-interest income and to equity portfolio valuation losses that resulted from the ongoing downward movements of equity prices and trading volume in the Greek stock market, while capital gains from bond portfolios were limited, because the fall in bond yields in 2002 was more modest than in the past. The fall in trading, investment banking and other fee and commission income was not fully offset by the increase in net interest income stemming from the continuing fast credit expansion. Specifically, on the basis of Greek banks' net pre-tax profits, return on equity declined from 16.5% in 2001 to 9.3% in 2002 and return on total assets fell from 1.4% to 0.7%, while the share of net interest income in gross operating income rose from 63% in 2001 to 73% in 2002. Evidently however, the importance attached by most Greek banks to their retail business helped alleviate the detrimental impact on profitability of the downturn in the stock exchange, while providing a more sustainable source of income, as was also the case with those European banks that had focused on the retail market.

Reduced profitability, in conjunction with fast credit expansion and the inability, under the circumstances, to raise new equity capital through the Athens Stock Exchange, drove the capital adequacy ratio of Greek banks (on a non-consolidated basis) from 13.6% at end-2001 to 12.5% at end-2002. Despite this fall, the total capital adequacy ratio

remains well above the regulatory minimum of 8%, even if the ratio is calculated on the basis of core (or Tier 1) capital, which is an indicator of the quality of own funds. As already mentioned, the high profitability of banks in 1999-2000 and substantial new equity capital raising through the then thriving Athens Stock Exchange enabled them to strengthen considerably their capital base, which served as a buffer against the subsequent impact of adverse stock market developments.

Notwithstanding a recent slight weakening, credit expansion remains strong (mainly to households), thus enhancing the stability of bank profits and improving their composition in quality terms. On the other hand, strong credit expansion could raise some concerns about the additional credit risk assumed, which is the most important risk faced by banks, at least at the present stage. Although no signs of poorer quality can be discerned up to now from data and trends of overdue loans, which, on a net-of-provisions basis, decreased in 2002 for all commercial banks in relation to total loans, the possibility of higher credit risk owing to strong credit expansion warrants a further increase in provisions for non-performing loans, so as to improve the ratio of provisions to non-performing loans (45.3% at end-2002), which is lower than the EU average of about 68%. However, it should be noted that, as the definition of non-performing loans is quite different across the EU, cross-country data are not comparable. Such data are often expressed net of collateral, which is not the case in Greece, where a significant part of loans are in fact secured by collateral. It should also be taken into consideration that expected GDP growth in Greece is considerably higher than in the EU as a whole. Nevertheless, the ratio of on- and off-balance-sheet credit-risk-weighted total assets to total assets rose to 51% at end-2002, from 48% at end-2001, which points to higher credit risk.

Further developments in the quality of banks' loan portfolios will depend on the financial condition of enterprises and households against a background of real disposable income growth at a projected rate of about 3% in 2003, as well as on individual banks' credit risk management policies, a matter of particular interest to the Bank of Greece as the supervisory authority.

Household indebtedness as a percentage of GDP was 18% in 2001 according to end-of-year data and, despite a rise of around 4 percentage points in 2002, remains relatively low. Moreover, the ratio of household indebtedness to the total value of household wealth, i.e. dwellings and direct or indirect (through mutual fund units) equity holdings, was very low (3.8%) at end-2001. Lastly, a recent survey on the magnitude of household borrowing and indebtedness conducted by a private firm on behalf of the Bank of Greece showed that, in a representative sample of 6,007 households interviewed from all over the country, 49.8% of the 2,303 households that did answer all questions had no debt obligations. The remaining 50.2% had outstanding debt obligations, but for 75% of these households the latest monthly instalment of interest and principal did not exceed one third of their monthly income. Therefore, it is presumed that these households could well afford servicing of their debt. Even if these positive overall findings do not correspond to the bor-

rowing pattern of the households which refused to complete the interview or failed to return the questionnaire, they are still valid, as these households represented just 5% of the total sample or 13% of all households that actually responded.

Turning to the business sector, there are conflicting indications about its financial soundness, as derived from a database (operated by the Hellenic Banks Association-owned company "Bank Information Systems – Teiresias S.A.") on enterprises' bankruptcies. Specifically, the number of bankruptcy petitions and the total amounts involved declined by 37.1% and 67.8% respectively in 2002 relative to 2001, reaching the lowest levels since 1996. The same holds true for the total amount of payment orders issued by courts. On the other hand, the total value of unpaid cheques increased by 26.5% between 2001 and 2002, after a decline during the previous three years. Comprehensive data on developments regarding return on equity (ROE) and the indebtedness of the entire business sector in 2002 are not as yet available. However, a Bank of Greece examination of the published financial statements of a sample of 418 non-financial corporations¹ (262 of which are listed on the Athens Stock Exchange) shows a 5.4% increase in pre-tax profits in 2002 over 2001 and a marginal decline in ROE, from 12% to 11.8%. It also shows a rise in leverage, as the gearing ratio (i.e. of own to borrowed funds) fell from 1.20 in 2001 to 1.15 in 2002; however, this ratio remains high in comparison with the average (0.65) of the five-year period from 1997 to 2001 for all industrial and commercial firms that are sociétés anonymes or limited liability companies. In conclusion, it does not appear that the overall financial situation of the business sector in 2002 poses risks to the stability of the banking system, even though individual enterprises or sectors have been facing problems.

The indebtedness of enterprises and households, taken together, as a percentage of GDP (61.3% at end-2002, compared with 56.5% at end-2001) remains considerably lower than in both the euro area (127.8%) and the United States (142.9%), according to end-2001 data.

Because of the heightened uncertainty surrounding the overall economic environment, the fall in banks' hidden reserves on fixed assets (as some banks took up a new option provided for by law to revalue their fixed assets almost at market prices and to offset the resulting gain against losses from the valuation of their equity portfolios) and the extent of banks' forbearance towards certain major shareholders who had faced difficulties in repaying loans secured by collateral in shares, the Bank of Greece decided to raise minimum supervisory loan loss provisions for certain categories of past due loans. As any shortage of supervisory provisions over reported loan loss allowances (that are largely tax-driven) is deducted from own funds, the new measure is expected to exert pressure on banks to further improve the effectiveness of their risk management systems, adopt more conservative dividend policies and step up efforts to increase regulatory own funds. The latter objective could be attained mainly by issuing subordinated debt (or Tier 2 capital) instruments or "innovative" equity-like (or lower Tier 1 capital) instruments, to the extent

1 Other than banks, insurance companies, leasing companies etc.

permitted by the anticipated return on these funds. Moreover, the Bank of Greece monitors with keen interest and encourages the efforts of certain banks to further develop their internal credit risk measurement and management systems; such systems, when finalised and approved, would allow a more accurate calibration of both capital requirements for credit risk and provisioning for doubtful loans as an alternative to mandatory provisions.

In the current economic conditions, which are affecting adversely bank income, the containment of operating costs becomes essential for supporting profitability. Bank operating costs as a percentage of bank assets fell to 2.3% in 2002, from 2.4% in 2001. The Bank of Greece recognises that, under the circumstances, more effective cost reductions could not be achieved in 2002, despite the efforts made in this direction, which are expected to bear fruit in the years to come. The rationalisation of operating costs should be a priority, especially for those banks that in recent years have expanded through mergers and acquisitions.¹ Bank operating costs are also influenced by the growth of banks' retail networks and, more generally, by their selling and marketing strategies. The rapid expansion of both the number of ATMs and the banking services they offer, the automation of operations through the DIAS interbank settlement system and the further development of phone and electronic banking involve high start-up costs, but, if planned properly, can lead to significantly lower costs per transaction in comparison with operations through conventional bank branches. It should be mentioned in this connection that the number of ATMs rose from 4,377 at end-2001 to 4,955 at end-2002, but their density in relation to customers (452 ATMs per million inhabitants at the end of 2002) remains well below the euro area average (650 ATMs per million inhabitants at the end of 2000). At the same time, the number of bank branches in Greece increased from 3,134 at end-2001 to 3,263 at end-2002. Thus, despite the development of alternative distribution channels and the observed relative slowdown in the expansion of branch networks, the latter remain the prevailing distribution channel for Greek banks, as well as for most EU banks. However, in order to enhance their profitability, banks should intensify their efforts to rationalise their branch networks and reduce branch size, centralise the provision of certain services and implement an "open-architecture" strategy, i.e. utilise their networks to sell third-party financial products (insurance, mutual fund units etc.) other than conventional bank products.

There was little change in the structure of the domestic banking market in comparison with 2001. On the basis of end-2002 total assets, market shares are as follows: 81.1% for Greek commercial banks, 9.5% for specialised credit institutions, 8.9% for branches of foreign banks and around 0.5% for cooperative banks. But for the acquisition of ETBA by the Bank of Piraeus, no other significant merger and acquisition activity took place in 2002, unlike what had happened in the previous years. In general, major banks focus their efforts on the operational integration of earlier acquisitions.

1 This mainly refers to cases where the acquisition costs exceeded the corresponding net book value of the acquired bank; this created significant amounts which had to be deducted from the acquiring bank's own funds and were not offset by an equivalent increase, from internal or external sources, in the acquiring bank's own funds.

Concentration in the Greek banking market is still high, although it falls short of that observed in five other EU Member States.¹ On the basis of total assets, the market share of the two largest commercial banks was 38.1% at the end of 2002, while the share of the five largest banks amounted to 67.5%. Nevertheless, competition remains strong, particularly in the fastest developing retail segments (consumer and residential mortgage credit). This is reflected in the large number and variety of products and services offered by banks to meet a broad range of financing and investment options. As regards interest rates, banks seem to have adopted a selective policy of cuts for specific categories of borrowers and loans. However, as already mentioned in Section 5.1, the spread between the average (weighted) interest rate on new bank loans and the corresponding deposit rate narrowed by 0.4 percentage point in 2002 and by a total of around 3 percentage points between end-1998 and end-2002.

The Bank of Greece, recognising that furnishing bank customers with accurate and adequate information facilitates their choices, hence promoting competition, and enhances the reliability of the banking system, has recently codified and supplemented the provisions governing the transparency of banking transactions. Specifically, for certain products offered by banks, such as financial derivatives and guaranteed capital investment products, where customers are exposed to market risk, it is of particular importance to provide additional information on the characteristics of these products and the risks to be incurred.

With respect to developments in the regulatory framework, in 2002 the Bank of Greece, in addition to its aforementioned decisions to increase mandatory minimum provisions for supervisory purposes for certain categories of bank loans and to codify and supplement provisions on the transparency of banking transactions, also adopted the following regulations with a view to enhancing the effectiveness of supervision and adapting the banking system to the new monetary and credit conditions:

- Credit institutions were given the option, under certain conditions, to use internal risk management models to calculate capital requirements for market risk. Moreover, the calculation of capital requirements for market risk as regards banks' positions in commodities, gold and related financial derivatives was adjusted; the capital requirement for foreign exchange risk was lowered from 10% to 8%; and credit institutions were required to report more frequently to the Bank of Greece data on their capital adequacy.

- Credit institutions' funds earmarked for the financing of manufacturing firms (they were deposited in a special account with the Bank of Greece) were released, as (i) the establishment of a special "Guarantee Fund for Small and Very Small Enterprises" was anticipated (Law 3066/2002) and it was ascertained that smaller manufacturing firms have now more alternatives for obtaining low-interest credit from the banking system and funds from domestic and EU programmes, and (ii) it was no longer deemed necessary to impose administrative restrictions on credit institutions' asset management.

¹ The Netherlands, Belgium, Sweden, Finland and Denmark.

- The scope of supervision of credit institutions on a consolidated basis was broadened to include the real estate management subsidiaries of banks.
- Credit institutions were required to submit to the Bank of Greece biannual reports of exposures, broken down by country and region, to non-residents of Greece, in particular to residents of countries with emerging market economies and of developing countries.

8. THE GREEK ECONOMY IN EMU: PROSPECTS AND NEEDS FOR ADJUSTMENT

Greece is already in its third year of full participation in Economic and Monetary Union (EMU). The introduction of the single currency on 1 January 2001 has brought about radical and irrevocable changes not only to monetary conditions, but also to the operational environment of the Greek economy. EMU participation entails indisputable economic benefits, both in the short and the long term, and opens up new economic opportunities, which, if fully exploited, will help sustain strong long-term growth and price stability. However, EMU participation also poses major new challenges for economic policy: as the Greek economy is quite different in structure from most of its European partners, gradual integration into the wider euro area economy will require further structural adjustments and institutional reforms geared towards enhancing market flexibility and efficiency and creating an investment-friendly environment. This, in turn, would help to significantly improve the productivity and international competitiveness of the Greek economy and ensure its adaptability to new conditions.

8.1 *Economic benefits*

While some of the economic benefits became visible as soon as Greece joined EMU, others had begun to make themselves felt earlier, during a period when an intensive effort was being made to achieve nominal convergence and meet the Maastricht Treaty criteria for adopting the euro. Thanks to strong political commitment to economic convergence, wide public support attributable in part to the disappointing economic performances of the past, and the adoption of a definite target date for joining EMU, the Greek economy was able to stabilise and converge towards the rest of the EU. Thus, in the first half of 2000, when Greece was evaluated to determine whether or not it qualified for euro area entry, average annual inflation based on the Harmonised Index of Consumer Prices (HICP) had dropped to 2%, the general government deficit-to-GDP ratio had declined to 1.6% (in 1999) and the public debt-to-GDP ratio, though still high (end-1999: 104.4%, on the basis of estimates available at the time), was falling at a satisfactory pace. Furthermore, long-term government bond yields had decreased to levels comparable with those prevailing in other euro area countries. Meanwhile, apart from helping to stabilise the economy, the prospect of euro area entry as of 1 January 2001 also gave a decisive

boost to business and consumer confidence and, hence, to investment and private consumption, thus speeding up GDP growth.

Once Greece had markedly improved its economic performance in order to qualify for EMU entry, the adoption of the euro opened the way to even more favourable prospects for low inflation and brought about a reduction in interest rates, thus setting the stage for stronger economic growth. In the three years from December 1999 to December 2002, short-term and long-term bank rates on business loans in Greece fell by 7.4 and 6.3 percentage points respectively.

The high degree of macroeconomic stability achieved after years of effort geared towards sustainable convergence in view of Greece's EMU entry bid, along with the conditions of monetary and exchange rate stability secured by the introduction of the euro and the single monetary policy, as well as the convergence of Greek interest rates on the lower euro area rates were a further boost to business and consumer confidence. GDP growth thus remained high at its year 2000 level (about 4%) during the first two years following euro area entry, in spite of the marked economic slowdown observed concurrently in the euro area and worldwide. The prospects for global economic recovery in 2003 now appear to be less encouraging than in the last months of 2002, owing to the heightened uncertainty caused by geopolitical tensions. Greece's economic growth rate nonetheless remains strong and, according to the latest Bank of Greece forecasts for 2003, should only fall slightly short of the 2002 level.

After receding to around 2% — i.e. to a level consistent with a broad definition of price stability — by mid-2000, HICP inflation picked up once again from July 2000 onwards, as a result of rising world crude oil prices and the depreciation of the drachma. The latter reflected both the weakening of the euro against the other currencies and the convergence of the drachma (from a higher level) on its central rate vis-à-vis the euro until end-2000 within the Exchange Rate Mechanism. For reasons discussed previously, Greek inflation in 2001 and 2002 followed a generally upward trend, above the euro area average. More specifically, HICP inflation in Greece rose to 3.8% over 2001-2002, compared with a euro area average of 2.3%. Although this rate of inflation is a definite improvement on past inflation performances (with CPI inflation averaging 17.25% from 1974 to 1994 and HICP inflation standing at 4.6% in the second half of the 1990s), it remains significantly higher than the euro area average and above the level that the European Central Bank (ECB) considers compatible with price stability (i.e. an annual rate of increase in consumer prices of less than 2%).

The economic stability and credibility secured on a permanent basis through euro area participation therefore constitutes a significant benefit for an economy like that of Greece, which has faced serious macroeconomic imbalances and economic instability in the past.

Apart from restoring economic stability and credibility, improving the overall prospects for low inflation and speeding up the convergence of Greek interest rates on the euro area's lower ones, EMU membership also entails other substantial benefits, a number of which are immediate and visible:

First, the adoption of the euro has eliminated the conversion costs between the former national currencies of EMU members and the costs of hedging against exchange rate risks and uncertainty. This benefit is particularly important for Greece, considering that its inflation performance in past years had often caused the drachma to depreciate against the other currencies.

Second, the markets view the euro area as a zone of economic stability and security. This has helped to minimise the impact of international monetary and exchange rate shocks on euro area countries, an advantage once again of particular importance in the case of Greece.

Apart from the immediate benefits, EMU membership should also entail additional economic benefits and open up new opportunities, which, if properly pursued, could foster long-term economic growth. With the adoption of the single currency reducing uncertainty and transaction costs, capital movements and trade will increase. Furthermore, participation in a large integrated capital and money market will enable Greek enterprises to raise funds on favourable terms. Meanwhile, investors will be able to diversify their portfolios and choose from a variety of investment options. Finally, Greek productivity also stands to improve, as a result of increased competition, the structural reforms rendered necessary by EMU membership and the more efficient operation of product, labour and capital markets.

However, these substantial potential benefits will not, as already mentioned, materialise automatically, but will ultimately depend on the advancement of structural reforms, the dynamism of the Greek economy and, more generally, on its ability to adjust to the new competitive conditions within EMU.

It has often been argued that EMU participation also has its economic costs. In the case of Greece, the question that is usually asked is “what costs has the Greek economy incurred from waiving the right to conduct an independent monetary policy – in particular, an interest rate policy – and an exchange rate policy as a means of improving competitiveness and generating employment?”.

In terms of monetary policy, it should be noted that market globalisation and the deregulation of capital movements leave little room for the conduct of an independent monetary policy in a small open economy like Greece. The implementation of the Eurosystem’s single monetary policy in Greece has decisively enhanced monetary stability and strengthened the prospects for low inflation. As for the exchange rate policy, experience has shown that in small open economies, especially those where labour markets do not operate efficiently, currency depreciation is not an effective means of improving competitiveness and generating employment. The reason for this is that, as the depreciation of the currency is rapidly offset by cost-price increases, any improvement in competitiveness is short-lived and the end result is an acceleration of inflation. It can therefore be reasonably concluded that, in the case of Greece, the costs incurred from losing the ability to conduct independent monetary and exchange rate policies are very limited.

8.2 *Challenges and further reforms*

From the above discussion of the economic benefits and potential costs of EMU participation, it emerges that Greece stands to gain much in terms of economic stability, restored credibility and elimination of both exchange rate risk hedging costs and exchange rate uncertainty. Meanwhile, the costs incurred from waiving the right to conduct independent monetary and exchange rate policies seem to be relatively low, especially in the light of past experience. As mentioned previously, the most significant benefits will be felt in the long run and will not materialise automatically. The Greek economy still faces substantial structural problems and the product and factor markets are still characterised by insufficient competitive conditions and by operational rigidities. Thus, further adjustments in a wide range of policies as well as institutional reforms must be pursued if Greece wants to adapt successfully to the new economic environment and maximise the economic benefits to be drawn from EMU participation. These adjustments and reforms will help ensure market flexibility and operational efficiency and gradually restructure the economy.

From the previous examination of developments, it ensues that, in spite of the significant improvement in economic performance achieved in the last few years, some problems are more chronic and suggestive of underlying structural weaknesses.

First, the unemployment rate — though receding for the third year in a row (2002: 9.9%, 2001: 10.5%, 2000: 11.1%, 1999: 11.9%) — remains the second highest in the European Union.

Second, the current account deficit as a percentage of GDP has exceeded 6% for the third consecutive year and is one of the highest in the OECD. This high deficit, which, as previously mentioned, reflects a shortfall of domestic savings against domestic investment, is largely attributable to the faster expansion of domestic demand in Greece, compared with its main trading partners. However, it also denotes a loss in competitiveness of Greek goods and services both on the domestic and the international markets.

Since Greece joined the euro area, the financing of the current account deficit has become less of a constraint on the conduct of economic policy. To the extent, however, that this deficit reflects structural weaknesses and a loss of competitiveness, its widening affects economic growth and employment and underscores the need for structural reforms geared towards increasing competitiveness.

Third, inflation, though much lower than in the past, remains higher than the euro area average, and the inflation differential between Greece and the euro area has in fact widened. Of course, a fast growing economy in a process of real convergence can be expected to have a higher rate of inflation than the more developed economies towards which it is converging. However, part of this differential (the part that is not due to the faster increase in the prices of non-tradeable goods and services) implies a decline in the economy's international competitiveness. Should differentials of this sort become more permanent, their cumulative effect on competitiveness would be significant. Thus efforts must be intensified to reduce Greece's inflation differential with the euro area and increase competitiveness, especially in the tradeable goods and services sector.

Fourth, although the fiscal position has improved substantially, with the general government deficit falling to 1.2% of GDP in 2002, public debt remains particularly high, amongst the highest in the euro area and well above the reference rate of 60% set in the Treaty on European Union. Therefore, efforts geared towards fiscal consolidation and the faster reduction of the public debt-to-GDP ratio must be pursued, as provided for in the Updated Stability and Growth Programme.

The gradual integration into the wider economy of the euro area poses new policy challenges. Top priority should be given to maintaining substantially higher growth rates than in the other EU Member States and to bringing the standard of living in Greece up to par with the European average within a reasonable time span. The further reduction of unemployment to a socially acceptable level should also constitute a primary objective. Both of these goals must be pursued in conjunction with price stability, which is not only desirable *per se*, but also essential in order to sustain high long-term growth. Since monetary and exchange rate policies conducted at a national level are no longer an option, the objectives of sustainable strong growth and higher employment, without jeopardising price stability, will have to be achieved through fiscal policy and structural reforms aimed at increasing productivity and improving the competitiveness of the Greek economy.

In order to ensure sustainable strong growth and achieve real convergence in an environment of price stability, the current account deficit must, as a minimum prerequisite, be lowered and maintained at tolerable levels. Necessary conditions and adjustments must therefore be fostered so that Greece can address its external imbalances and base its prospects for dynamic growth not only on domestic demand, but also on exports of goods and services. For a small open economy like Greece to succeed in the new competitive environment of EMU, all sectors with a comparative advantage must be supported in order to strengthen the export orientation of the economy. The anticipated decrease in inflows from EU structural funds is but another reason why the sustainability of the external balance and an increase in receipts from exports of goods and services must be secured. More specifically, the 3rd Community Support Framework will end in 2006, although funds will continue to be received until 2008 under Community rules. In the enlarged EU, Greece will no longer belong to the group of most favoured countries as regards CSF support (as is the case today), since some of the new Member States will have a lower GDP growth rate than Greece and a greater need for Community support. Net receipts from the EU budget will therefore decrease, but will not cease. The adjustment to the new situation will be gradual, since transitional arrangements regarding increased funding to new EU entrants and decreased funding to older EU Member States will apply. Whatever the exact outcome, other growth factors, both external and domestic, will have to be utilised in order to offset this reduction in EU transfers.

Without the exchange rate adjustment option, Greece will now have to rely exclusively on other policy instruments to strengthen its competitiveness and promote its exports. This is yet another reason why a prudent fiscal policy and further structural reforms are warranted.

Essential to the strengthening of the Greek economy's export orientation is the creation of an environment that would encourage new business investment and attract foreign direct investment. Substantial additional efforts will therefore be needed to improve the efficiency of the public sector and reduce the administrative interventions that have deterred investment and entrepreneurship in many sectors of the economy. In order to deal with these problems, several corrective steps have already been taken, such as the measures to simplify license issuance for start-ups and the creation of "Investment Reception Centres" ("one-stop shops"). A lot, however, remains to be done. Meanwhile, the number of firms that implement a strategy of technological and organisational modernisation, reduce production costs and improve their product range and quality so as to meet foreign market standards and requirements must be increased. This will serve to stimulate the recovery and growth of Greek exports, provided that a macroeconomic policy fostering stability and growth is concurrently implemented and that the firms themselves follow an appropriate pricing policy and – together with employees – adopt wage policy options conducive to these ends.

8.3 Macroeconomic policy

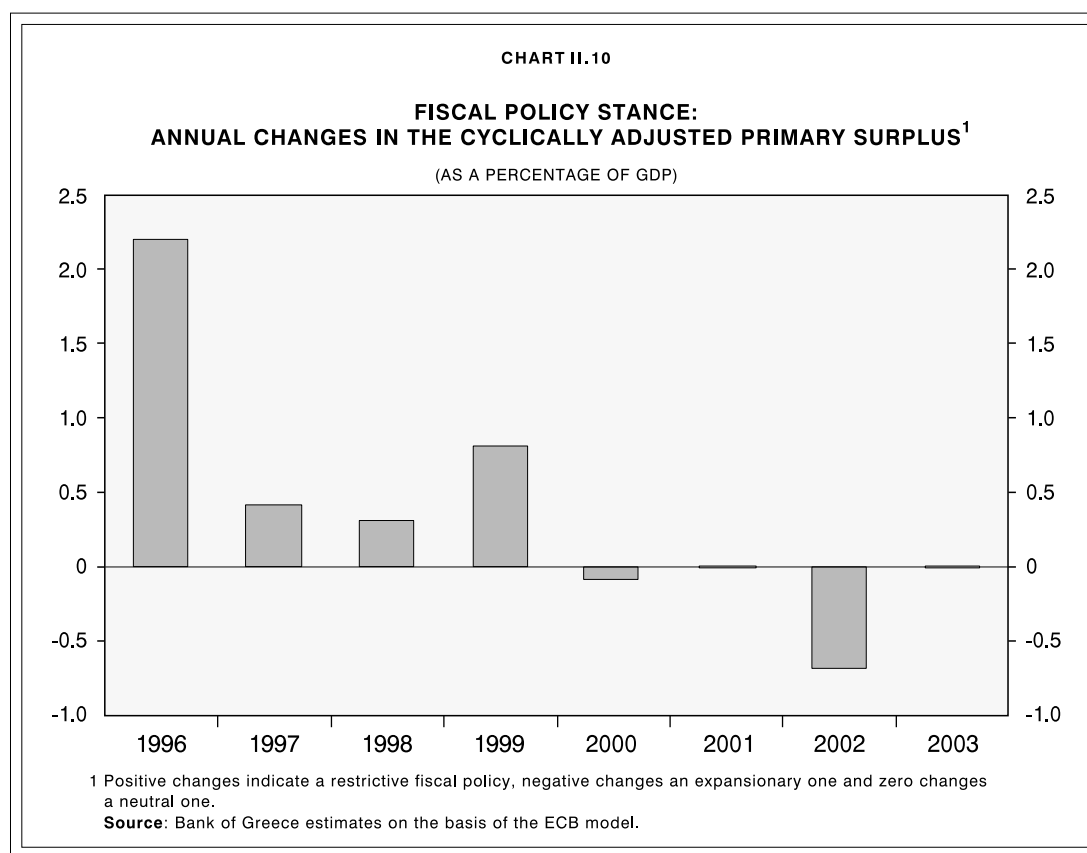
The conduct of a sound and balanced macroeconomic policy has become more imperative now that Greece has joined the euro area. The single monetary policy is formulated by the ECB on the basis of the economic conditions prevailing in the euro area as a whole and not in individual countries. Therefore, it cannot be tailored to meet country-specific needs, and Greece, for instance, can no longer make up for a possibly lax fiscal policy with a tight monetary or nominal exchange rate policy. Thus, the conduct of a stability-oriented macroeconomic policy must mainly rely on fiscal policy (and in the long term on structural policies that enhance market flexibility). The effectiveness of macroeconomic policy will also largely depend on the behaviour of the social partners.

Fiscal policy

The relaxed monetary conditions and expansion of domestic demand that the Greek economy is currently experiencing call for a tightening of fiscal policy (see Chart II.10). A policy of faster fiscal consolidation (especially if it were to cover off-budget expenditure) would help contain inflationary pressures, thus serving the price stability objective. It would also help reduce public debt at a quicker pace, thereby reducing the risks from a possible interest rate increase. Meanwhile, the ensuing rise in public savings would serve to reduce the current account deficit. Furthermore, since the economy is in a phase of rapid growth, a stronger fiscal position would enable automatic fiscal stabilisers to operate fully in the years to come. This would attenuate the impact from the reduction in the positive contribution to

growth that certain factors had had in the last few years. In fact, this could be accomplished without violating the Stability and Growth Pact, which requires EU Member States to meet the medium-term target of a general government budget close to balance or in surplus.

Fiscal flexibility will be further enhanced if the debt-to-GDP ratio is reduced from its current level of roughly 105% to the level of 60% laid down in the Treaty on European Union, thus averting public finance problems. If the debt ratio is not reduced soon, central government may have difficulty coping with an increase in interest rates in the future, which would only magnify debt servicing costs. An increase in debt servicing costs coupled



with a substantial drop in the growth rate could make it hard to maintain the annual budget within the limits set by the Stability and Growth Pact.

However, there is another reason why public debt must be rapidly reduced: in Greece, as in other EU Member States, the liabilities of the social security system will increase in the second decade of the century, as an increasing number of workers will reach the age for retirement. Public pension expenditure as a percentage of GDP will therefore rise sharply, especially if the reform of the social security system has not been completed.

Reducing the debt-to-GDP ratio to 60% will not be an easy task. The previous reduction over 1997-2002 was particularly slow (only 6.4 percentage points of GDP).

Furthermore, this previous reduction was not in pace with the large primary surpluses, the significant acceleration in the economic growth rate and the considerable decrease in interest rates and interest expenditure, nor did it reflect the fact that proceeds from privatisations (used almost exclusively for debt reduction) reached 10% of GDP over the same period. In spite of the favourable evolution of these debt ratio determinants, a sizeable decrease in debt was not achieved for the following reasons: (i) central government took over the liabilities of several entities outside the general government (for instance, by taking up the debts or participating in share capital increases of public enterprises), (ii) certain expenditures (e.g. back-pays in bond form) did not figure in the annual general government budget deficit, but were included in the debt ("deficit-debt adjustment"). These additional burdens are estimated to have averaged, on an annual basis, 5.2% of GDP in the 1997-2002 period (see Table VIII.10).

Based on the dynamics of the debt-to-GDP ratio and on some rather optimistic assumptions, it has been projected that roughly 6-7 years will be needed to lower the debt-to-GDP ratio to 60%. This projection assumes e.g. that: (i) the debt ratio will be reduced to roughly 100% by end-2003, as outlined in the State budget for 2003, (ii) nominal GDP will grow at an annual rate of 6.0%, (iii) government borrowing costs will be 4.5%, (iv) the general government budget will show a primary surplus (excluding interest payments) equal to 6% of GDP, (v) proceeds from privatisations will amount to an annual 1% of GDP and will be used exclusively to reduce public debt, and (vi) general government will no longer take over any off-budget liabilities.

Therefore, efforts must be intensified to rapidly reduce the public debt-to-GDP ratio in the next few years, i.e. while growth is expected to remain strong and pension expenditures will not be as high as they will be later on (because of population ageing). In addition, as mentioned previously, the achievement of such an objective also presupposes a high primary surplus in the general government budget – in the range of 6% per year, the acceleration and broadening of the privatisation programme and the use of all privatisation proceeds for debt reduction.

There is also room for gradually disengaging the government from the assumption of public entity liabilities and other expenditures that do not figure in the general government budget. The plans of the Ministry of Economy and Finance to drastically reduce these expenditures in 2003, the sharp cutback in State guarantees and the termination of State-funded share capital increases of public enterprises are decisive steps in the right direction that should be maintained on a more permanent basis.

The experience of several countries has shown that effective long-term fiscal consolidation and high primary budget surpluses are best achieved by containing primary expenditure and eradicating tax evasion, rather than by increasing taxes, which usually has adverse repercussions on investment and growth. Reducing interest payments on public debt is certainly useful, but radical and permanent fiscal consolidation should not rely on this means alone. In order to contain primary expenditure successfully, specific expenditure ceilings that extend beyond each fiscal year and cover all levels of the public sector must be

set. Such rules¹ would enhance the credibility of fiscal policy and have a favourable impact on expectations about public deficit and debt and, ultimately, on growth and inflation.

Personnel outlays represent the largest category of public sector payments, accounting for some 51% of total primary expenditure of the ordinary budget.² Considered inelastic, these outlays will undoubtedly prove very difficult to contain in the short term. In the long term however, there is definite room for greater management efficiency, a substantial improvement in productivity, a reduction in public sector employment and a redeployment of personnel to sectors more in need. The envisaged introduction of part-time employment in the public sector could help attain these objectives. As the ultimate goal is to create a smaller but more efficient public administration, wider-ranging reforms and changes in personnel selection and advancement methods will be required. Meanwhile, the savings from this restructuring could serve to bring public sector salaries more in line with their private sector equivalents, thus helping to attract highly qualified staff to the public sector.

As mentioned previously, the budgetary burden caused by various types of subsidies and allowances, which have rapidly increased in the last few years and account for roughly one fifth of total primary expenditure, can also be substantially reduced. The purpose of most public sector transfer payments is to help public entities – such as the Farmers' Insurance Fund (OGA), the Social Insurance Fund (IKA), the Seamen's Pension Fund (NAT), hospitals, etc.) and public enterprises not included in general government, e.g. the Hellenic Railways Organisation (OSE), the Hellenic Aerospace Industry (EAB), the Urban Transport Organisation (OAS) – cover their deficits. The effective reduction of these expenditures would require a restructuring of the wider public sector geared, *inter alia*, towards improving the operational efficiency of public enterprises and several other public entities, reforming the health care system and ensuring the viability of the social security system. These reforms, though advocated on numerous occasions in the past (in reports by international organisations and by the Bank of Greece itself), will obviously be difficult to carry out immediately as they have so far come up against strong opposition. Without them, however, public sector primary expenditure will be difficult to contain in the long term.

On the revenue side, there are two crucial – and interrelated – matters to be addressed: the eradication of tax evasion and the tax reform. With regard to the first, it is worth noting that ordinary budget revenue in 2002 would have fallen short of budget forecasts by 0.8% of GDP, if an extra €1,061 million had not been collected as a result of two tax arrangements for the settlement of pending tax cases. The fact that taxpayers welcomed these arrangements suggests that tax evasion is still widespread and/or that taxpayers' relationships with the tax authorities still leave much to be desired. The frequency of these arrangements in the recent past (there have been at least ten since 1980) has not

1 For examples of such rules, see Bank of Greece, *Annual Report 2001*, Athens 2002, p. 53.

2 According to provisional data for 2002 (see Table VIII.6).

helped develop fiscal civic-mindedness and in the medium term is in fact not only counterproductive in the fight against tax evasion but often ends up working against the conscientious taxpayer. For all of these reasons, as already suggested on numerous occasions,¹ these arrangements should be resorted to less frequently and only in conjunction with major tax reforms (like last year's) or with the radical restructuring and upgrading of the tax administration.

With regard to the tax reform, a series of measures were taken in 2002 to simplify the tax system and increase its transparency, to lower tax collection and compliance costs and to reduce the tax burden on natural persons, especially low-income earners and families with three or more children. Taxes on inheritances, gifts and parental donations were also lowered significantly. These measures, together with the previous arrangements of November 2001,² have not only significantly simplified the tax system and made it more equitable, but, in certain instances, have even improved the competitiveness of the economy. As announced by the government, the tax reform will be pursued further. Optimally this reform should cover the entire tax system and focus on the triple target of ensuring a simple tax system with increased financial incentives, a broadened tax base and an efficient tax administration.

The contribution of the social partners

EMU participation has, as mentioned above, increased the responsibility of the social partners in achieving national economic objectives. The social partners should, first, ensure that the outcome of their wage bargaining is compatible with price stability and — above all — helps reduce the inflation differential between Greece and the euro area. What this means in practical terms is that, until this differential is eliminated, the rise in real wages should fall short of the rise in productivity. In this way, losses in competitiveness will be recouped and the competitiveness of Greek production will be sustained, without adverse consequences on employment and workers' income. In addition, the pricing policies of enterprises must be compatible with both price stability and the long-term interests of the enterprises themselves. Their focus should therefore be twofold: (i) to strengthen competitiveness, as a necessary prerequisite to increasing market shares on both the domestic and the foreign markets, and (ii) to enhance profitability, as a precondition for new investment. Enterprises also play a crucial role in the growth process. In an open international economic environment, in which Greece now operates in its capacity as an EU and euro area member, enterprises have no choice but to upgrade their technology, modernise their organisation and administration and gear their efforts in close concert with their personnel towards increasing productivity, reducing operating costs and raising

¹ For instance, by the International Monetary Fund.

² Laws 2990/2002 and 2992/2002 reduced income tax and abolished stamp duties.

product quality to meet market standards. Those that will succeed in adjusting to the new conditions and producing at internationally competitive prices will be in a position to reap the advantages and opportunities opened up by EU enlargement and EMU participation, and serve as a launch-pad for export expansion.

8.4 Structural reforms

As mentioned above, Greece's successful participation in EMU and real convergence on the other euro area economies will depend on the furthering of structural adjustments and institutional reforms geared towards: (i) a steady and rapid improvement in productivity, as a key to higher competitiveness, growth and employment, (ii) increasing market flexibility and efficiency, as a means of ensuring the Greek economy's adjustment and full integration into EMU, and (iii) creating an investment-friendly environment.

Since late 2000 a number of structural policy measures have been adopted that were aimed at fiscal consolidation, public sector modernisation and greater operational efficiency in the product, labour and capital markets.

The fiscal consolidation and public sector modernisation measures included a pension system reform,¹ the gradual implementation of a tax reform,² the reorganisation of the Social Insurance Fund (IKA),³ as well as legislation on the privatisation of public enterprises,⁴ on public sector recruitment⁵ and on the tasks of the Greek Ombudsman.⁶ The tax reform was discussed in the previous subsection. As for the other measures, as already stressed, there is a definite need: (i) to accelerate the privatisation process, as a way to fiscal consolidation and to a more efficient operation of the economy, and (ii) to decisively promote the modernisation of the public administration with a view not only to boosting investment but also to improving State-citizen relations,⁷ which in turn will raise productivity and the standard of living.

Of these measures, completing the social security reform stands out as a top priority, not only in Greece but in several other countries as well. Given that the population will be ageing rapidly in upcoming decades, pension expenditure is projected to exceed 20% of GDP by the year 2050 (compared with 12.6% of GDP in 2000).

1 Law 3029/2002.

2 Law 2992/2002 (certain sections), Law 3052/2002 and Law 3091/2002.

3 Law 2972/2001.

4 Law 3049/2002.

5 Law 3051/2002 (certain articles).

6 Law 3094/2003.

7 The *Annual Report 2002* submitted by the Greek Ombudsman to the Speaker of the Greek Parliament on 27 March 2003 provides an assessment of the independent authority's activities since its establishment in 1998 and, *inter alia*, analyses the deeper reasons for poor public administration-citizen relations (the "Greek government's standard practice, until very recently, of recruiting public administration personnel on the basis of clientelism rather than meritocracy", a general tolerance of illegality, the excessive number of legal acts and the lack of legal clarity, and the shortage of staff with the appropriate skills). The report is available in Greek on the website www.synigoros.gr.

The reform of 2002 was a substantial step in the right direction,¹ its primary objective being to ensure the viability of the largest social security organisation in Greece, i.e. the Social Insurance Fund (IKA). To this end, it was decided that an amount roughly equal to 1% of GDP per annum would be transferred from the State budget to IKA. Additional measures included the merging of certain social security funds, the establishment of a framework for the creation of private social security funds at a branch level, the harmonisation of provisions concerning the social security entitlement of “old” and “new” labour market entrants, the introduction of disincentives to early retirement, and changes in the methods used to calculate “last wages earned”, which serve to determine pension levels. Apparently, however, this reform does not substantially reduce the large increase in pension expenditure over the long term. While official estimates prior to the reform pointed to a 12.2 GDP percentage point increase in total pension expenditure between 2000 and 2050 (from 12.6% to 24.8% of GDP), post-reform figures only lower this increase to 10 GDP percentage points (from 12.6% to 22.6% of GDP).

Far from having been completed, the social security reform should therefore be pursued towards the two following goals: (i) providing a uniform coverage to the maximum possible number of workers, and (ii) creating a second and third pillar with “funded” characteristics. While the legal framework for social security funds at the branch level (i.e. the second pillar) was recently established by law, the third pillar of social security, which concerns individual choices, has yet to be provided for. Apart from offering workers a greater range of options (for the expansion of their social security coverage), the establishment of the second and third pillars will help cut back on compulsory social security contributions (which, according to Eurostat,² are the highest in the EU), as well as on public expenditure for pensions (especially if accompanied by acceptable parametric changes). It would also increase the returns on contributions of the social security system. It should of course be taken into consideration that under the present circumstances further reforms in this field would trigger social reactions. However, if the matter is not addressed decisively and soon, a significant increase in the tax burden would be practically inevitable on a long-term horizon to cover future pension expenditures.

The measures aimed at increasing the operational efficiency of product and capital markets include: the deregulation of the fixed voice telephony market (as from 2001),³ the opening of the electricity market (also as from 2001),⁴ provisions for the organisation of the

1 The importance of the recent social security reform (Law 3029/2002) is analysed in detail in Bank of Greece, *Monetary Policy, Interim Report 2002*, November 2002, Box 2, pp. 103-07.

2 See “Labour Costs Survey 2000 – Member States”, *Statistics in Focus*, Theme 3 – 7/2003. The survey covered 13 EU countries (EU-15 except Belgium and Italy). In 2000, the social security contributions effectively paid by employers accounted for 22.4% of total labour costs in Greece’s business sector (excluding agriculture), followed by 22.0% for Sweden and 19.9% for France.

3 Law 2867/2000. This measure and the lowering of the State’s participation in OTE’s share capital to less than 50% essentially marked the completion of the telecommunications sector’s deregulation. (Under Article 26 of Law 2843/2000, the State retains one third of OTE’s share capital, while under Article 29 of Law 2937/2001 its Board of Directors is elected in accordance with legislation on sociétés anonymes and the Statute of OTE).

4 Law 2773/1999.

oil products market,¹ the opening of domestic sea transport (as from 1 November 2002),² the provision of incentives to construction firms,³ the simplification of procedures for setting up companies,⁴ legislation aimed at strengthening the capital market and boosting entrepreneurship,⁵ legislation on corporate governance,⁶ the creation of a “Guarantee Fund for Small and Very Small Enterprises” (TEMPME)⁷ and draft laws on such matters as accounting standardisation and auditing, the establishment and supervision of stock exchanges, corporate bond issuance, as well as securitisation of claims (including claims on real estate). With regard to the most significant of these measures, it should be observed that:

- The deregulation of the telecommunications market has had a visible impact on the prices, range and quality of services provided, and on job creation. This also applies, to some extent, to domestic air transport.

- The opening of the electricity market has not yet led to effective competition or to a drop in prices, due both to remaining institutional obstacles⁸ and the long lead-time required to set up new plants. Meanwhile, the pricing of natural gas and the opening of the natural gas market, to be completed by 2006, are two matters that are still pending.

- On a more general note, for the deregulation of markets to ensure a level playing field for enterprises and have a beneficial impact on social well-being, the independent and efficient operation of the Regulatory Authorities that have been set up must be supported and further strengthened. The same also applies to the Competition Commission.⁹

Finally, the labour market measures taken concerned employment promotion,¹⁰ tax incentives to enterprises to increase employment,¹¹ the employment of immigrants,¹² the restructuring of the Greek Manpower Employment Agency (OAED) and the operation of Temporary Employment Agencies.¹³

The assessment of the implementation of these measures leads to certain initial conclusions, which also suggest the desirable course of action for the future. More specif-

1 Law 3054/2002.

2 Law 2932/2001.

3 Law 2940/2001.

4 Law 2941/2001.

5 This Law (2992/2002) provides for the introduction of international accounting standards, as well as for the granting of tax incentives to enterprises that both merge and increase employment.

6 Law 3016/2002 (Article 27) also contains “measures to combat poverty” (financial assistance to the long-term unemployed, to poor households residing in mountainous regions and to low-income families with school-aged children).

7 Law 3066/2002. TEMPME will be supervised by the Bank of Greece and provide small and very small enterprises with part of the guarantees they need for bank loans.

8 Certain problems have been pointed out by the Regulatory Authority for Energy (see Bank of Greece, *Annual Report 2001*, Athens 2002, Box III.5) and by the OECD (*Economic Surveys – Greece*, July 2002).

9 Arrangements to this effect were included in Law 3051/2002.

10 Law 2874/2000 (December).

11 Article 13, paragraph 13, of Law 2992/2002.

12 Law 2910/2001, as amended by Law 3013/2002.

13 Law 2956/2001. Also, Presidential Decree 178/2002 (implementing Directive 98/50/EC) on the safeguarding of employees’ rights in the event of transfers of undertakings. Another presidential decree on fixed-term work will soon be issued (implementing EU Directive 99/70/EC).

ically, the measures geared towards increasing labour market flexibility, which, apart from boosting employment, could also serve to contain inflation, are more or less on the right track. However, the provisions of Law 2874/2000 regarding the reduction of overtime work and incentives for job creation have been severely criticised for leading to a substantial production cost increase in several cases. Serious problems also emerged during the restructuring of the OAED, but are to be resolved by new legislation.¹ Finally, although the recent process for the legalisation of non-EU immigrants is well under way (the second such process since 1998), significant bureaucratic obstacles remain.

From the factual analysis, certain conclusions can be drawn about the main problems of the labour market, most of which have already been addressed in the National Action Plans for Employment (drawn up in accordance with EU employment policy guidelines). Efforts must, however, be intensified to implement the policy guidelines contained in these National Plans. More specifically, in order to reduce youth, female and long-term unemployment, increase the effectiveness of OAED programmes and ensure the smooth integration of immigrant workers into the Greek economy, the following measures are desirable:

First, apart from a reform to the general educational system, the vocational training system must be upgraded and a greater emphasis placed on lifelong learning. A modern and effective educational system will be crucial to Greece's economic future. Learners must not only acquire knowledge and skills that correspond to current market requirements, but also acquire learning skills that will enable them to flexibly adapt to an environment of ever-changing knowledge and technology. Combatting "digital illiteracy" will obviously be a key element of this endeavour and significant steps have already been taken in this direction (e.g. by introducing Information Technology in school curriculums). More generally, the educational reform and the dissemination of new knowledge will improve the quality of the labour supply and, at the same time, set the stage for an increase in productivity.

Second, the operation of OAED must be decisively improved as far as matching labour demand and supply is concerned, while the operation of the Temporary Employment Agencies and Private Labour Counselling Offices (i.e. of agencies that can help achieve a better match between labour supply and labour demand) must be monitored for legal compliance. Furthermore, the requirements for participation in OAED's employment subsidy programmes must be re-examined.

Third, the childcare infrastructure (day nurseries, full-day schools, "Children's Creative Workshops", etc.) must be improved and part-time employment further encouraged (which mothers with family obligations may find attractive).

Fourth, supportive programmes must be set up to facilitate the integration of immigrant workers into the work force and society, while the procedure for their legalisation must be completed. Such a legalisation procedure would *inter alia* entail an equal

¹ Law 2956/2001 is to be amended by a draft law currently being discussed in Parliament.

treatment of foreign and Greek workers, but also equal terms of competition for all enterprises, whether they employ foreign workers or not. The equal treatment of workers and the equal terms of competition between enterprises presuppose that compliance with labour legislation, especially in terms of health protection and safety at work, important *per se*, will be effectively monitored by the Labour Inspectorate.

More generally, the adjustment of working hours and even of employment to variations in production must be further facilitated. In addition, the costs of creating employment must be lowered and incentives provided to small enterprises to comply with their tax and social security contribution obligations, so as to make the legal environment (i.e. labour, social security and tax legislation) more employment-friendly, in particular towards formal salaried employment in medium- and large-sized enterprises.¹

* * *

The conclusion that can be drawn from the previous analysis is that, after the impressive progress made in recent years, the picture of the Greek economy continued to be satisfactory in 2002 in spite of the adverse conditions prevailing in the world economy. Greek GDP growth remained strong at roughly its 2001 level, substantially overshooting the respective euro area average. The rate of unemployment was reduced for the third year in a row, albeit at a relatively slow pace. Inflation was contained at a level marginally higher than in 2001, even though fresh fruit/vegetable prices increased sharply as a result of the exceptionally harsh weather conditions, and oil prices rose substantially during the year. Greek inflation, however, still remains higher than the euro area average.

The conditions of economic stability and credibility ensured by euro area participation have improved Greece's prospects of maintaining a satisfactory growth rate and containing core inflation at a relatively low level once again in 2003, in spite of heightened global uncertainty and the repercussions of the war in Iraq.

However, certain problems still need to be resolved. Greece's per capita income, measured in purchasing power standards, came to only around 67% of the respective EU figure in 2002.

Unemployment fell to 9.9% in 2002, but still ranks second highest in the EU. The current account deficit remained above 6% of GDP for the third year in a row. In addition, in spite of the significant improvement in Greece's fiscal position as a result of the reduction in the fiscal deficit to 1.2% of GDP in 2002, public debt remains particularly high.

Therefore, Greek economic policy still has serious challenges ahead. First and foremost, higher than euro area growth rates will have to be maintained so that the standard of living in Greece can converge on the European average within a reasonable time

¹ See "Introduction" in R. Bryant, N.C. Garganas and G. Tavlas (eds) *Greece's Economic Performance and Prospects*, Bank of Greece and the Brookings Institution, Athens, 2001, pp. 26-28.

span, while the rate of unemployment will have to be reduced to socially tolerable levels. This dual objective must be attained in conjunction with a reduction in inflation to levels judged consistent with price stability.

The prospects of achieving real convergence, a high level of employment and price stability are favoured by the significant benefits and new opportunities opened up by EMU participation.

However, in order to reap the maximum economic benefits and achieve the targets of real convergence and increased employment, it will be necessary to complete reforms that will increase productivity and the competitiveness of the economy, enhance market flexibility and efficiency and strengthen business investment.

Meanwhile, efforts must be pursued to eliminate fiscal deficits with a view to reducing public debt and achieving price stability. Full fiscal consolidation and safeguarding stability will be crucial to the country's economic progress.

Implementing structural reforms will not be an easy task, *inter alia* because of the economic and social costs they entail and owing to the changes in standard attitudes and economic behaviour that they presuppose. The government and the social partners must, however, make every conceivable effort to ensure the widest possible consensus and cooperation for the promotion of the necessary reforms that will serve to improve the performance of the economy and achieve real convergence and high employment.

III. ECONOMIC ACTIVITY AND EMPLOYMENT

1. EXPENDITURE AND NATIONAL INCOME

1.1 Summary of developments in 2002 and the outlook for 2003

According to provisional estimates published by the National Statistical Service of Greece (NSSG) in March 2003, gross domestic product (GDP) grew by 4.0% in 2002, compared with 4.1% in 2001 (see Table III.1), recording the second highest growth rate in the EU, after Ireland's. This implies that the considerable economic slowdown observed in the other EU countries, which are Greece's major trading partners, had a limited impact on the Greek economy.

The sustained rapid growth of economic activity in 2002 and in the preceding two years was driven by interest rate cuts and the resulting strong credit expansion (both of which support consumption and investment), by the inflow of resources from the EU Structural Funds (used to finance infrastructure investment), as well as by investments realised in anticipation of the 2004 Olympic Games. The high performance of the Greek economy was indirectly due to the improved environment of macroeconomic stability and the climate of confidence, which stemmed from (i) a drastic reduction of inflation and public deficits, as a result of efforts made in the 1990s to achieve nominal convergence, (ii) the entry of Greece into the euro area and the adoption of the single currency, and (iii) a number of structural reforms implemented in recent years (see Chapter II.8).

The rather strong GDP growth was fuelled, on the supply side, by secondary and tertiary sector growth (5.7% and 3.3% respectively), while primary sector output remained virtually unchanged at -0.2%. On the demand side, GDP growth reflected the following developments:

- First, private consumer demand — according to NSSG estimates — increased by 2.5%, i.e. at a rate only slightly lower than in 2001 (2.9%, average annual rate of increase: 3.0% in 1998-2001). However, a number of short-term indicators suggest that private consumption growth may have been stronger than 2.5% in the year under review.

- Second, public consumption growth — according to the same estimates — was particularly high (6.2%, compared with a 0.9% decrease in 2001), whereas the Updated Stability and Growth Programme of December 2002 had projected that it would have been as low as 1.5%. This was partly due to the considerable growth of employment in the public sector and partly to the increase, in real terms, of public sector expenditure for the purchase of consumer goods and services.

- Third, total gross fixed capital formation is estimated to have risen by 6.7%, compared with 5.9% in 2001. In more detail, a strong increase was recorded in private residential investment, as well as in public and private business investment, especially in non-residential construction. However, on the basis of available evidence, private *industrial* firms curtailed their

TABLE III.1
GROSS EXPENDITURE OF THE ECONOMY AND GROSS DOMESTIC PRODUCT
(Constant prices of year 1995)

	Million euro	Annual percentage changes			
		1999	2000	2001	2002
1. Consumption	70,655.0	2.7	2.5	2.2	3.1
1.1 Private	58,405.3	2.9	2.6	2.9	2.5
1.2 Public	12,249.7	1.6	2.0	-0.9	6.2
2. Gross fixed capital formation	14,867.2	6.2	8.0	5.9	6.7
2.1.a By investor: General government	2,537.6	1.5	20.1	1.1	1.7
2.1.b Other sectors	12,329.6	7.2	5.7	6.9	7.8
2.2.a By type: Construction	9,421.9	6.2	2.9	7.2	8.2
2.2.b Equipment	4,679.4	3.5	17.6	3.7	3.4
2.2.c Other investment	766.0	32.8	-0.3	8.7	16.4
3. Change in stocks and statistical discrepancy (percentage of GDP)	251.5	-0.3	0.0	0.0	0.1
4. Domestic final demand	85,773.7	2.8	3.9	3.1	3.9
5. Exports of goods and services	14,087.2	8.0	19.7	-1.6	-4.5
5.1 Exports of goods	8,343.9	-4.2	11.3	-5.3	-7.9
5.2 Exports of services	5,743.2	19.2	25.9	0.8	-2.4
6. Final demand	99,860.9	3.6	6.6	2.2	2.4
7. Imports of goods and services	19,933.7	3.8	14.5	-3.4	-2.7
7.1 Imports of goods	18,084.2	-4.8	14.8	-4.7	1.5
7.2 Imports of services	1,849.4	53.4	13.1	1.2	-17.1
8. Balance of goods and services	5,846.5	...	...	...	...
9. GDP at market prices	79,927.2	3.6	4.2	4.1	4.0

	Contribution to GDP growth (percentage points)			
	1999	2000	2001	2002
1. Consumption	2.3	2.2	1.9	2.6
1.1 Private	2.1	1.9	2.0	1.7
1.2 Public	0.2	0.3	-0.1	0.8
2. Gross fixed capital formation	1.3	1.8	1.4	1.6
2.1.a By investor: General government	0.1	0.7	0.0	0.1
2.1.b Other sectors	1.3	1.1	1.3	1.5
2.2.a By type: Construction	0.8	0.4	0.9	1.1
2.2.b Equipment	0.3	1.4	0.3	0.3
2.2.c Other investment	0.3	0.0	0.1	0.2
3. Change in stocks and statistical discrepancy (percentage of GDP)	-0.6	0.3	0.1	0.0
4. Domestic final demand	3.1	4.2	3.4	4.2
5. Exports of goods and services	1.7	4.3	-0.4	-1.1
5.1 Exports of goods	-0.4	1.1	-0.5	-0.7
5.2 Exports of services	2.1	3.3	0.1	-0.4
6. Final demand	4.7	8.6	3.0	3.1
7. Imports of goods and services	-1.1	-4.4	1.1	0.8
7.1 Imports of goods	1.2	-3.5	1.2	-0.4
7.2 Imports of services	-2.4	-0.9	-0.1	1.2
8. Balance of goods and services	0.5	-0.1	0.7	-0.2
9. GDP at market prices	3.6	4.2	4.1	4.0

Source: National Statistical Service of Greece (NSSG)/National Accounts (provisional estimates for 1999-2002), March 2003.

initial investment plans in the course of 2002, eventually causing their investment expenditure to decline. Moreover, general government investment is estimated to have increased, on a national accounts basis, by a mere 1.7%, despite a sharp increase in some of its components.

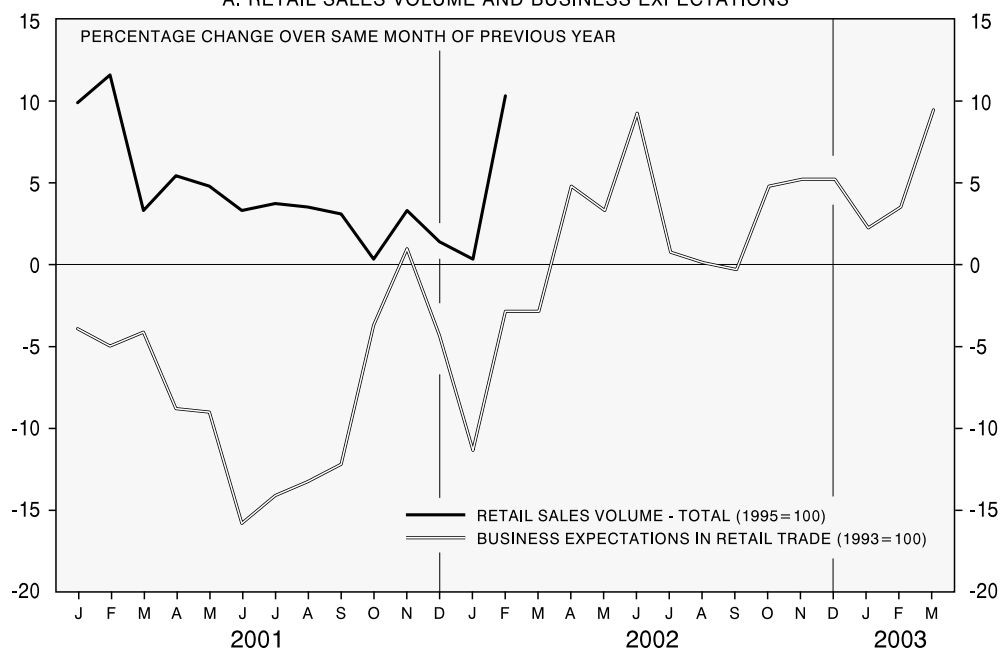
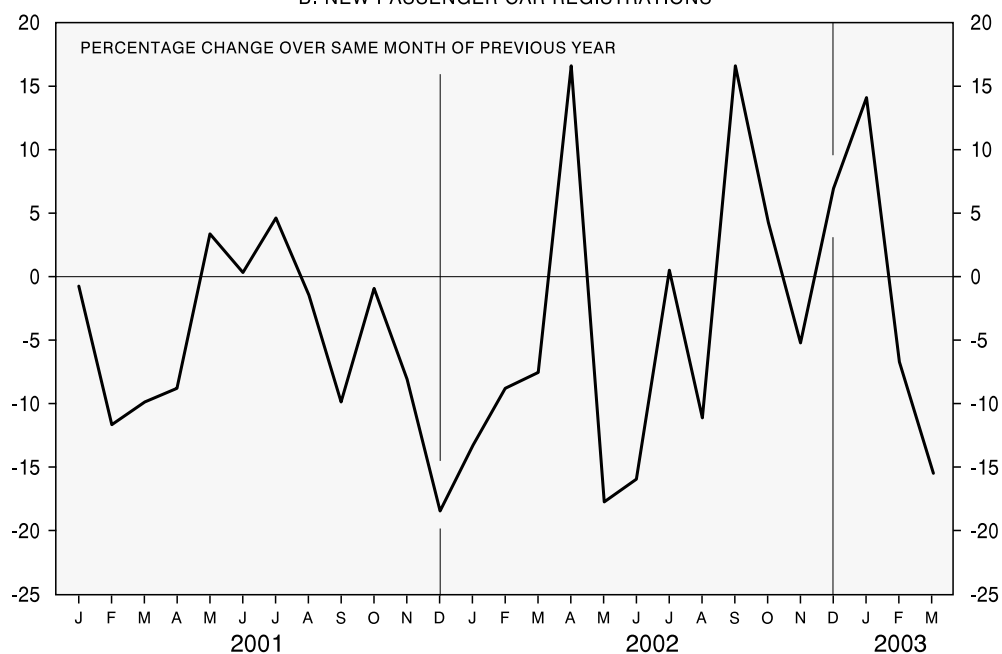
On the other hand, the repercussions of the worsened external economic environment manifested themselves in 2002 in a drop of goods and tourist services exports, also driven by a decline in price competitiveness. However, the negative contribution of the real external balance on goods and services (i.e. exports minus imports) to GDP growth was relatively small, as the aforementioned considerable drop in exports of goods and services had coincided with a virtual stalling of goods imports and a sharp fall in services imports (see Chapter IX).

Regarding the *economic outlook for Greece* in 2003, the share of domestic demand in GDP growth is expected to remain stable. Private consumption growth should be supported by higher levels of real disposable income of households, as a result of (i) a projected increase in the real earnings of employees, (ii) the alleviation of the tax burden on income (see Chapter IV.2) and (iii) employment growth. Increased employment in sectors of economic activity that are involved in the preparations for the Olympic Games (mainly the construction industry) should counterbalance any downward or stagnation effects occurring in other economic sectors (e.g. manufacturing or tourism) that are more directly affected by heightened uncertainty and the anticipated deterioration (for reasons explained below) of the price competitiveness of the economy. Also, private residential investment is projected to further increase appreciably, along with the considerable growth of both public (according to the budget) and private business investment in the context of the preparations for the Olympic Games.

By contrast, the change in the real external balance is projected to make a stronger negative contribution to growth this year, compared with 2002. This may occur for a variety of reasons: (i) the pace of economic recovery in Greece's major trading partners and in the countries of origin of incoming tourists is expected to be rather slow, (ii) further losses are to be expected in the price competitiveness of domestic goods and services if the inflation differential between Greece and the other euro area/EU countries persists, and because of the ongoing appreciation of the euro against the other major currencies, and (iii) tourist activity has been negatively affected by uncertainty *since before* the war on Iraq about the situation that will arise *once it is over*, although it cannot be ruled out that this climate may reverse over the coming months.

In view of the above, the Bank of Greece estimates that the robust growth of economic activity will continue into 2003, at a rate of 3.7%, i.e. somewhat lower than in 2002. This projection also takes into account the adverse impact of global uncertainty, which had become visible in domestic aggregates and in the confidence climate since before the outbreak of the war. The strength of the impact on the Greek economy will ultimately depend on the economic conditions that will emerge once the war is over. In any case, this impact is expected to be rather limited, as domestic GDP growth relies on endogenous factors that remain supportive.

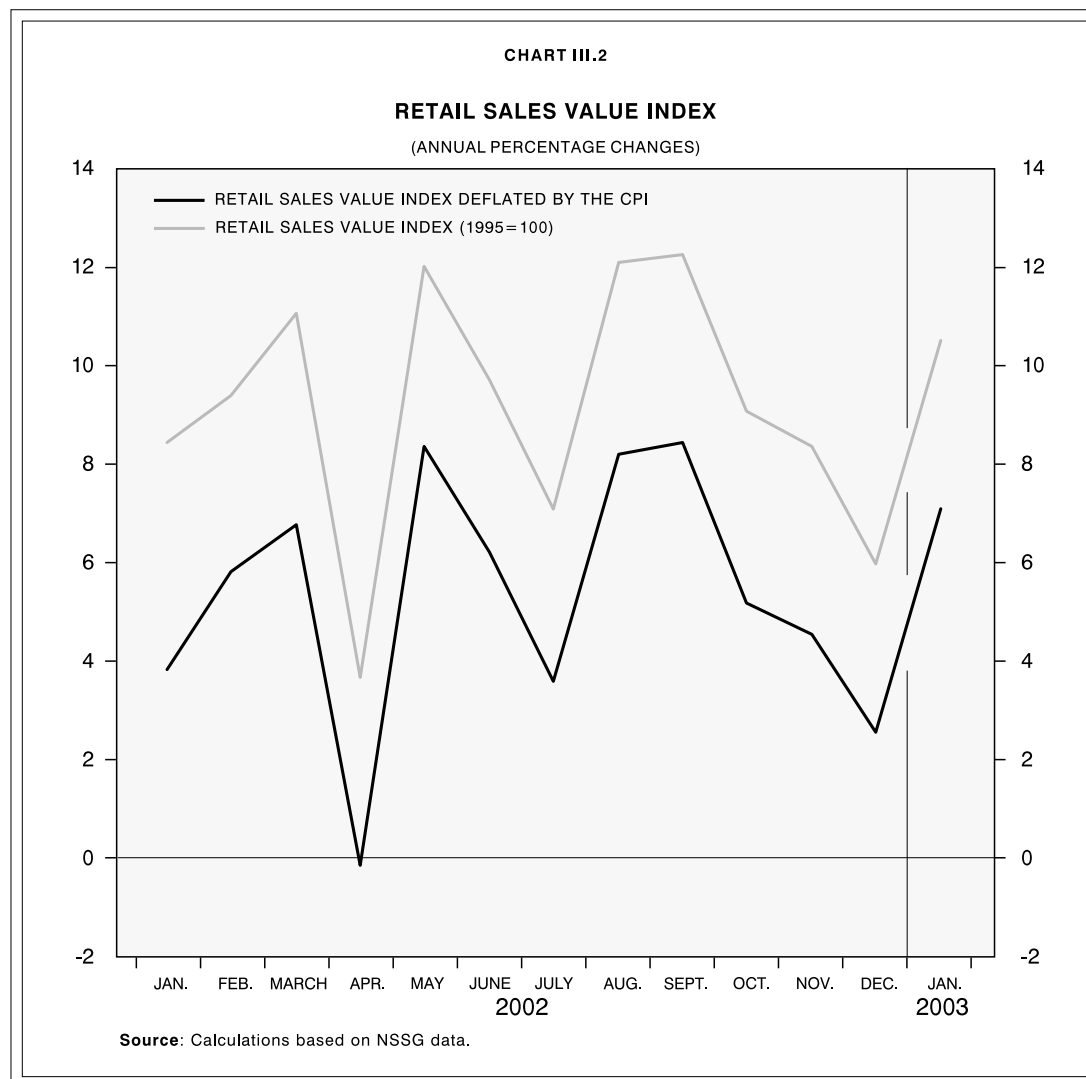
CHART III.1

CONSUMER DEMAND**A. RETAIL SALES VOLUME AND BUSINESS EXPECTATIONS****B. NEW PASSENGER CAR REGISTRATIONS**

Source: Calculations based on data from the NSSG (retail sales and cars) and the Foundation for Economic and Industrial Research-IOBE (expectations). The index of business expectations is calculated on the basis of business firms' estimates on sales and stocks, as well as of forecasts on business activity over the next six months.

1.2 Consumer demand

As mentioned in the previous section, consumer demand growth was 2.5% in 2002 (compared with 2.9% in 2001), based on the provisional national accounts estimates of the NSSG. However, available short-term indicators suggest that consumer demand growth



may have been stronger than that (see Charts III.1 and III.2 and Table III.2). In more detail, the value of retail sales (excluding car sales) rose, according to the NSSG, by 8.9% in 2002, implying a growth of more than 5% in volume. As this is estimated to have more than offset the 4.2% drop in new passenger car registrations (more so because the value of car imports actually increased owing to both higher prices and larger engine capacity), it would be reasonable to assume that the increase in consumer demand for goods had been

appreciably high. This assumption is also corroborated by other evidence concerning the year under review, including: (i) the strong growth of domestically produced *consumer non-durables* (5.9%), (ii) the parallel increase in imports of consumer non-durables (see Table IX.2), and (iii) the rebound – according to a business survey carried out by the IOBE

TABLE III.2
RETAIL SALES VALUE INDEX
(Percentage changes over year 2001, 1995=100)

Categories	2002
1 Big food stores	11.5
2 Department stores	11.0
3 Food – beverages – tobacco	5.8
4 Pharmaceuticals – cosmetics	8.4
5 Clothing – footwear	6.5
6 Furniture – electrical appliances – household equipment	5.0
7 Books – stationery – other goods	8.9
8 Retail sales not in stores	4.0
General index	8.9

Source: NSSG.

(Foundation for Economic and Industrial Research) – in the index of business expectations of (the usually pessimistic) retail trade firms. Furthermore, available evidence on consumer demand for services, although insufficient, suggests that this demand increased relatively slowly. Indeed, while demand for mobile telephony services continued to expand strongly,¹

¹ Public revenue from mobile telephony standing charges rose by 27.5% in 2002, implying an increase in the number of mobile telephony subscribers.

BOX III.1

The household savings ratio

Based on the latest NSSG national accounts data (pursuant to the European System of Accounts – ESA 95 – for the 1995-2002 period), this Box provides evidence on households' disposable income, final consumption and savings. Specifically, it defines four different indices of household disposable income (namely *gross/net* disposable income, depending on whether depreciations are included or not, and *adjusted/non-adjusted* disposable income, depending on whether social transfers in kind from the public sector to households are included or not) and another two different savings indices (namely *gross* and *net* savings), once more depending on the inclusion or exclusion of depreciations. In view of the above definitions, four *different ratios of household savings to household disposable income* can be identified (see table). For the →

Source: Calculations based on NSSG (National Accounts Dept.) data.

→ calculation of the ratio of savings to *adjusted* (net/gross) disposable income, *social transfers* in kind are added to both income and consumption. Calculations of disposable income and depreciations for the year 2002 rely on estimates, since the related NSSG data are unavailable as yet (unlike data on consumption and transfers).

Data summarised in the table point to a characteristic downward trend of the savings ratio in the period under review (irrespective of the definition adopted), which appears to have halted in 2002. A similar general downward trend has also been observed in the rest of the EU and in the majority of developed economies in the last twenty years. Between 1995 and 2002 the drop in the Greek savings ratio was in the range of 5.5-7 percentage points, compared with a decrease of less than 3 percentage points in the respective euro area figure.

overall demand for other services — relying on business firms' own estimates, as reported in the IOBE services survey (excluding retail trade and banking)¹ — declined in 2002, partly on account of the drop in tourist activity.

The 2.5% (or slightly higher) growth of private consumption was bolstered by an increase in households' real disposable income in the range of 2.4%-2.8% (depending on which index of real disposable income is referred to – see Box III.1). This in turn brought the average propensity to save back to around the level it was in 2001, halting its down-

¹ Industries covered in the survey include hotels, restaurants, travel agencies, land and other transport agencies, providers of advertising and business services, insurance companies, etc.

BOX III.2

The EU housing market and recent housing price developments in Greece

The real estate market is a distinct market with important consequences for macroeconomic and financial stability. In recent years, a great deal of attention has been paid to the need for recording and understanding the developments and particularities of this market. In this respect, the Bank of Greece has emphasised, on several occasions, the importance of systematically monitoring developments in the real estate (housing) market, as well as their possible repercussions on household consumption, savings, wealth value and portfolio structure.¹ Moreover, it has proceeded to systematically collect and elaborate data concerning the real estate market, the evolution of housing prices and supply in particular.

The increased interest in this issue has also been reflected in a special report on *Structural Factors in the EU Housing Markets* published in March 2003 by the European Central Bank (ECB). The report was prepared by a Task Force consisting of experts from the ECB and the national central banks of all EU countries. →

¹ See, *inter alia*, *Annual Report 2001, 2002*, Box III.2, as well as *Monetary Policy, Interim Report 2002*, November 2002, Annex to Chapter IV.

→ The report initially highlights the importance of housing markets for the overall economy in general and for monetary policy in particular. Then, it goes on to examine the origins and effects of housing market fluctuations. The emphasis is on structural aspects of the housing market that may influence the effectiveness of monetary policy, particularly its effects on economic activity and prices. Furthermore, the report provides an overview of residential property

PRICES OF DWELLINGS

Period	Urban areas: total		Athens		Other urban areas	
	1997=100	Percentage change over previous year	1997=100	Percentage change over previous year	1993 Q ₄ =100	Percentage change over previous year
Year						
1995	82.6	8.5	80.1	9.2	114.3	7.8
1996	91.2	10.5	88.9	11.0	125.7	10.0
1997	100.0	9.7	100.0	12.5	134.7	7.1
1998	114.4	14.4	115.5	15.5	152.6	13.3
1999	124.5	8.9	129.6	12.2	161.5	5.8
2000	137.6	10.5	149.1	15.1	171.2	6.0
2001	157.7	14.6	175.4	17.6	190.7	11.4
2002	...	...	...	...	209.3	9.8
Quarter						
2001 Q ₁	150.6	14.0	165.7	17.0	184.3	10.9
Q ₂	156.3	15.4	174.2	18.9	188.6	11.8
Q ₃	159.6	15.1	178.7	18.8	191.5	11.1
Q ₄	164.3	13.8	183.0	15.8	198.3	11.6
2002 Q ₁	171.6	14.0	193.6	16.8	204.2	10.8
Q ₂	179.1	14.6	208.0	19.4	205.8	9.1
Q ₃	...	...	...	...	210.5	10.0
Q ₄	...	...	...	...	216.6	9.2
Month						
2001 Dec.	...	...	181.8	15.1	...	...
2002 Jan.	...	...	187.6	15.0	...	...
Feb.	...	...	186.9	12.8	...	...
March	...	...	206.2	22.6	...	...
Apr.	...	...	208.7	22.9	...	...
May	...	...	207.8	18.0	...	...
June	...	...	207.5	17.5	...	...
July	...	...	204.7	15.6	...	...
Aug.	...	...	203.5	14.6	...	...

Sources: For other urban areas, Bank of Greece. For Athens, calculations based on data collected by "Property Ltd." (since 1997) and "Danos and Associates" (for 1995-1996). For the total of urban areas, the index is weighted on the basis of the stock of dwellings in Athens and other urban areas.

price and rent dynamics in most EU countries since 1980, as well as of reforms in housing tax policies, while also stressing the need for improved statistical information regarding real estate markets across EU countries.

As noted in the report, inter-linkages between housing markets and mortgage markets may intensify cyclical fluctuations. In general, changes in house prices, rents and mortgage interest rates may have a significant impact on aggregate demand and inflation, and play an →

→ important role in the monetary policy transmission mechanism and financial stability. Furthermore, developments in housing markets may have implications for the supply side of the economy, in particular, for labour mobility in the EU. Indeed, high transaction costs in housing markets and the existence of “non-portable” housing-related benefits hinder labour mobility across and within EU countries.

During the last decade there has been a boom in housing value in most EU countries. Spain, Ireland, the Netherlands and the United Kingdom have been among the EU countries that have recently experienced two-digit growth rates in house prices. Given that housing assets represent the most fundamental element of households’ portfolios, the increases in their price levels and hence in the current value of household wealth seem to have contributed to the decline in the savings ratio. In the case of Greece, this fall was in the range of 5.5-7 percentage points from 1995 through 2002 (see also Box III.1), while house prices more than doubled over the same period. Rising house prices, combined with gains in the value of household bond holdings during 2001 and 2002 (see Box III.1), helped to more than offset the downward effect on household wealth deriving from the fall in equity prices from September 1999 onwards.

The table displays recent house price developments in Greece. Throughout the 1995-2001 period, house prices in urban areas grew at an average annual rate of 11.0%. The most pronounced increase was observed in the broader area of Athens (13.3% on average, compared with an average increase of 8.7% in provincial towns and 5.2% in the Consumer Price Index). According to the latest data, the average annual growth rate of provincial house prices stood at 9.8% in 2002, while the respective figure for the area of Athens in the January-August 2002 period was 17.4%. However, while the annual rate of growth remains positive, house price *levels* in Athens have been showing signs of weakening since May 2002 (as seen in the table, the Athens house price index dropped to 203.5 in August 2002, from 208.7 in April).

ward trend. The rise in real disposable income mainly reflects: (i) the growth of average real pre-tax earnings, which, along with the reduction of income tax for all taxpayers and the abolition of stamp duties on the earnings of business sector employees, has enabled a 3.0% increase in real take-home pay per average employee (see Table IV.3), (ii) the growth of total employment (see Section 4 below), and (iii) the rise in real average and total real agricultural income (which, according to Eurostat’s recent estimates, amounted to 5.4% and 2.3% respectively – see Section 2.2 below).

In addition, consumer demand growth was supported by the rise in the prices of dwellings, which represent key assets of Greek households (see Box III.2), and of bonds during the 2001-2002 period (see Box III.3), both of which more than offset the drop in the market price of household-held stocks. The consequent growth of household wealth is estimated to have had a favourable impact on private consumption, mainly because it reinforced households’ expectations on their financial outlook, hence encouraging their recourse to borrowing. Indeed, although it fell in the course of the year, the annual growth rate of the outstanding balance of consumer loans remained at a high level (December 2002: 24.2%, December 2001: 42.5% – see also Chapter VI.2.2).

BOX III.3**Changes in the value of household assets in Greek government paper from 1995 through 2002**

The principal feature of the Greek bond market in the 1995-2002 period was the dominant role of Greek government paper in the overall activity, whereas issuance and trading of corporate and bank bonds only occupied a very limited part of it. Specifically, the government bond market experienced a noticeable boom, especially from the early 1990s onwards, which had been driven by the high levels of the government's gross borrowing requirement and by changes brought about by the Maastricht Treaty with regard to fiscal deficit financing (ban on central bank financing of public deficits with effect as from the beginning of 1994). Furthermore, the subdued activity in corporate and bank bond markets was due to the unfavourable tax treatment of the respective securities during the period under review. In particular, corporate and bank bond yields were taxed at a rate of 20% and 15% respectively, while government paper yields also became subject to a 7.5% tax in early 1997, which then changed to 10% in early 1998. Thus, activity in corporate bond markets was restricted to bonds convertible to shares, which were mostly issued by firms listed on the Athens Stock Exchange (ASE), often on account of failure to raise funds from alternative sources.

With the initiation (as of May 1998) of the operation of the Electronic Secondary Securities Market (HDAT) by the Bank of Greece,¹ the performance of the government paper market has been substantially enhanced. HDAT is a fully automated system for the trading of all Greek government securities in book-entry form, thereby ensuring a high level of market transparency and liquidity. Its average daily turnover has recorded a spectacular increase in recent years, reaching €2.3 billion in 2002, up from €0.1 billion in 1998.

The table shows the estimated value of Greek household assets in government paper² throughout the 1995-2002 period. It is obvious that the value of household portfolios of Greek government paper in 1996 grew by 34% to €32 billion, which was the same in 1997. In 1998, however, portfolio value began to fall at a high rate until 2000. After rebounding once more in 2001, it increased significantly into 2002, virtually returning to its 1999 level (see first chart).

In more detail, households increased their investment in government bonds in the 1995-1997 period, on account of (i) the relatively higher yields of government bonds and the lack of satisfactory alternative investing options and (ii) the monetary turmoil in South Eastern Asia and its adverse repercussions on the Greek foreign exchange market and stock market, which caused a flight to safety to government paper (see first and second chart).

During the three years from 1998 to 2000, households reduced their investments in Greek government paper, causing an impressive fall in the aggregate value of the respective portfolio (2000: €7 billion, 1997: €32 billion). This development reflected, on the one hand, →

1 Following the launch of the Securities Settlement System (settling Greek government securities in book-entry form) in mid-1995.

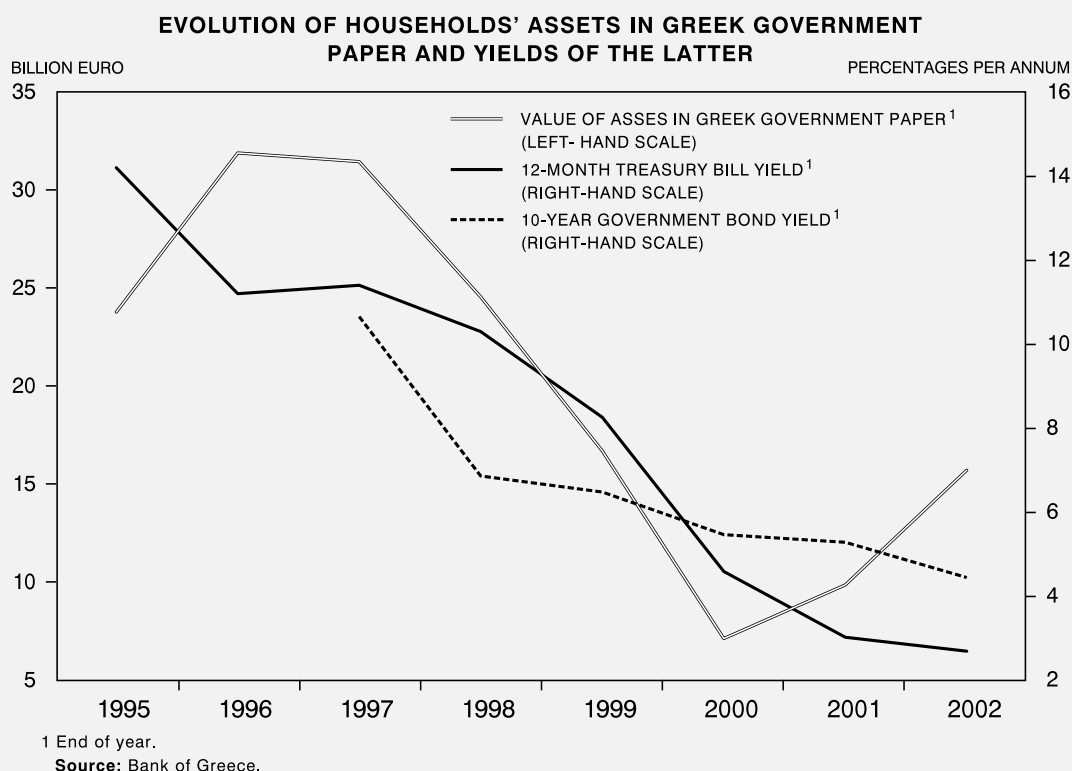
2 Calculations of the value of directly household-held government paper have been based on (i) Bank of Greece data on Greek government paper portfolios in the private sector and in insurance and portfolio investment companies, and (ii) the estimated value of investment by non-financial corporations (and public enterprises) in government paper. The estimated value of indirectly household-held government paper is based on (i) investment by all types of mutual funds and (ii) the calculation of outstanding amounts of household-held shares.

	1995	1996	1997	1998	1999	2000	2001	2002
1. Greek government paper issued in the primary market	31.9	36.1	31.7	29.6	30.5	26.7	24.1	32.1
Percentage change over previous year	20.4	13.2	-12.2	-6.5	3.0	-12.5	-9.9	33.4
2. Total value of Greek government paper ¹	64.8	75.2	80.0	86.6	90.5	97.2	108.7	123.1
Percentage change over previous year	17.9	16.0	6.3	8.3	4.4	7.4	11.9	13.2
3. Value of Greek government paper directly or indirectly ² held by households ¹	23.8	31.9	31.5	24.6	16.6	7.1	9.8	15.6
Percentage change over previous year		34.2	-1.4	-22.0	-32.3	-57.5	38.7	59.7
4. Value of Greek government paper held by households:								
– as a percentage of GDP	29.7	36.3	32.4	23.2	14.7	5.8	7.5	11.1
– as a percentage of disposable income ³	34.3	42.5	38.4	27.9	18.0	7.3	9.8	14.8
– as a percentage of the total value of Greek government paper	36.7	42.4	39.3	28.3	18.4	7.3	9.0	12.7
5. – 12-month Treasury bill yield (percentages per annum) ⁴	14.20	11.20	11.40	10.30	8.26	4.59	3.02	2.69
– 10-year government bond yield (percentages per annum) ⁴	–	–	10.66	6.86	6.48	5.47	5.29	4.44

1 End-of-year balance.
2 Value of Greek government paper corresponding to mutual fund units held by households.
3 Households' gross disposable income.
4 End of year.

Sources: Bank of Greece, NSSG and Ministry of Economy and Finance.

→ the adverse impact on international bond markets of the Russian crisis of 1998 and, on the other hand, an impressive boom in stock prices in the course of 1999. The considerable drop in the value of Treasury bill issues, as a result of a government policy of substituting these securities with long-term bonds with the aim of extending the weighted average maturity of new issues and debt, may have also been another contributing factor. Indicative in this respect is the fall in the percentage of Treasury bills in the overall value of Greek government paper issues to 5% in 2002, from 47% in 1998 and 61% in 1995. Initially, households carried out only a partial substi-



tution of Treasury bills with long-term bonds in the period under review, owing to their unfamiliarity with the latter and because of their preference for shorter-term investment. Subsequently, however, they gradually increased their investments in repos¹ and, in particular, ASE-listed shares.

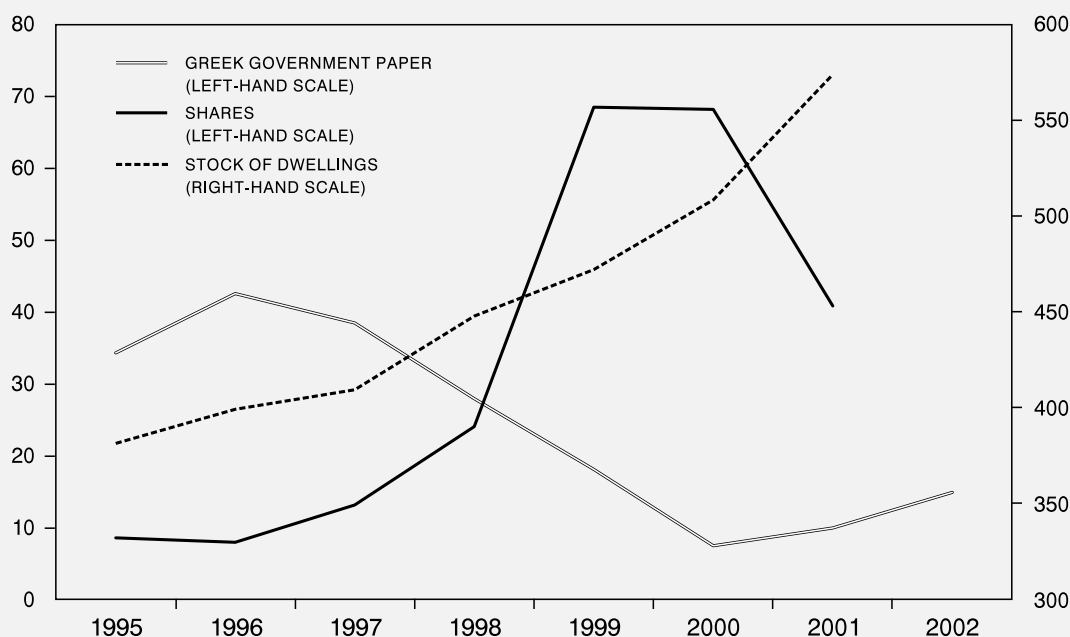
Finally, in the 2001-2002 period, the combination of a heavy fall in the prices of ASE-listed shares and of cuts in housing loan rates resulted in a shift in household attention first to housing investment² and then to bank deposits and government bonds, bringing the value →

¹ Investment in repos by both households and institutional investors began to increase in September 1998, following the abolition of the 15% tax on repo yields (pursuant to para. 12 of Article 10 of Law No. 2642/1998). However, repos once more became subject to a 7% tax in the beginning of 2002 (Legislative Act of 21 December 2001, ratified by Law 2990/2002).

² See Bank of Greece, *Monetary Policy, Interim Report 2002*, Annex to Chapter IV, November 2002.

→ of household bond holdings to €15.6 billion at the end of 2002. Hence, the value of household-held government paper as a percentage of disposable income, after rising from 34.3% in 1995 to 42.5% in 1996, fell to 7.3% in 2000, before rising again to 14.8% in 2002 (see table and

EVOLUTION OF HOUSEHOLDS' ASSETS IN GREEK GOVERNMENT PAPER, SHARES AND DWELLINGS AS PERCENTAGES OF THEIR DISPOSABLE INCOME¹



¹ For assets in Greek government paper see table in this Box.

For assets in shares and dwellings, see Bank of Greece, *Monetary Policy, Interim Report*, November 2002, Annex to Chapter IV.

Sources: Bank of Greece. For disposable income: NSSG (national accounts) - see also Box III.1.

second chart). A similar pattern emerges with regard to the evolution of the value of household-held government paper as a percentage of GDP.

1.3 Investment demand

In 2002, total investment demand rose faster than in 2001 (6.7% against 5.9%), on account of the stronger increase in other than general government investment (2002: 7.8%, 2001 6.9%). General government investment grew by a mere 1.7%, compared with 1.1% in 2001. Hence, the contribution of the change in total investment to GDP growth rose to 1.6 percentage points, from 1.4 percentage points in 2001.

A breakdown of investment by category shows that construction investment increased considerably in 2002 (8.2% against 7.2% in 2001). By contrast, investment in machinery and equipment grew at a lower rate (3.4%) and was almost exclusively concentrated in transport equipment (which increased by 16.7%), whereas investment in metal products and machinery declined by 3.2%.

All in all, business investment (i.e. non-residential investment by private and public¹ enterprises) is estimated to have grown by 7.4% in 2002 (2001: 7.8%), mainly as a result of the implementation of investment projects, particularly in the fields of construction and services (e.g. telecommunications, transport, tourism), in preparation for the Olympic Games of 2004. Regarding the sources of finance for private business investment, the profitability of non-financial corporations (a potential source) was modest in 2002 (see Chapter IV.3), while raising funds through the ASE (already limited)² shrank appreciably. Nonetheless, the outstanding balance of corporate loans (excluding credit to the agricultural sector) grew by 11.4% in the course of the year (see Chapter VI.2.2), as lending rates continued to fall.

In the *industrial sector*, according to the investment survey carried out by the IOBE in October-November 2002, private firms estimated that their investment expenditure decreased by 22.7% (current prices) in 2002, owing to the curtailment of investment plans,³ but forecast an increase of 10.1% in 2003. On the basis of the above results, the IOBE considers that the investment climate at the end of 2002 was restrained and less sanguine than in corresponding periods of past years. The breakdown of investment expenditure shows that 50% of industrial investment over the last three years concerns replacing available equipment and expanding productive capacity in existing product lines, while the remaining 50% is devoted to productive restructurings and/or the introduction of new technologies.⁴ Moreover, the production of capital goods, which relates to investment in equipment, declined by 5.2% in 2002, offsetting an equal increase in 2001. The capacity utilisation rate for the capital goods industry also dropped by 2 percentage points in 2002 (2002: 79.4, 2001: 81.4), but still remains at satisfactory levels, since it had followed a steady upward course in the last four years. Finally, imports of capital goods rose very little (2.8% in value terms – see Chapter IX.1.2).

Worthy of special mention is the growth of construction investment, which reflects (i) the implementation of infrastructure projects and other projects in preparation for the 2004 Olympic Games and (ii) the increase in residential investment. Specifically, investment in non-residential construction grew by 7.7%, compared with 8.8% in 2001, while residential investment increased by 8.9%, i.e. more than twice as fast as in 2001 (4.4%).

1 According to data contained in the introductory report on the government budget, investment by public enterprises rose at current prices by 8.7% (20.2% in 2001) and mainly concerned railway and urban transport. The investment programme of public enterprises (mainly transport organisations and enterprises concerned with the preparations for the 2004 Olympic Games) is projected to continue to increase in 2003 (by 22.7% to €3,379.3 million).

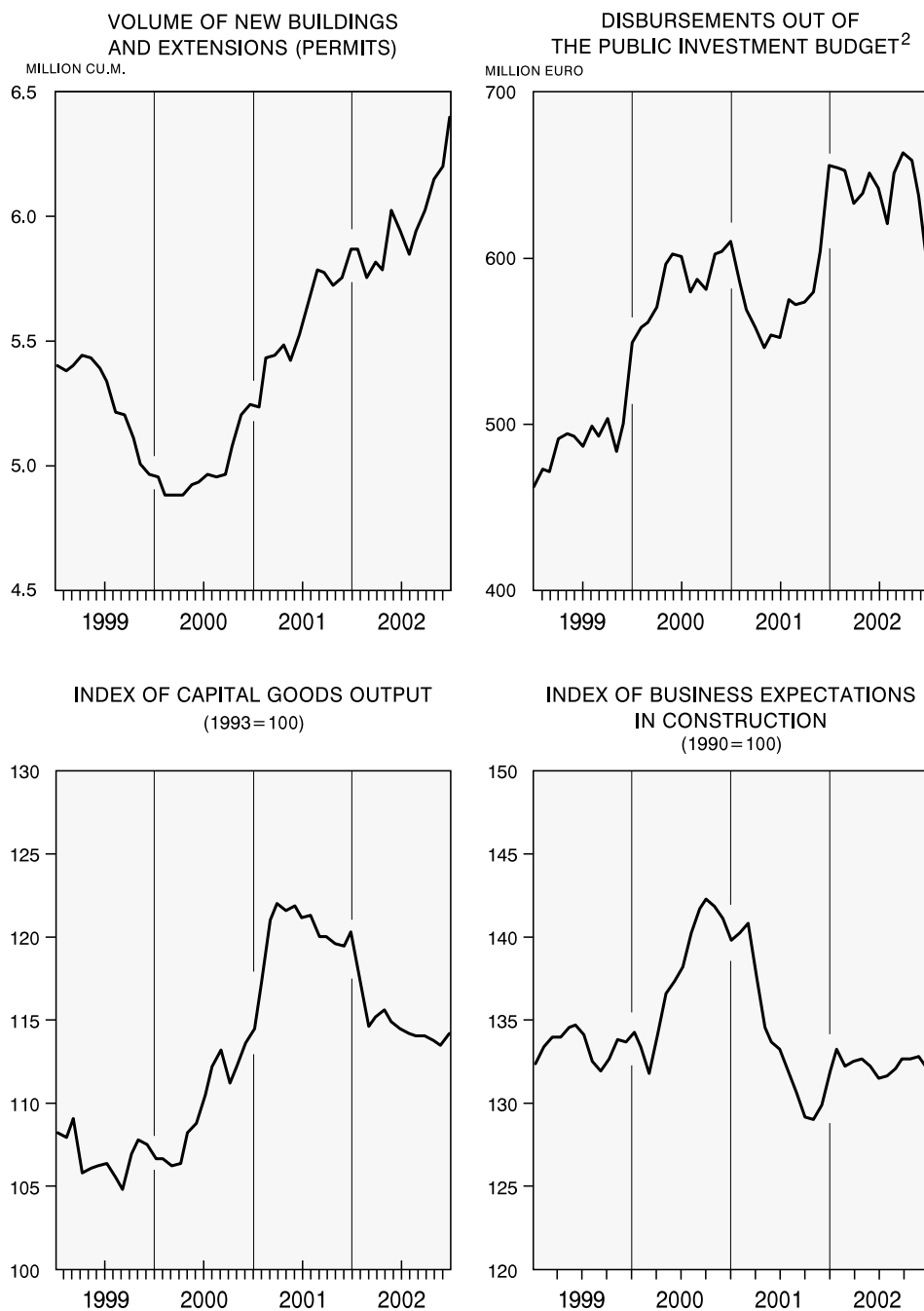
2 Total funds raised through the Athens Stock Exchange (ASE) amounted to €353 million in 2002, compared with €836 million in 2001 (see Table VII.3).

3 It should be noted that a year earlier, according to a survey conducted by the IOBE (October-November 2001), private industrial firms had expected their investment expenditure to increase by 38.3% in 2002. In March-April 2002, it was again expected to *increase*, but only by 10.1%.

4 About 18% of total investment expenditure is used to expand production capacity for new products, 20% to improve production methods and/or introduce new ones, and 10% for other purposes (mostly related to the protection of the environment etc.). Moreover, it appears that the above investment categories will account for a significantly larger share of total investment in 2003.

CHART III.3

MAIN INDICATORS OF INVESTMENT ACTIVITY¹



1 Twelve-month moving average centred on the last month of the period.

2 Disbursements to finance the public investment programme (cash basis, current prices).

Sources: NSSG, IOBE and Bank of Greece.

Hence, construction contributed decisively (4.6 percentage points) to total investment growth. National accounts estimates are confirmed by the rise recorded in the output of some manufacturing industries, which are connected with construction. In greater detail, according to NSSG data, output of products from non-metallic minerals rose by 3.8% in 2002: that of ready-made concrete, in particular, by 15%.¹ Also, according to the business survey conducted by the IOBE, the construction confidence indicator remained unchanged at its 2001 high (132.1 points, see Chart III.3). Finally, based on NSSG data, the volume of private building activity, on the basis of permits issued, increased at a high rate (9.1%) in 2002, as in 2001 (12.1%).

The stronger growth of private residential investment in 2002 came as result of (i) the continued expansion of housing credit,² (ii) the further decrease (compared with 2001) in housing loan rates³ and (iii) other factors, such as the passing of a law on building coefficient transfer (for further details see Box III.4).

1 Cement production decreased by 2.3% in 2002 (according to NSSG data). This is estimated to reflect the steep decline in cement exports, whereas the volume of domestic cement sales is estimated to have increased considerably (possibly by about 10%). In any case, the aggregate sales of the two largest cement-producing companies (which hold 96% of the market) rose by 4.4% in 2002, compared with 15.3% in 2001.

2 According to provisional data, the total outstanding balance of bank housing loans rose by 35.6% in 2002, compared with 38.9% in 2001.

3 The average interest rate on fixed-rate housing loans with a maturity of over 5 years dropped to 4.9% in December 2002, from 5.4% in December 2001.

BOX III.4

Construction industry: developments and outlook

Developments

In 2002 there were several mergers between companies in the construction industry (pursuant to the provisions of Law 2940/2001 on incentives for construction companies), with a view to obtaining the new contracting degrees. Specifically, following their reassessment (which had been completed on 31 January 2003), contracting companies were classified into six new categories, in accordance with Law 2940/2001. It is worth noting that the new classification leads to a 50.7% decrease in the number of contracting companies, as, under the former classification of contracting companies in the MEEP (Contracting Companies Register), those registered in the five highest categories numbered 759, against only 374 now. Indicative in this respect is also the fact that within the top category (G) there are only 14 companies now, compared with 60 in the old top category (H). This suggests a concentration of the Greek technical companies market.

Actually, as pointed out in a survey on *Developments in the Structure of the Domestic Construction Industry – Market Concentration* (published in July 2002 by the Institute for Economic Studies of the Construction Industry – IOK), the restructuring of the construction industry shows that the main objective of Law 2940/2001, namely to increase the average size of construction companies, has been achieved. However, the enhancement of the competitiveness →

→ of new construction schemes –which had also been envisaged– will depend on the composition and performance of these schemes in the economic conditions that will emerge.

Moreover, Law 3044/2002 (on building coefficient transfer¹) was passed in July 2002, with a view to resolving issues which have remained pending for many years. Its implementation will speed up the issuance of more than 50,000 building licences, which, although approved, have been left pending since 1996.²

Outlook

According to another survey carried out by the IOK, it is estimated that the contribution of the construction industry to GDP will rise to 20.7% in the 2001-2004 period, from 16.5% in 2000. This will reflect primarily the completion of infrastructure projects financed through the 3rd Community Support Framework and relating to the 2004 Olympic Games, as well as the increasing penetration of private sector projects and building companies by major technical firms.

The outlook for the construction industry, following the end of the 3rd Community Support Framework in 2006 (or in 2008, on the basis of the n+2 extension rule) and the accomplishment of projects relating to the 2004 Olympic Games, depends on various factors. After 2006, construction firms are expected to focus on identical goals: increasing their participation in co-financed projects and developing activities in the form of concession contracts. Moreover, the introduction of a legal framework governing concession contracts for low-budget projects³ is expected to attract private capital.⁴ The method of self-financing bears, in principal, a lot of benefits for both the public and the private sector and society in general. First, not only is the government budget not burdened, but also projects are completed in the shortest possible time and at the lowest possible cost, while, under certain preconditions, they also have the best possible quality.⁵ Moreover, co-financing is beneficial to the private sector too, since →

1 The term “building coefficient transfer (BCT)” refers to the right of a real estate owner to transfer his building rights, which cannot apply to that estate, either to another real property or to another part of the same property.

2 The implementation of Law 2300/1995 (on building coefficient transfer) had been suspended, following Council of State (Plenary) Decision 6070/1996 that some of its provisions were unconstitutional. The new law (Law 3044/2002) stipulates that the transfer of building coefficient is only permitted if a real estate is situated within designated zones in each municipality, which are called “Zones of Reception of Building Coefficient - (ZRBCs)”. From now on, burdened real estates, i.e. real estates from which the building coefficient can be transferred, are only those within the town plan or “listed” ones (the term “listed real estates” refers to real estates of special architectural or historic interest). This transfer has to be made to ZRBCs situated within the administrative boundaries of the same municipality/community in the case of real estates within the town plan, or within the boundaries of the same district in the case of listed ones. Currently, pending titles for building coefficient transfer account for a total area of 535,000 square metres (or 2.5% of private building activity in 2002) and are expected to be executed under the new law, whereas titles corresponding to an area of about 35,000 square metres are being rescinded, as they do not come from real property which is either within the town plan or listed.

3 The undertaking of high-budget projects in the form of concession contracts is, to date, subject to approval by the Greek Parliament.

4 Several ministries, municipalities and communities will proceed to launch self-financed construction projects (e.g. schools, prisons, hospitals, biological cleaning stations, parking areas), which the contractors will be called upon to execute, manage and maintain.

5 The first self-financed project is Attiki Highway, which is being executed exclusively by Greek companies.

→ it enables more profitable capital investments and the choice of the financially most attractive projects.

The main engine for the further development of Greek technical companies after 2006 is likely to be the undertaking of *more infrastructure projects* abroad by a *greater number* of companies and the expansion of their business to new fields, such as development and management of real property, energy and environment. Indeed, undertaking major infrastructure projects in South Eastern European countries, in the Balkans, or even in the Middle East, presents a bright prospect for the Greek construction companies, which should not be left unexploited. Also, the development of co-operation and the exchange of know-how and expertise with major foreign construction groups are considered very important elements. Greece's geographical closeness to EU accession countries in the Balkans encourages EU-funded co-operation between Greek, Balkan and other major foreign contracting companies. Within the context of Greece's attempt to assist the Balkan countries on the basis of the Greek Plan for the Economic Reconstruction of the Balkans (GPERB),¹ there is a need for greater organisation and preparedness on the part of domestic consultant companies, so that they can participate –by contributing their know-how, but also by taking up operational risks– in the new co-operation schemes together with subsidised agencies from other Balkan countries.

At the same time, several Greek technical companies are pursuing their penetration in the fields of private construction projects and real estate via the creation of subsidiaries chiefly involved in property development both in Greece and abroad and via the acquisition of real property and the execution of business projects with a view to acquiring a share of this market. Finally, another new field of activity that seems to open up for the Greek construction industry is the environment. As environmental protection requirements are becoming stricter, compensatory investment projects (such as collection, transfer and processing of solid waste, draining of liquid waste, desalination, cleaning of public and private industrial sites etc.), green spaces programmes and resources management projects are deemed particularly relevant and offer attractive business opportunities to construction companies.

¹ A legislative framework for the provision of financial support (€528 million) to five Balkan countries has been put in place by the Greek government. A considerable part of these investments will be devoted to the construction of infrastructure projects.

Disbursements under the Public Investment Programme (PIP) (related mainly to the public sector construction programme) dropped by 9.4% in 2002 (initial budget forecast: 14.1% increase). This development was primarily due to a shortfall in EU transfers, as well as to the curtailment of the PIP and the deferral of some of its expenditure items to 2003. Besides, part of general government investment activity appears now –on a national accounts basis– under “other sectors”, owing to a change in the legal status of some agencies.¹ Nevertheless, payments through the PIP are expected to total €8,918 mil-

¹ As of fiscal year 2002, investments made by the National Road Construction Fund (TEO) show up in the programme of the Ministry for the Environment, Planning and Public Works, because the above Fund has been converted into a société anonyme (TEO S.A.).

lion in 2003, which corresponds to a 12.9% increase over 2002. In fact, during the first quarter of this year, disbursements under the PIP increased by 170% relative to the same quarter of 2002.

2. PRIMARY AND SECONDARY PRODUCTION

2.1 Overview

According to provisional national accounts estimates by the NSSG, the gross value added of the primary sector (at 1995 prices), having fallen by 3.1% in 2001 and 5.3% in 2000, remained virtually unchanged (−0.2%) in 2002. By contrast, the gross value added of the sec-

TABLE III.3
GROSS VALUE ADDED AT BASIC PRICES

	Million euro	Annual percentage changes (constant prices of year 1995)				
	1995	1998	1999	2000	2001	2002
1. Primary sector (agriculture)	7,277	2.3	6.8	−5.3	−3.1	−0.2
2. Secondary sector	16,550	7.3	2.8	4.4	6.4	5.7
2.a Mining and quarrying	476	13.0	−0.6	8.4	0.6	...
2.b Manufacturing	9,572	5.3	−0.1	3.6	6.0	...
2.c Electricity - Town gas - Water supply	1,751	6.8	13.1	5.6	2.8	...
2.d Construction	4,751	10.6	5.2	5.2	8.9	9.7
3. Tertiary sector	50,031	3.1	2.9	5.7	4.1	3.3
3.a Trade	10,018	3.6	3.3	8.6	7.9	...
3.b Hotels - Restaurants	4,821	3.7	−1.4	−0.6	2.2	...
3.c Transport - Communications	4,978	4.1	11.9	22.7	9.0	...
3.d Financial intermediaries	3,112	11.5	6.8	1.6	3.3	...
3.e Real estate management and other activities	12,577	2.5	2.0	6.5	3.1	...
3.f Public administration - Security	5,308	−0.6	1.5	−3.0	3.0	...
3.g Health	3,298	−0.7	1.7	2.6	−4.1	...
3.h Education	3,855	1.2	−2.9	−0.1	−0.9	...
3.i Other activities	2,064	6.5	5.2	2.0	5.2	...
4. Gross value added	73,858	3.9	3.2	4.4	4.0	3.7
5. Imputed banking services	2,175	16.5	2.6	11.1	12.8	0.8
6. Gross value added at basic prices	71,682	3.6	3.2	4.2	3.6	3.9

Source: NSSG/National Accounts (provisional data for 1999-2002), March 2003.

ondary sector continued to increase at a high rate (5.7%), which was lower than in 2001 (6.4%), owing to the slower growth of manufacturing activity. However, construction activity and mining and electricity output picked up. Finally, the growth rate of tertiary production is estimated to have decelerated to 3.3% in 2002, from 4.1% in 2001 (see Table III.3).

2.2 Agricultural production

On the basis of provisional national accounts data, the NSSG estimates that the gross value added of the primary sector (at 1995 prices) remained virtually unchanged (–0.2%) in 2002, compared with a 3.1% decrease in 2001. Provisional data from the Ministry of Agriculture (see Table III.4) show that the increase in the output volume (measured in thousand tonnes) of a number of agricultural products (maize, tobacco, milk, meat, apples, citrus fruit and olive oil) seems to have been offset by a reduction in the output of other products (soft and durum wheat, cotton, industrial tomatoes, sugar-beet and peaches).

TABLE III.4
PRODUCTION OF BASIC AGRICULTURAL PRODUCTS
(Thousand tonnes)

Products	1997	1998	1999	2000	2001	2002 ¹
Soft wheat	580	580	621	408	401	381
Durum wheat	1,269	1,300	1,400	1,450	1,429	1,402
Maize	2,050	2,000	1,800	1,850	1,900	2,002
Tobacco	126	127	127	125	118	121
Cotton (natural)	1,059	1,185	1,320	1,235	1,136	1,070
Industrial tomatoes	1,220	1,226	1,094	1,149	1,150	1,000
Sugar-beet	3,095	1,933	2,160	3,146	2,825	2,780
Olive oil	453	466	413	430	360	372
Lemons	166	150	135	139	78	109
Oranges	1,001	801	1,040	903	898	1,114
Apples	324	332	336	309	225	229
Peaches	273	472	1,002	1,020	904	776
Meat, total	522	493	490	492	484	488
Milk, total	1,821	1,821	1,865	1,896	1,902	1,928

1 Provisional data.

Source: Ministry of Agriculture.

However, according to the revised provisional data from the “Economic Accounts for Agriculture” (published by Eurostat on 3 April this year), gross agricultural output rose by 1.2%. If intermediate consumption is deducted, real gross value added at basic prices rose by 2.1% in 2002. Then, if capital consumption and production taxes are deducted and subsidies are added, real agricultural income rose by 2.3%. Moreover, since employment (measured in annual full-time-employed labour units) declined by 2.9%, *real agricultural income per full-time employee* increased by 5.4%. It should be noted that, on the basis of Eurostat data, only three of the EU’s 15 countries (Greece, the United Kingdom and Finland) recorded a rise in both agricultural output and agricultural income.

According to NSSG data, the “terms of trade” for producers also improved, although less than in 2001. Specifically, the producer price index rose by 5.2%, compared

with 6.5% in 2001, owing to the 8.4% increase in the prices of plant products. By contrast, the prices of livestock products dropped by 1.8% (see Table III.5). Producer prices rose faster than input prices (2.8% against 2.4% in 2001). The accelerated growth of the latter mainly reflected the 2.5% increase in the prices of consumables (2001: 2.1%), while fixed capital made a smaller contribution (increase of 3.8% against 4.0% in 2001).

TABLE III.5
PRODUCER PRICES AND INPUT PRICES¹ (1995=100)

		1996	1997	1998	1999	2000	2001	2002
	Weights	Percentage changes in producer prices (output prices)						
Plant production	69,132	10.1	1.7	-2.5	0.7	2.8	6.1	8.4
Livestock production	30,868	-0.7	3.5	3.4	0.0	6.4	7.5	-1.8
<i>General producer price index</i>	<i>100,000</i>	<i>6.8</i>	<i>2.2</i>	<i>-0.8</i>	<i>0.6</i>	<i>3.9</i>	<i>6.5</i>	<i>5.2</i>
		Percentage changes in input prices						
Consumables	81,217	7.7	2.1	0.9	1.9	6.2	2.1	2.5
Fixed capital	18,783	7.1	3.0	6.5	1.9	2.3	3.8	4.0
<i>General input price index</i>	<i>100,000</i>	<i>7.6</i>	<i>2.2</i>	<i>2.0</i>	<i>1.9</i>	<i>5.4</i>	<i>2.4</i>	<i>2.8</i>

¹ As from 1995, output prices do not include subsidies on products.

Source: NSSG.

Notwithstanding the above, the outlook for the Greek agricultural sector is also associated with the imminent revision of the Common Agricultural Policy (CAP). Box III.5 presents the European Commission's proposals in this connection.

BOX III.5

Mid-term review of the Common Agricultural Policy (CAP)

The evolution of the CAP

The CAP is the longest standing and most accomplished policy of the European Union. Its general objectives and principles were defined in the Treaty of Rome.¹ In 1960, its mechanisms were adopted by the six founding Member States of the European Communities (EC) and in 1962 the CAP came into force. With the introduction of the Maastricht Treaty (1992), the →

¹ The legal basis of the agricultural policy has been defined in Title II (Articles 38 to 46) of the Treaty of Rome. The initial objectives of the CAP, as set out in Article 39, are briefly the following: (i) to increase agricultural productivity, (ii) to ensure a fair standard of living for the agricultural community, (iii) to stabilise markets, (iv) to ensure the availability of supplies and (v) to ensure that supplies reach consumers at reasonable prices.

→ Treaty of Amsterdam (1997) and the action programme “Agenda 2000” (1999), the CAP was linked to the economic and social cohesion policy and the promotion of sustainable development.

Among the EU policies, the CAP is regarded as one of the most important policy areas, because of its symbolic significance and the extent of sovereignty transferred —within the framework of its implementation— from the national to the European level. The significance of the CAP is also portrayed by the fact that it is directly related to the Single Market and EMU and the rest of EU policies (regional policy, international trade etc.). Indicative in this respect is the fact that over 50% of the “acquis communautaire” concerns CAP regulations.

The CAP is comprised of a set of rules and mechanisms which regulate the production, trade and processing of agricultural products in the EU. It is financed by the European Agricultural Guidance and Guarantee Fund (FEOGA) through the Community Budget. The FEOGA is divided into two sections: (i) the Guarantee Section, which finances expenditure on the common organisation of markets; and (ii) the Guidance Section, one of the Structural Funds¹ financing expenditure related to the implementation of the CAP’s structural programmes. The CAP consumes —through the FEOGA Guarantee Section— the largest part of the Community Budget (CB), although this share has been reduced in recent years to about 40-45%, from 70% in the mid-1980s.

The two major problems of the CAP began to emerge in the early 1980s: First, it encouraged overproduction of agricultural products. This resulted in the creation of vast surpluses of, especially, products from the northern countries of the EU. Second, it consumed constantly growing CB resources, to the discontent of the Member States that are net contributors. Moreover, substantial spending on the CAP limited available resources for financing other common policies, such as the structural policy. These problems signalled the direction of the subsequent CAP reforms.

The reshaping of the CAP began with the publication (in June 1985) of the European Commission’s preoccupations in a document known as the *Green Book*. Its subsequent inclusion in the Delors I package (1988-1993) led to a reallocation of CB expenditure. This involved channelling increased resources to structural spending through corresponding decreases in FEOGA Guarantee spending.² Nevertheless, the major problems of the CAP continued to persist, as its basic mechanism, i.e. “the price support system”, remained essentially unchanged.

The revision of 1992

The first genuine reform of the CAP was endorsed in May 1992 and was linked to the Uruguay round of the World Trade Organisation (WTO)³ negotiations. The former price support system was replaced in a range of agricultural products by a new direct income support →

1 Other Structural Funds are: the European Regional Development Fund (ERDF), the European Social Fund (ESF) and the Financial Instrument of Fisheries Guidance (FIFG). It should be recalled that, since 1998, Structural Funds financing has been included in the Community Support Frameworks (CSFs).

2 The implementation of “budgetary discipline” (which provided for a ceiling on the growth rate of agricultural expenditure) began within the framework of these decisions.

3 Ex-GATT (General Agreement on Tariffs and Trade).

→ scheme for Community farmers. The new system, which was phased in in the 1993-94 marketing year and became fully effective in 1997, provided for a switch to area- from production-based payments, in order to compensate farmers for the reduction in their incomes resulting from cuts in institutional prices. Also, *inter alia*, environmental measures and a scheme for the early retirement of farmers from agriculture were introduced.

The reform of 1992 was generally regarded as successful, with positive effects on European agriculture. However, developments in the ensuing years – international trends, the prospect of enlargement towards Central and Eastern Europe, the increasing competitiveness of products from third countries and a new round of World Trade Organisation negotiations (the Doha round) – forced further adaptation of the CAP.

“Mid-term review” of the CAP

In the light of the forthcoming enlargement of the EU, the Berlin European Council adopted in March 1999 the action programme “Agenda 2000”, which provided, *inter alia*, for a new reform of the CAP in the framework of the 2000-2006 financial perspective. The general thrust of the reform was confirmed by the Göteborg European Council (June 2001) and was included in the Commission’s proposals for the so-called “mid-term review” of the CAP published in July 2002.¹

Further to the decisions of the European Council meetings in Brussels and Copenhagen (October and December 2002, respectively), a number of adjustments were made in January 2003 and the final proposals are expected to be agreed upon within the first half of this year.

The proposals generally involve further cuts in the institutional prices of agricultural products and the promotion of the rural development strategy (which has been recognised as the second pillar of the CAP) through the adoption of a number of specific measures, including in particular:

- to cut the link (decoupling) between production and direct payments by replacing the latter with a single (lump sum) income support per farm;
- to gradually reduce the single income support (degressivity), *except for small producers who receive up to €5,000 per farm*. As far as big farms are concerned, this reduction will be made in steps of 3% per year (over the seven-year period until 2011), up to a maximum 20%. The savings will be transferred to the second pillar in order to support rural development programmes, whose budget will *increase* by 3% annually;
- to make payments conditional on environmental, food safety, animal welfare, occupational safety standards and rules (cross-compliance); and
- to introduce a new farm auditing system to ensure correct implementation of the above arrangements.

Such measures aim to progressively create a “multi-functional” agriculture, in which payment entitlements to farmers will be conditional on their performing other functions, in addition to the production of agricultural products. →

¹ See European Commission, Communication from the Commission to the Council and the European Parliament: Mid-Term Review of the Common Agricultural Policy, COM (2002) 394 final, 10 July 2002.

→ Regarding adjustments to the common market organisation policy – which remains the most important pillar of the CAP – proposals about reforming the intervention measures applying to certain products involve *inter alia*:

- *cereals*: effective from 2004-5 another 5% reduction in cereals intervention price, partly offset by a corresponding increase in area payments;
- *durum wheat*: the cutdown of the supplement for durum wheat, compensated by the introduction of a new quality premium for producers;
- *rice*: a 50% reduction in the rice intervention price, offset by the introduction of a new aid;
- reform measures pertaining to *dairy products, dried fodder, protein crops and nuts*.

The proposed adjustments are envisaged to apply from 2004 onwards, while so far there have been no concrete proposals about reforming the regulations governing *the markets of Mediterranean products* (olive oil, fruit and vegetables and sugar).

It is expected that the “mid-term review of the CAP” will:¹

- enhance the competitiveness of EU agricultural products in both the external and the domestic market;
- simplify the functioning of the CAP;
- allow maximum flexibility in production decisions, while guaranteeing income stability and a more equitable distribution of income support in a less trade-distorting way² and respecting at the same time trends in consumer choices;
- ensure production methods that support environmentally-friendly quality products;
- facilitate the EU enlargement process;
- help to better defend the CAP in the WTO negotiations; and
- respond to the need of restricting CAP expenditure in the Community budget.

The mid-term review of the CAP will constitute a radical reform of the present system. Negotiations will be tough and lengthy and no final agreement will be easily reached between the parties concerned, including the current EU-15 Member States, acceding countries with an important agricultural sector,³ and the WTO (in the framework of the new Doha round of negotiations, in which the EU has been committed to improving the accessibility of the European markets to third countries’ products and to cutting aids granted to domestic consumption and to Community exports).

The Greek position on the Commission’s proposals has been determined by the fact that the CAP is perceived as of high relevance to Greece, given the importance of the agricultural →

1 See decisions (“Presidency conclusions”) of the Berlin and Göteborg European Councils (March 1999 and June 2001, respectively).

2 Under the reformed CAP, 30% of European farmers (against 20% currently) would receive 75% of Community payments (against 80% currently). According to a recent study on farm household income in OECD countries (OECD, Farm household income: issues and policy responses, 2003), agricultural aids are not, in general, efficient in improving agricultural income and often introduce severe distortions in market operation. Both agricultural income distribution and financial resource distribution are expected to improve with the proposed changes (see European Commission, Directorate General for Agriculture, Mid-term review of the common agricultural policy, Impact analysis, February 2003).

3 Both the agricultural area and the agricultural employment are expected to increase with the enlargement of the EU. Particularly, the agricultural employment rate would rise from 4.1% in the EU-15 to 5.5% in the EU-25 and 7.6% in the EU-27.

→ sector in the Greek economy and the resulting significant amount of Community inflows.¹ The main elements of this position are presented below:²

- In principle, Greece views positively the agricultural aspect of the enlargement. The CAP should be implemented in future Member States, immediately after their admission to the EU, provided that some transitional arrangements are applied to them – particularly in the area of direct payments, the amount of which would gradually increase annually.³

- Greece rejects any plan aimed at reducing or gradually dismantling the CAP, or promoting its partial or full renationalisation.⁴

- The CAP would have to be aligned with the requirements of sustainable development and social and economic coherence.

- Greece is supportive of the idea of making payments conditional on compliance with environmental rules (cross-compliance). However, according to its opinion, the two pillars of the CAP, namely the common market organisation (Pillar 1) and the structural aspect and rural development (Pillar 2) should be considered as complementary, not mutually exclusive.

- As far as the cut of the link between production and subsidies (decoupling) is concerned, Greece believes that this should not result in the latter being converted into purely social payments⁵ and therefore it demands, *inter alia*, to make sure that (i) under the new system the amount of direct payments to producers remains equivalent to its present level and (ii) that the new system is approved by the WTO without cutbacks.

- Regarding the proposed payment cuts for farmers receiving between €5,000 and €50,000 in direct aids, Greece considers that the bottom limit of this range is low and would have to be increased.

- Also, changes in the intervention measures which apply to products that are important to the Greek agricultural sector (e.g. durum wheat and rice) are seen as unfavourable. →

1 Up to the mid-1980s, inflows from the FEOGA Guarantee Section accounted for approximately 75% of total Community funds received by Greece. This high proportion was due, first of all, to the predominant role of the CAP at the time, and therefore to the fact that the largest part of the Community budget was used to finance the agricultural price support system, and second, to the importance of the agricultural sector in the Greek economy. Lastly, high drachma receipts resulted from the achievement of high institutional prices for certain products and the depreciation of the “green” parity of the drachma. At the end of the 1980s, inflows from the FEOGA Guarantee Section as a percentage of the overall CB receipts were still high. However, from this point onwards they gradually began to fall and in recent years they have come to about 40-45%, owing to the implementation of the Delors I and II packages and the 1992 CAP reform.

2 See Ministry of Agriculture “The CAP in view of the mid-term review of the Agenda 2000: the Greek position”, EU Council document No. 9062/23 September 2002.

3 Indeed, according to the decisions of the Brussels and Copenhagen European Councils, the current EU-15 Member States will receive until 2006 the amounts agreed for the agricultural sector in the Berlin European Council, while transitional arrangements will apply to the 10 new Member States: Direct payments to these Member States will start at 25% of the present system in 2004, will continue with 30% in 2005, 35% in 2006 and 40% in 2007 and will increase by steps of 10% annually to reach 100% of the level which will apply in 2013 for the current EU-15 Member States.

4 It is important to note in this regard that the Commission has also rejected the abolition or renationalisation of agricultural support (see European Commission, *Communication from the Commission to the Council and the European Parliament, Mid-Term Review of the Common Agricultural Policy*, COM (2002) 394 final, “Explanatory Memorandum”).

5 Indeed, during the last decade spectacular headway has been made in decoupling payments from production in the framework of the 1992 CAP reform.

➔ — More generally, Greece believes that any arrangement should be made in a gradual and smooth manner and one that is comprehensible to farmers and to all European citizens, and be based on objective and uniform criteria at the Community level, as well as on social and economic cohesion criteria.

As more than 40% of the CB continues to be spent on the CAP, it is only natural that a heated controversy has arisen between the Member States that are net beneficiaries (e.g. France and the countries of the Mediterranean South, like Greece) and those that are net contributors (e.g. Germany). Therefore, the Greek Presidency seeks to achieve an agreement, before the end of its term of office and upon prior approval by the Member States, on the reform of the CAP.

In conclusion, it is impossible at this point in time to determine the overall impact of the “mid-term review” of the CAP on Greece. First, the proposed measures have to be assessed in terms of their contribution to attaining the individual goals of the reform. Second, it is clear that future inflows from the CB will be affected by this reform.¹ Third, account has to be taken of the composition of the Greek agricultural sector and of the particular characteristics of individual product markets. (Given the small average size of Greek farms, *prima facie*, it is expected that Greek producers will *not* be significantly affected by the gradual reduction of single income payments. According to statements by the Minister of Agriculture on 10 April 2003, 90% of farmers (excluding cotton producers) currently receive less than €5,000, which is the lower limit for payments.) Fourth, the coherence between this reform and the EU regional policy should not be disregarded.² In general, the future of the agricultural sector in Greece (and in the other Member States) will depend on the sector’s ability to benefit from the opportunities that will arise in the enlarged EU³ and worldwide.

1 The level of EU inflows (from the FEOGA Guarantee Section and the other Structural Funds) in Greece and in the rest of the current EU Member States is guaranteed until 2006 (inclusive) under the current financial perspective (2000-2006). However, in the 2007-2013 programming period the CB spending on agriculture will certainly fall as a percentage of GDP and the money will be channelled to Structural Funds spending. (For a discussion of the future of EU inflows, see Box IX.2.)

2 Various EU institutions have stressed, on several occasions, the need to ensure greater coherence between the second pillar of the CAP (rural development) and regional development policy (see, for example, European Commission, *Second progress report on economic and social cohesion*, COM (2003) 34 final, 30 January 2003).

3 It is worth noting that the EU has already become the main trading partner of many candidate countries in the area of farm products.

2.3 Manufacturing

The relevant NSSG index shows that *total industrial output* growth in 2002 (1.8%) outpaced that of 2001 (1%). This reflects the recovery in the output of energy and intermediate goods, but mainly the acceleration (for the third consecutive year) in the growth of consumer non-durables production, which therefore contributed decisively (1.6 percentage points) to the increase in total industrial output. By contrast, a decline was observed in the output of intermediate and capital goods (see Table III.6).

Manufacturing production increased, but at a decelerating rate (1.2%), in 2002, partly because of the unfavourable external economic environment, particularly the weakening of economic activity in the EU.¹ However, manufacturing production remained at high levels, as it has risen every year since 1995, with the exception of 1999 (−0.9%). The index of business expectations in industry fell slightly (−0.6%), compared with a 4.3% decrease in 2001 (see Chart III.4). A small decline was also recorded in the industrial capacity utilisation rate, which stood at 77.1% in 2002, down from 77.7% in 2001 (see

TABLE III.6
INDUSTRIAL PRODUCTION (1995=100)

	Weights (1995)		Average annual percentage changes					2002 level ¹ (1995=100)
			1998	1999	2000	2001	2002 ¹	
INDUSTRY	100.0		9.0	1.9	7.2	1.0	1.8	125.9
1. Mining and quarrying	6.0	100.0	−1.3	−6.0	13.4	−1.4	9.1	117.5
Coal and lignite extraction		40.2	3.6	1.6	5.3	4.4	6.2	125.4
Oil wells and extraction of natural gas		6.1	−31.6	−94.3	1,470.4	−24.2	−5.8	44.9
Ores extraction		12.5	−3.3	−4.0	6.0	15.4	19.4	138.4
Other extraction and quarrying activities		41.2	−0.9	−5.4	15.4	−9.6	9.8	114.2
2. Manufacturing	71.4	100.0	8.1	−0.9	5.1	1.8	1.2	118.1
3. Electricity - natural gas - water supply	22.6	100.0	14.2	11.9	11.5	−0.3	2.0	152.8
Electricity		92.0	6.7	7.1	8.7	−0.9	1.5	130.2
Natural gas		0.2	1,587.1	79.8	34.3	0.4	4.7	10,890.7
Water supply		7.8	8.4	4.6	8.0	4.4	2.8	151.8
INDUSTRY	100.0		9.0	1.9	7.2	1.0	1.8	125.9
Basic categories								
Energy	28.6		12.7	6.7	12.3	−0.3	2.3	147.1
Intermediate goods	32.1		5.1	−0.9	6.2	−1.0	0.8	114.3
Capital goods	8.5		18.4	−1.4	7.3	5.1	−5.1	114.2
Consumer durables	1.9		17.4	12.0	12.7	−1.8	−13.9	138.3
Consumer non-durables	28.9		6.2	0.0	1.9	4.1	5.9	120.5

1 Final data.

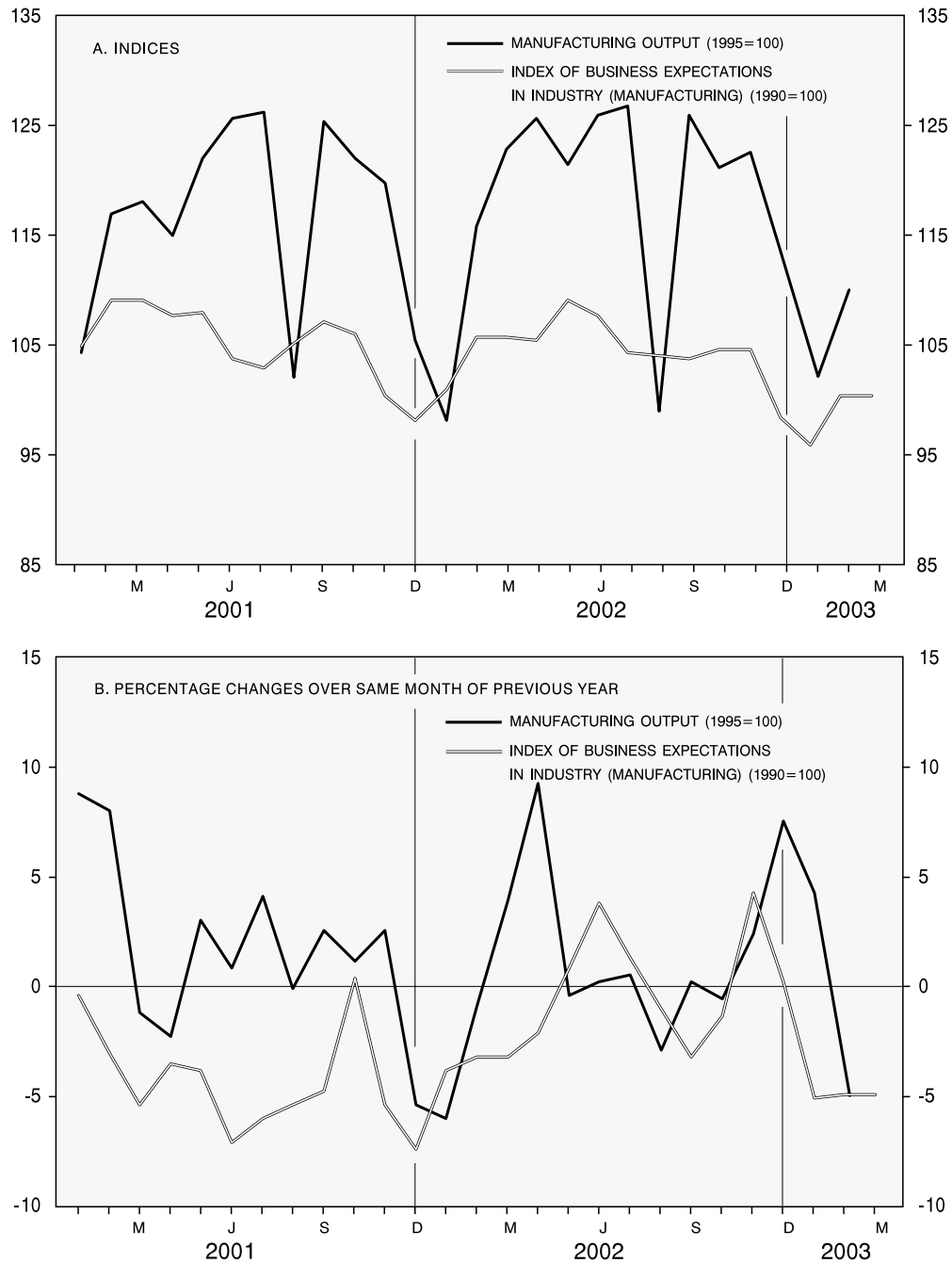
Source: NSSG.

Chart III.5). By contrast, the Purchasing Managers' Index (PMI) compiled by NTC Research recorded a rise in manufacturing production. The PMI (see Chart III.6) remained steadily above 50 (which is the value that draws the line between a rise and a fall in production) nearly all last year. Thus, its average level came to 52.7 in 2002, from 51.2 in 2001. The PMI stayed above 50 in the first two months of 2003, before dropping in March to its lowest level (47.5) since 1999, when the survey began.

1 Manufacturing output decreased at an average annual rate of 0.8% in the first two months of this year.

CHART III.4

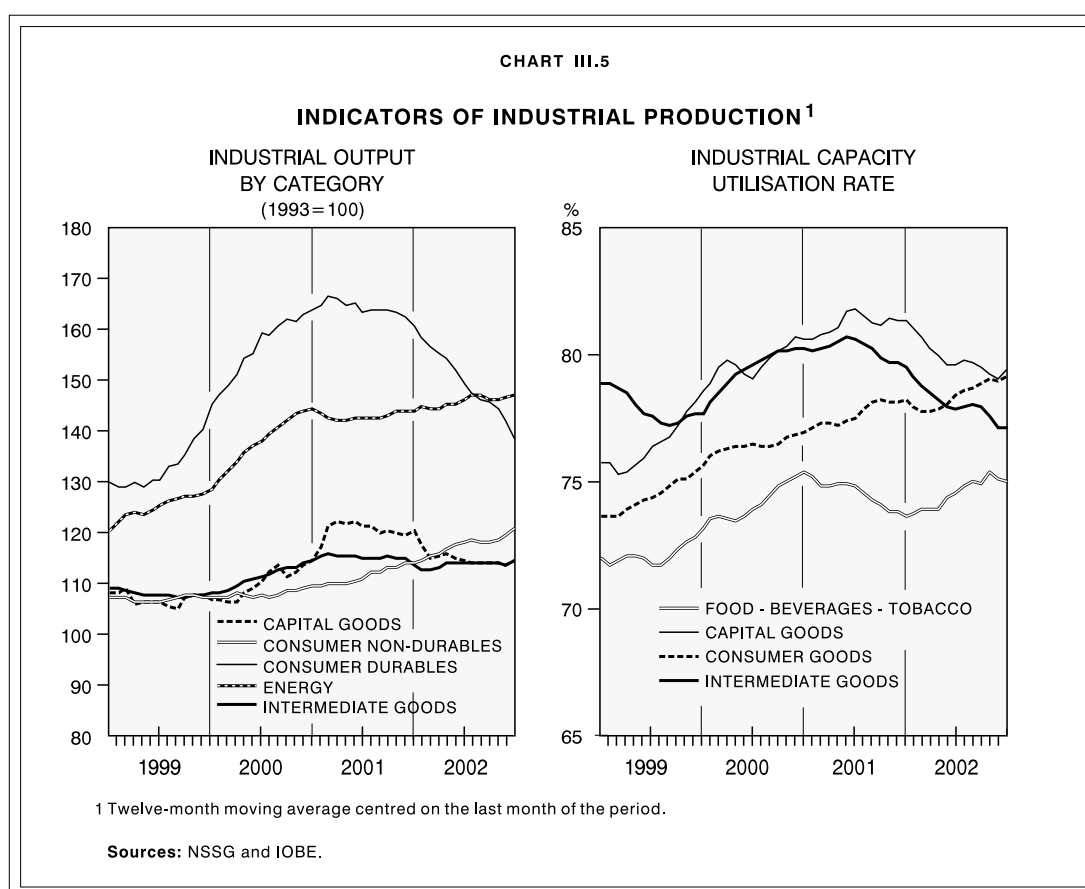
OUTPUT AND BUSINESS EXPECTATIONS IN MANUFACTURING



Sources: NSSG (output) and IOBE (business expectations). The index of business expectations is based on business firms' estimates of total demand and stocks, and on output forecasts for the next 3-4 months.

It should be noted that out of a total of 23 manufacturing industries,¹ 12 recorded an upswing and 11 a decline in output (see Table III.7). Furthermore, the output of the 15 most dynamic industries (which accounts for more than two thirds of total manufacturing production) grew by a cumulative 38.4% between the base year (1995) and 2002, in comparison with total manufacturing production which rose by a mere 18.1% in the same period.

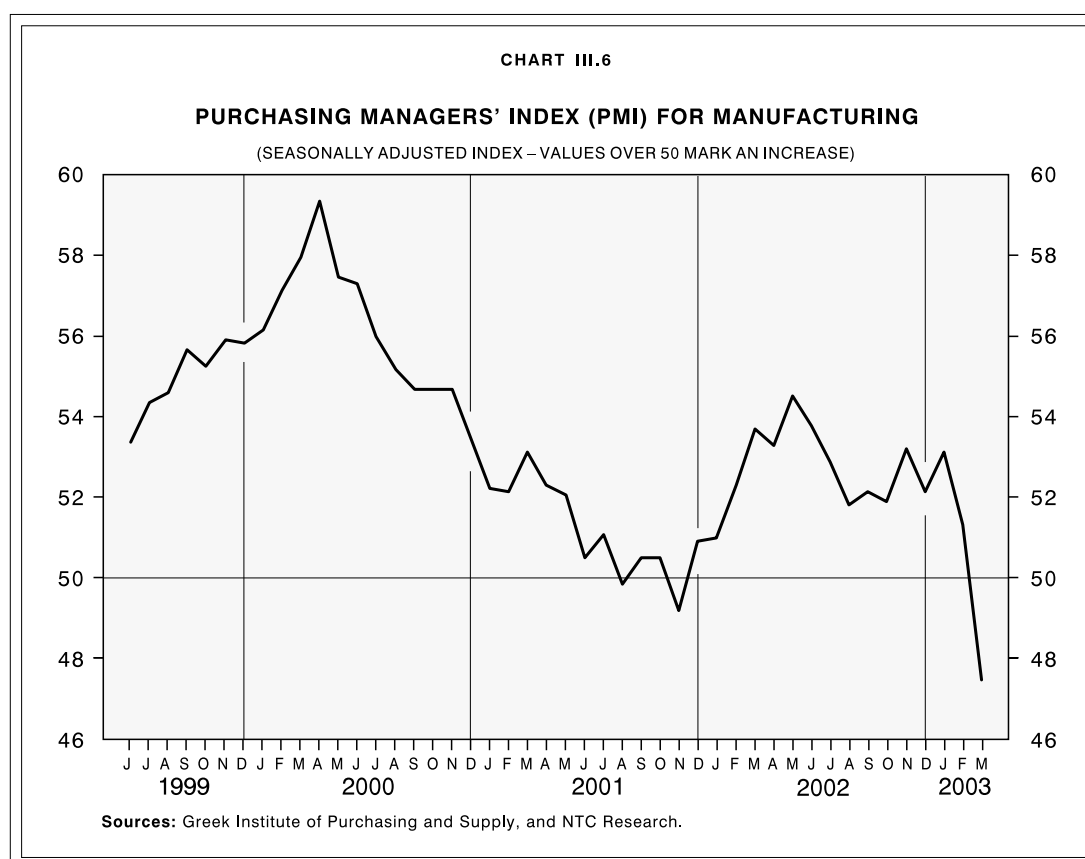
Among the industries with a rise in output, the following rank first: office appliances-PCs (46.3% against -22.8% in 2001), publishing and printing (31% against 5.7% in 2001), recycling (25% against -1.2% in 2001), medical tools and precision instruments



(12.9% against -2.4% in 2001), chemicals (10.8% against 9.7% in 2001) and basic metals (6.1% against 1.4% in 2001). Out of the remaining 6 industries that recorded a smaller increase than the aforementioned ones, worthy of mention is the continued increase in non-metallic minerals (3.8% against 2.8% in 2001), food-beverages (2.2% against 2.1% in 2001), tobacco (1.9% against 1.5% in 2001), machinery and equipment (1.6% against

¹ In the new (revised) industrial production index (1995=100) published by the NSSG from May 2002 onwards, a new industry, namely recycling of waste and scrap, has been added to the list of manufacturing industries.

3.5% in 2001) and metallic end-products (0.8% against 1.5% in 2001). Specifically, companies involved in oil refining recorded a rebound in output in 2002 (2002: 2.3%, 2001: -1.9%), accompanied by an impressive boom in their earnings, while their business continues to expand into the broader area of South Eastern Europe (mainly through acquisitions of like companies that are being privatised in neighbouring countries) in parallel with the realisation of considerable investments.¹ Furthermore, Greek companies have taken a keen interest in building and exploiting oil pipelines in the Balkans.²



A heavy fall was observed in the output of radio, TV and communication devices (-23.1% against 9.3% in 2001), furniture and other industries (-14.3% against -4.2% in 2001), electrical machinery and appliances (-11.7% against 2.2% in 2001), wood and cork

1 The construction of the Thessaloniki-Scopje oil pipeline, which links the Hellenic Petroleum SA (ELPE) refinery to the OKTA refinery, is undoubtedly the most outstanding Greek investment in the Former Yugoslav Republic of Macedonia (FYROM). The transport capacity of this 230 km-long pipeline, which was inaugurated and put into operation in July 2002, is 2.5 million tonnes of crude oil annually.

2 On 29 January 2003, Greece and Bulgaria signed a memorandum of co-operation for the construction of the Burgas-Alexandroupolis oil pipeline, with Greek, Bulgarian and Russian companies participating on an equal percentage basis (33.3%). Initial plans provide for the establishment of the Trans Balkan Oil Pipeline company, which will assume the responsibility of building and managing this pipeline (transport capacity: 35 million tonnes of crude oil annually).

TABLE III.7
MANUFACTURING PRODUCTION (1995=100)

	Weights (1995)	Average annual percentage changes					2002 ¹ level (1995=100)
		1998	1999	2000	2001	2002 ¹	
Manufacturing	100.0	8.1	-0.9	5.1	1.8	1.2	118.1
Food-beverages	22.5	9.6	0.2	1.9	2.1	2.2	121.7
Tobacco	1.9	-16.4	7.1	-1.3	1.5	1.9	86.9
Textiles	8.1	-0.5	-15.8	14.1	-6.7	-7.4	86.4
Clothing	6.4	1.7	-0.8	-5.7	-2.2	-2.5	79.5
Leather-footwear	1.5	-20.1	-4.2	2.3	-5.0	-4.3	62.6
Wood and cork	1.4	-17.9	-0.8	39.3	-2.0	-8.8	84.2
Paper and paper products	3.6	57.0	3.2	-16.7	-4.2	-3.4	95.1
Printing and publishing	3.4	8.7	-17.5	0.7	5.7	31.0	145.7
Petroleum and coal products	4.6	13.7	-16.1	17.5	-1.9	2.3	135.8
Chemicals	8.5	7.8	3.2	5.1	9.7	10.8	155.9
Rubber and plastics	4.3	23.2	4.9	1.1	3.2	-2.3	134.2
Non-metallic minerals	6.8	0.9	0.8	2.3	2.8	3.8	120.3
Basic metals	7.4	-7.0	11.3	14.3	1.4	6.1	135.3
Metal products	4.1	5.2	17.9	0.9	1.5	0.8	133.6
Machinery and equipment	3.3	3.8	-6.8	15.1	3.5	1.6	123.2
Office appliances – PCs	0.1	-63.5	-7.9	82.0	-22.8	46.3	125.7
Electrical machinery, appliances etc.	2.5	6.2	3.4	12.6	2.2	-11.7	110.0
Radio, TV and telecommunication devices	1.6	133.2	-10.3	32.5	9.3	-23.1	187.3
Medical tools and precision instruments	0.4	-15.2	-0.4	4.3	-2.4	12.9	116.1
Vehicles	0.6	94.7	22.6	1.3	13.4	-8.8	211.2
Other transport equipment	5.1	-4.0	-7.0	-4.8	0.8	-1.5	71.7
Furniture – other industries	2.0	19.6	7.7	9.6	-4.2	-14.3	120.2
Recycling	0.1	2.1	-9.8	6.1	-1.2	25.0	97.3

Contributions by industry to changes in total
manufacturing production (in percentage points)

	1998	1999	2000	2001	2002
Manufacturing	8.11	-0.88	5.08	1.76	1.15
Food-beverages	2.21	0.05	0.46	0.49	0.50
Tobacco	-0.30	0.10	-0.02	0.02	0.03
Textiles	-0.04	-1.21	0.92	-0.47	-0.48
Clothing	0.10	-0.04	-0.30	-0.10	-0.11
Leather-footwear	-0.26	-0.04	0.02	-0.04	-0.04
Wood and cork	-0.20	-0.01	0.33	-0.02	-0.09
Paper and paper products	1.55	0.12	-0.69	-0.14	-0.10
Printing and publishing	0.34	-0.69	0.02	0.18	1.01
Petroleum and coal products	0.74	-0.91	0.84	-0.10	0.12
Chemicals	0.71	0.29	0.48	0.92	1.10
Rubber and plastics	0.99	0.24	0.06	0.16	-0.12
Non-metallic minerals	0.07	0.06	0.16	0.19	0.26
Basic metals	-0.54	0.75	1.06	0.11	0.49
Metal products	0.22	0.74	0.04	0.07	0.04
Machinery and equipment	0.13	-0.22	0.46	0.12	0.05
Office appliances – PCs	-0.08	0.00	0.03	-0.02	0.02
Electrical machinery, appliances etc.	0.15	0.08	0.31	0.06	-0.30
Radio, TV and telecommunication devices	1.69	-0.28	0.81	0.29	-0.78
Medical tools and precision instruments	-0.06	0.00	0.01	-0.01	0.04
Vehicles	0.46	0.20	0.01	0.14	-0.10
Other transport equipment	-0.17	-0.26	-0.17	0.03	-0.05
Furniture – other industries	0.39	0.17	0.23	-0.11	-0.34
Recycling	0.00	-0.01	0.00	0.00	0.01

1 Final data.

Source: Calculations based on NSSG data.

(–8.8% against –2% in 2001), vehicles (–8.8% against 13.4% in 2001), textiles (–7.4% against –6.7% in 2001), leather and footwear (–4.3% against –5% in 2001). It should be noted, however, that for most of these industries this fall was a continuation of the downward trend seen in their output in 2001. Exceptions include vehicles and radio, TV and communication devices, whose output had considerably increased that year. A smaller decline was also recorded in the output of companies making clothing (–2.5%), rubber and plastic products (–2.3%) and other transport equipment (–1.5%).

The foregoing are significantly corroborated by the annual financial results of manufacturing firms. In a sample of 214 industrial firms (which forms part of the larger sample presented in Chapter IV.3), pre-tax earnings grew relatively strongly in industries concerned with petroleum products (oil refineries)-chemicals-plastics, non-metallic minerals and food-beverages-tobacco. By contrast, they were reduced in industries making metallurgical products and furniture, while textiles and clothing recorded losses.

The bulk of the increase in manufacturing output during 2002 stemmed from the growth of chemicals (1.10 percentage points), publishing-printing (1.01 percentage points), food-beverages (0.50 percentage point), basic metals (0.49 percentage point) and non-metallic minerals (0.26 percentage point).

In the chemical industry, the most pronounced (and accelerating) output growth was in pharmaceuticals (2002: 19.9%, average annual growth rate: 18.3% from 1995 onwards), while in printing-publishing, printing production picked up impressively (2002: 59.6%, 2001: 4.5%). As far as food-beverages are concerned, a marked upswing was seen in plant and animal oil production (2002: 8.5%, 2001: –14.5%) and in animal feed production (8.7%), while the output of beverages also increased considerably (9.2%). In basic metals, the dynamics of pipe production continue to be strong (rate of increase: 18.8% in 2002, compared with 39.7% in 2001 and 25.0% in 2000), and likewise for other iron and steel primary processing (7.9%), as a result of an increase in domestic demand associated with the realisation of infrastructure projects and projects related to the Olympic Games. In non-metallic minerals, concrete, gypsum and cement (15.1%) and cutting and shaping of stone (8.2%) led the round of increases in output.

As shown by the disaggregated data of the Bank of Greece balance-of-payments statistics,¹ despite the steep decline in total goods exports, exports of *manufactured products (except fuel)* increased in 2002, albeit at an appreciably lower rate than in 2001. (In more detail, export receipts rose by 5.5%, compared with 9.0% in 2001, while the estimated growth of export volume was 3.0%, compared with 6.3% in 2001.) This fact may imply the existence of a dynamic business sector (see Chapter IX.1.2). The export performance of manufacturing (i.e. the share of production that is exported) rose slightly, from

¹ Since the classification of exported products by category is not exhaustive on account of the incompleteness of commercial bank data, this estimate should be regarded as provisional only. It is worth mentioning that, according to provisional data from NSSG trade statistics (2002), receipts from exports of industrial products *fell* by about 2.5%, compared with an increase of around 5% in 2001.

TABLE III.8
IMPORT PENETRATION AND EXPORT PERFORMANCE OF
BASIC MANUFACTURING INDUSTRIES

Industries ¹	Annual percentage changes				Import penetration ³	Export performance ⁴
	Current prices			1995 prices		
	Import payments ²	Export receipts ²	Gross value of production	Gross value of production		
Food products-beverages (15)						
2000	18.1	-0.1	3.8	1.9	32.4	12.5
2001	5.8	11.1	5.8	2.1	32.5	13.1
2002	-0.7	9.8	6.4	2.2	31.1	13.5
Textiles, wearing apparel, footwear (17, 18,19)						
2000	16.5	11.8	10.1	5.1	49.0	38.1
2001	18.6	4.8	-4.7	-4.9	56.1	41.9
2002	3.8	3.0	-4.0	-5.4	59.3	45.0
Rubber-plastic products, chemicals (24, 25)						
2000	22.9	53.8	9.5	3.9	60.3	22.7
2001	21.5	1.3	12.8	7.8	61.4	20.4
2002	4.8	33.5	7.9	7.2	62.2	25.2
Non-metallic mineral products (26)						
2000	...	...	9.8	2.3	22.9	7.3
2001	34.5	-61.6	9.2	2.8	25.8	2.6
2002	-22.3	232.0	6.3	3.8	21.2	8.0
Basic metals and metal products (27, 28)						
2000	36.8	67.8	22.0	10.4	39.4	22.2
2001	4.4	5.1	4.0	1.4	39.5	22.4
2002	4.4	-14.8	3.3	4.7	38.6	18.5
Machinery and equipment (29, 30, 31, 32)						
2000	25.1	9.5	24.7	18.9	83.7	25.1
2001	7.4	30.3	26.9	4.7	81.4	25.8
2002	-3.2	-5.0	-8.9	-10.3	82.5	26.9
Motor vehicles and other transport equipment (34, 35)						
2000	31.2	136.5	0.2	-2.0	81.3	3.2
2001	2.9	54.9	7.9	6.9	80.8	4.6
2002	5.2	-25.1	-0.6	-5.2	81.5	3.5
Total (except fuel)						
2000	...	...	10.9	6.1	50.5	16.9
2001	11.3	9.0	4.6	1.7	52.2	17.6
2002	0.6	5.5	3.6	1.6	51.6	17.9

1 The numbers within brackets represent the two-digit codes of individual industries.

2 Based on the Combined Nomenclature Codification (CNC).

3 Ratio of imports to apparent consumption (current prices).

4 Ratio of exports to gross production value (current prices).

Sources: Bank of Greece and NSSG.

17.6% in 2001 to 17.9% in 2002 (see Table III.8), as the growth of exports of manufactured products outpaced the increase in their production. Among industries that achieved an appreciable increase in exports in 2002 while also improving their export performance were non-metallic minerals, chemicals, rubber and plastics, wood and cork, paper-publishing-printing, and food and beverages. Particularly in the case of non-metallic minerals, paper-publishing-printing and food-beverages, the improvement in export performance came along with an increase in their domestic market share. By contrast, the export volume of textiles-clothing-footwear remained virtually stable, in line with a marked drop in production. The remaining industries recorded a decrease in their exports.

On the other hand, import penetration (i.e. imports as a percentage of apparent consumption¹) dropped to 51.6% in 2002 from 52.2% in 2001, as payments *for imports of manufactured products (except fuel)* only rose by 0.6% in 2002, compared with 11.3% in 2001, while the respective import volume is estimated to have remained stable (against an approximately 9% increase in 2001).

2.4 Mining and quarrying

Mining and quarrying production, having declined by 1.4% in 2001, rebounded considerably (by 9.1%) in 2002. NSSG data reveal that the sharp rise in mining activity was mainly fuelled by the increased output of stone aggregate, coal, lignite and industrial minerals (see Table III.6). By contrast, crude oil production continued in 2002 the downward course it had followed in 2001, albeit at a slower pace.

In more detail, coal and lignite mining carried forward to 2002 the upswing of the previous four years. This development is associated with the increased demand for lignite intended for electricity generation by the PPC's lignite-fired power plants.² By contrast, crude oil and natural gas production continued to fall in 2002, following a sharp rise in 2000 induced by the resumption of the exploitation of the Prinos oil well in December 1999.³ Mining of non-ferrous metals (bauxite, chromite, nickel and precious metals being the most important ones) increased in 2002, in line with stronger foreign demand for some of these metals.

According to provisional data from NSSG trade statistics, export volume of aluminium and alumina ores rose by 12.0% in January-September 2002. Meanwhile, major companies in this industry appear highly export-oriented towards, especially, the Balkan area, and take an interest in acquiring equity in mining concerns in neighbouring coun-

1 Apparent consumption is derived by deducting exports and adding imports to domestic production.

2 According to PPC data, the amount of lignite extracted from its mines increased by 6.5% to 70,341 thousand tonnes in 2002, from 66,053 thousand tonnes a year earlier.

3 The decline in oil production is connected with the difficulties in pumping out oil from this specific deposit (despite the existence of appreciable oil reserves, these cannot be tapped unless deep drilling is employed, as most of the surface deposit has already been absorbed).

tries. It should be noted that, despite the good performance of mining companies, in 2002 Chalkidiki mines faced operating problems (still persisting early this year) with the local agencies on environmental issues.¹

According to the NSSG index, a recovery was recorded (relative to 2001) in the output of quarry products. Particularly increased (24.2%) was the production of gravel and sand, since they are used in the construction of major motorways and other projects connected with the 2004 Olympic Games. Foreign demand for these minerals was also heightened. NSSG data indicate that the volume of total exports of stone (including marble), sand and gravel increased by 9.2% in January-September 2002. This increase was exclusively fuelled by an upturn in the relevant EU demand (22.5%). The output of marble and other stone quarries, which had steadily been on a declining path in the previous three years (2001: -9.1%, 2000: -0.1%, 1999: -2.5%), rebounded in 2002 and is expected to increase further in 2002-2004, when construction projects relating to the 2004 Olympic Games reach a peak.² This coincided with a pick-up in foreign demand (both from the EU and from the rest of the world) for marble in 2002. According to the provisional NSSG customs data, marble exports to non-EU countries grew by 1.4% in January-September 2002 (compared with a year earlier), while exports to the EU increased much faster (10.4%) in the same period. This development was linked to the fact that in 2002 major marble firms continued to reinforce their presence abroad and particularly in the Chinese market, where construction activity is growing rapidly. The strengthening of the marble industry is corroborated by a boom in its profitability during 2001.

The extraction of two industrial minerals, clay and kaolin, continued to fall in 2002 (-9.1% against -16.3% in 2001), despite rising clay demand from abroad. As indicated by NSSG data, the volume of total clay exports increased by 51.7% in January-September 2002, exclusively driven by a surge in EU demand. Reduced was also the extraction of limestone and gypsum (-7.3%), as well as salt production.

Lastly, the output of magnesite, asbestos, perlite, etc. recorded an upswing, which contrasted with slackening foreign demand for some of these products; for instance, the volume of asbestos exports dwindled by 88.6% in January-September 2002 (NSSG data).

1 Following a Council of State decision on local authorities' appeals, the operation of the TVX HELLAS mine of silver, pyrite and zinc (which is located at Mavres Petres, Stratoni, Chalkidiki), had been temporarily suspended (until the end of March 2003). The Council of State ruled that the "study on the environmental impact" has to be resubmitted to the five responsible ministries for reapproval, before the mine can resume its operation and expand its business to the exploitation of the sulphur compounds deposit. Also, regarding the TVX HELLAS investment for gold mining, it should be recalled that the Council of State (Plenary) Decision (Decision No. 613/2002 published on 1 March 2002) considered the operation of this mine hazardous and detrimental to the environment, and therefore its construction had been permanently discontinued. In the light of these developments, the TVX HELLAS company announced in March 2003 the termination of its business in Greece. Other companies are also exploring the possibility of exploiting the mine at Stratoni.

2 According to a survey carried out by the Institute for Economic Studies of the Construction Industry (IOK), quarries in the prefecture of Attica currently produce 26 million tonnes of stone aggregate annually, whereas demand is expected to exceed 35 million tonnes between 2002 and 2004. According to the same survey, the quarries' current potential output could permit sufficient increases in production to meet such demand, provided the smooth flow of construction projects is ensured. Some weaknesses of the present institutional framework governing the stone aggregate industry are also pinpointed.

2.5 Electricity-natural gas-water

According to the NSSG index, the production of electricity-natural gas-water, having declined slightly in 2001 (−0.3%), recovered again in 2002 (see Table III.6). Underlying this development were – chiefly – an upturn in electricity demand and a further improvement in the natural gas distribution index, which continues to hover at very high levels, as demand for gas in the various sectors of consumption is constantly rising. The water treatment and distribution index also rose in 2002, albeit at a lower rate than in 2001. Hence, the total output of electricity-natural gas-water contributed 0.54 percentage point (i.e. more than one third) to the growth of industrial production as a whole (1.8%).

In detail, according to the Public Gas Corporation (DEPA) data, the quantities of natural gas distributed in 2002 totalled 2,022 million Nm³, i.e. they increased by 7.5% relative to 2001 (1,881 million Nm³). This was mainly due to increased demand (5.2%) for gas used in electricity generation, while demand by the chemical industry also rebounded considerably (21.5%). Thus, 19% of total gas consumption was absorbed by the industrial sector as a whole and 74.5% by electricity generation. Moreover, gas supply companies (EPAs) (which supply gas to small industrial and commercial firms and households) absorbed in aggregate 118 million Nm³. Thus their share in total demand increased from 3.9% in 2001 to 5.8% in 2002, while it is expected to increase further in 2003 with the continuous expansion and operation of urban gas networks (see Box III.6). Lastly, another 14 million Nm³ of natural gas were supplied to special commercial consumers (the Athens International Airport, the Thermal Bus Company – ETHEL, etc.).

BOX III.6

Developments in the market for natural gas

The Public Gas Corporation (DEPA), after transferring in 2000 the use of medium- and low-pressure networks to its affiliates (Attica EPA, Thessaloniki EPA, Thessaly EPA) is now further expanding its networks in many parts of Greece. The use of these networks is also going to be transferred to new, to-be-established gas supply companies (EPAs). The Attica EPA, in particular, has already completed its first year of operation (it started operating on 27 November 2001), with 1,000 new customers in addition to the 8,500 who had come to it from the Public Gas Company (DEPA). At the same time, in 2002 it took the first major steps towards supplying natural gas to household and trading consumers in Attica. Following a call for tender, the supply of natural gas was awarded to two bidders: the Water Supply and Sewerage Company (EYDAP) and the EKO company. Specifically, EKO has been assigned the obligation to supply gas in South and West Attica (where it is expected to sign up 79,000 and 100,000 customers respectively in the next 10 years), while EYDAP, in a joint venture with two technical companies, has assumed the responsibility of providing connection, within the same time horizon, to the natural gas network to 54,000 new consumers in the north sector →

→ of Attica. With the signing of the first contract with EPA on 20 February 2003, this joint venture, called “The Suburb Gas Company –EAP S.A.”, has become the first retail seller of natural gas in Greece.

Regarding interconnections, the highlight of the year 2002 was the signing of an agreement between DEPA and the Turkish VOTAS (31 October 2002) to build a natural gas pipeline enabling the interconnection of the respective countries’ networks. This 285 km-long (200 km within Turkish and 85 km within Greek territory) pipeline will form part of the “South European Gas Ring” designed to transport natural gas from the Caspian Sea to Turkey, Greece and other European countries. Construction of the pipeline segment that lies within Greek territory will be initiated in the second half of 2003 and will be co-financed by the EU (29%), the Public Investment Programme (29%) and DEPA (the remaining percentage). The pipeline is expected to go on stream by the end of 2005 and will have an initial capacity of 3.5 billion m³ (possibly increasing to 11 billion m³) annually.

With the conclusion of an interstate agreement between Greece and Turkey (23 February 2003), the two countries have put in place the strategic option to collaborate in the deregulated European market. The construction of the aforementioned pipeline is expected to contribute to the diversification of the sources of gas supply and to the achievement of price stabilisation. It would also provide a sound basis for the deregulation of the natural gas market in 2006 (in accordance with Community Directive 98/30). Another landmark in efforts made to reach the trans-European networks has been the signing of a memorandum of co-operation between DEPA and the Italian company Edison Gas (31 July 2002) concerning the preparation of a joint feasibility study, with a view to building a sub-marine two-way pipeline running from Greece to Italy. Meanwhile, Greece has made an alternative suggestion to also build an additional pipeline that will go through Thessaloniki and the Western Balkans and terminate in Austria. Finally, another agreement was signed by the responsible Greek minister and his Bulgarian counterpart on 6 September 2002, concerning the construction of a new pipeline for the “transit” transportation of natural gas from Russia to Greece via Bulgaria.

According to PPC provisional data, net electricity production in 2002 increased by 2.4% to 49,657 GWH. The increase was mainly due to a recovery in output from hydro-electric power stations (2002: 26.8%, 2001: –34.3%), as well as to the continued increase in output from gas-fired power stations (2002: 15.7%, 2001: 4.4%). This led to a further rise in the share of gas-fired stations to 13.5% of total power production in 2002, approaching the slightly bigger share of oil-fired stations (15.2%). By contrast, the contribution of lignite-fired power plants was negative (–1.7 percentage point) and the relevant output fell by 2.6% after continued increases over the last six years. The output of PPC renewable energy sources (RES) fell to 83 GWH for the first time in years, while their capacity (37 MW) has not increased since 2000. The capacity of private RES stations operating under Law 2244/1994 grew moderately because –pursuant to Law 2773/93 on the deregulation of the energy market (see Box III.7)— a production licence is also required for RES stations before operating licences can be issued for such facilities, thus

causing considerable delays.¹ The Regulatory Authority for Energy (RAE) predicts that the share of RES in the country's overall installed power generating capacity will reach 25% by 2010.²

-
- 1 According to data from the Ministry of Development, 9 new operating licences were issued in 2002 for 17.450 MW power stations. Thus, the installed capacity of RES power stations operating under Law 2244/1994 comes to 249.113 MW, while the capacity of all stations operating since 1927 totals 338.710 MW. However, following an assessment by RAE, the Ministry of Development issued 309 new licences for RES power plants with an overall capacity of 2,483.3 MW.
- 2 It should be recalled that, according to Directive 2001/77/EC of 27 September 2001, Greece aims at a 20% share of RES in the country's electricity generation by 2010.

BOX III.7

The deregulation of the electricity market

1. Developments in the electricity market in Greece – The second phase of deregulation

A. Summary of developments

In Greece, the electricity market has been formally deregulated since February 2001 (Law 2773/99) and by 13 March 2003 the Regulatory Authority for Energy (RAE) had issued 462 power generation licences for a total capacity of 6,646 MW and three power supply licences for 700 MW.¹ Most generation licences concern gas-fired plants (3,051 MW) and renewable energy sources plants (2,728 MW) (of which 2,328 MW concern aeolic parks), while the remaining power (866 MW) mostly relates to major hydroelectric stations and co-generation plants.

However, in the last two years no investment project was implemented for the creation of private power generation plants, while some potential investors may be prevented from implementing their planned investments.

In part, the non-implementation of the investment plans, specifically by joint ventures (which have received licences for seven – 2,755 MW – thermoelectric plants) is due to the fact that, according to the applicable legislative framework, private investors must bear the business risk in full and must secure financing according to private business criteria. On their part, commercial banks consider this investment to be a high business risk, since they are asked to finance a still “notional” market and, for that reason, they demand security from the investors both for the profitability of the investment and the sales prospects (investors are required to submit the contracts of future customers, at least for the first 8-10 years of operation of a plant). However, for private investors, the creation of a customer base 3-4 years before the completion of their plants is a significant problem, since customers do not want to commit themselves to long-term contracts when they anticipate new opportunities in the future competitive market. →

1 In addition, according to the RAE opinions archive, 561 of the submitted applications for generation licences have received positive opinions by 13 March 2003, corresponding to 7,738 MW, and 9 firms have received a supply licence for 2,393 MW.

→ Possibly more important are the obstacles to the determination of the operating cost of the new plants, relating to the clarification of the institutional framework on the deregulation of the natural gas market, as well as the pricing and adequacy of this type of fuel. In addition, for private producers competition is also complicated by the fact that, for approximately 70% of its production, PPC uses lignite as a fuel, obtained free of charge, while private stations will use natural gas, the cost of which is very high at *present*.

B. The plans to amend Law 2773/1999

Based on these facts and in order to disentangle the planned private investments so that competition may move forward in practice, in early 2002 market participants raised the issue of amending the current institutional framework, a proposal that was accepted by both RAE and the Ministry of Development, which, under Law 2773/99, is the supervisory authority. Three draft amendments were proposed by December 2002 (by RAE and the Ministry of Development), which were not accepted by market participants because the latter maintained that, according to such drafts, the functioning of the market would not be based on real competition principles. The proposed amendments secure the entry of private individuals in the market, provided that the System Manager guarantees the pre-purchase of energy produced thereby. However, it has been said that conditions of unfair competition are created for potential investors who did not receive production licences during the first phase of electricity market deregulation and their future entry into the market is thus obstructed.

Specifically, the *second draft* amendment to Law 2773/1999 delivered by RAE (following public consultations with the interested parties) in September 2002¹ provides *inter alia* that, to secure adequate long-term reserves, Power Availability Certificates (PAC)² for up to 1,600 MW for a period of four years as from 2004, 2005 and 2006, as well as PACs for additional production potential of up to 1,200 MW for a period of three years as from 2006, 2007 or 2008, should be at the disposal of the System Manager (DESMHE). According to the proposal, these certificates should correspond to new production potential generated by the new plants to be built. This proposal (which, according to RAE, will help private investors to solve the problem of securing financing from the banking system) was opposed both by PPC, since the latter was excluded from the guarantees system, and by market participants who underlined that the application of the guarantees system creates conditions of unfair competition for potential investors who have not yet received production licences. In addition, the Federation of Greek Industries strongly opposed this proposal and, instead of the proposed financing, suggested that DESMHE should guarantee the purchase of a percentage of the energy generated during the transitional period of 5-7 years.

The draft amendment to Law 2773/1999, proposed by the Ministry of Development and opened for discussions with market participants in December 2002,³ stipulates that DESMHE →

1 The market participants estimated that the *first draft* provided by RAE did not offer any real incentives to activate the private sector and, for that reason, it was replaced by the next draft.

2 Based on this proposal, the Power Availability Certificates are issued by the producers and incorporate their obligation for the availability of production potential by a specific plant at a specific period of time.

3 Extracts of the draft were published in the financial press on 10 December 2002.

→ will hold a tender among the companies holding production licences in order to conclude contracts for the purchase of power up to 1,300 MW. The term of these contracts will be seven years from the commencement of commercial operation of each plant. In addition, these contracts will provide for a minimum number of 6,000 hours of annual operation of the plants to be selected, as well as for full coverage of the cost of fuel for their annual hours of operation. This version was also strongly criticised both by RAE and PPC, since it was estimated that this draft enables the operation of only three private plants out of the seven that have been licenced and, therefore, the functioning of the deregulated market will be delayed in practice for 2012-15. In addition, PPC estimated that some of its financially efficient lignite-fired plants risked to be superseded by the system and that the low-cost imports from our northern neighbours would be restricted.

In any event, regardless of the outcome of the amendment to Law 2773/1999, the competent Ministers of Development and Economy and Finance, in collaboration with banking system representatives, seek to create an appropriate framework for the financing of electricity production projects to facilitate their implementation, since, from 2007 onwards, the deregulation of the electricity and natural gas markets will be applicable to all Member States of the European Union.

Finally, the Ministers of Development and Economy and Finance have made clear that the deregulation of the electricity market in our country will comply with the rules of the market without disrupting the supply of power and without sharp electricity rate increases, while PPC will not be split.

2. Developments in the electricity and natural gas markets in the EU

A significant development for energy issues in the European Union is the agreement of the Council of Energy Ministers (on 25 November 2002) on the complete deregulation of the European electricity and natural gas market as from 1 July 2007. The ministers of 15 countries reached this agreement after the reservations were lifted and the compromise proposal of France was accepted for the deregulation of the electricity and natural gas market for household use as from 1 July 2007 and not 1 July 2005, as proposed by the European Commission. However, for industry and enterprises the deregulation will come into force on 1 July 2004, while a statutory separation will be applicable on the same date between energy-generating companies (electricity producers, natural gas distributors) and energy distribution companies (distribution network managers up to final customers). Finally, disadvantaged and insular regions of Europe and, therefore, of Greece were exempted from deregulation.

3. The single regional electricity market and the role of Greece

An important event for energy issues of both Greece and the broader SE European region was also the signing of a Memorandum of Understanding on the Regional Electricity Market by the energy ministers of eight countries of the region¹ on 15 November 2002 in →

¹ Namely: Greece, Bulgaria, Bosnia-Herzegovina, Albania, Romania, FYROM, Croatia and Yugoslavia/Serbia-Montenegro. Turkey participated as an observer.

→ Athens. The memorandum provides for the establishment of three bodies: (i) the Ministerial Council, composed of the Energy Ministers of these countries, (ii) the Permanent High Level Group (composed of representatives of the Energy Ministers), which shall be convened, when necessary, on the initiative of the Commission and the Presidency in office, in order to prepare the Ministerial Council, and (iii) the South East Europe Electricity Regulation Forum (the Athens Forum), comprising the Regulators of these countries, as well as Transmission System Operators (companies similar to DESMHE). The market will be seated in Athens, where all meetings of ministers will be held.

The regional SE European electricity market is expected to start functioning in 2005 and will become the basis for the operation of a system of exchange and purchase-sale of power among the electricity companies of the countries. The main feature is that this market will gradually adjust its functions to the principles applicable in the EU, the immediate prospect being to be incorporated into the single domestic EU electricity market *before* the accession in the EU of the countries participating therein. To this end, all SE European countries are in the process of incorporating in their legislative framework the Community Directive on the electricity and natural gas market. They have established regulatory authorities for energy (which are already operating in some countries) and are in the process of establishing independent agencies for the operation-management of their systems, as well as unbundling their electricity companies.

The operation of the single market is anticipated to be beneficial, since it will reinforce the safety of electricity transmission in the broader area, will promote private investments¹ and will strengthen cross-border electricity trade. Specifically, Greece will be able to meet its needs from SE European countries at the lowest possible cost and have more direct access to European networks through Yugoslavia and Bosnia after the restoration of their networks.

1 On 30 July 2002 the establishment of a joint company was announced between the Bulgarian state electricity production and transmission company (NEK) and a Greek group of companies, for the purpose of importing electricity from Bulgaria and selling it on the Greek market, as well as constructing and operating thermoelectric stations in Bulgaria. In addition, PPC has expressed interest in buying out 51% of the capital stock of two Romanian power distribution companies.

On the demand side, total electricity consumption grew by 4.7% in 2002. As in the past two years, this was mainly due to increased demand for household and commercial use and, to a lesser extent, industrial use. By contrast, demand for agricultural use declined further (–10.6%, compared with –4.5% in 2001). In particular, the growth of demand by households was fairly high (8.4%, the highest in the past five years), despite the increase (3.85%) in household electricity rates in July 2002, while the demand for commercial use recorded a high growth rate (5.9%).¹ The growth rate of demand for industrial use accelerated (3.1%) in 2002 compared with the previous year (2.5%), despite the slowdown in the growth rate of manufacturing output. The increase was mainly due to

1 It should be noted that, in the “Long-term Energy Planning Programme for the period 2001-2010”, RAE forecasts a rapid growth in energy consumption per household in Greece, owing to the rise in living standards.

stronger demand for high voltage electricity (4.6%), while demand for low and medium voltage was weaker (1.7%). Finally, electricity consumption for other uses, mainly in the public sector, continued to grow, but at a slower pace (2.6%).

The gap between generated and required energy led to an increase in energy imports to meet domestic demand (according to PPC estimates, Greece imports about 600 MW in summer times). This caused the net imports to sales ratio to rise further (6.2% in 2002, compared with 5.6% in 2001).¹ Owing to the increasing demand for electricity, in conjunction with the significant delay in the establishment of private electricity production plants (under Law 2773/1999), the Minister of Economy and Finance and the Minister of Development jointly decided (on 29 January 2003) to set up an additional PPC gas-fired station at Lavrio (capacity: 360-410 MW).² Total PPC-installed capacity increased by 571 MW in 2002 (mainly owing to the integration into the system of the 492 MW combined-cycle plant at Komotini) to 11,717 MW. Certain other PPC investment projects are under way and are scheduled to start operating in the coming years.³

3. SERVICES

According to provisional NSSG estimates, services industry output grew by 3.3% in 2002 (compared with 4.1% in 2001). This increase stemmed mainly from transport-communications, trade, real estate management and other activities.

In more detail, the increase in transport-communications stemmed from road and sea transport (owing to the growth of foreign trade) and from continuously stronger demand for telecommunication services, especially mobile telephony.

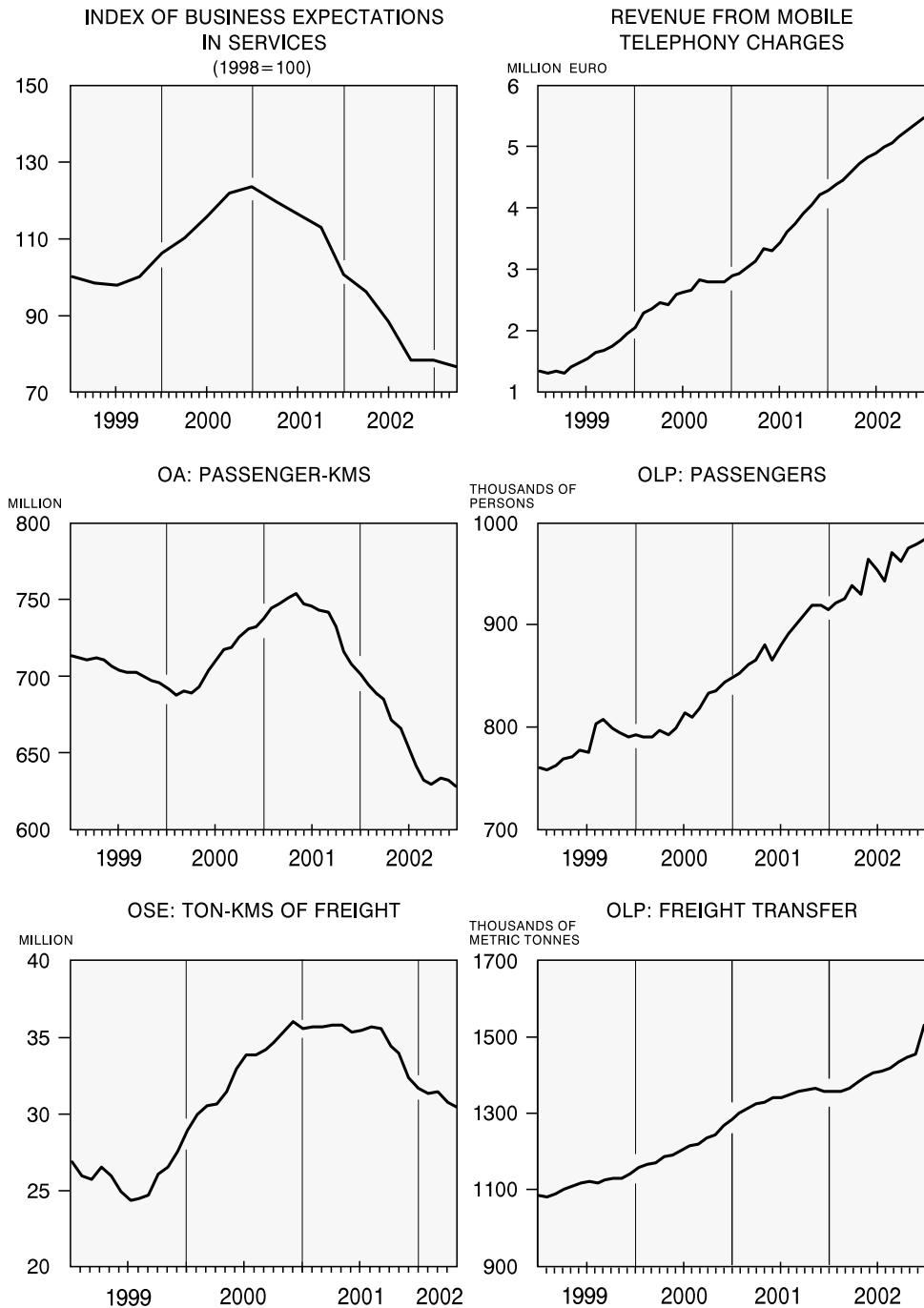
Specifically, according to Piraeus Port Authority (OLP) data, passenger traffic to and from the port of Piraeus increased by 7.6% and cargo traffic by 12.9% (see Chart III.7).⁴

1 At the same time, pursuant to the "Long-term Energy Planning Programme for the period 2001-2010" published by RAE on 12 March 2003 (see previous footnote), it is anticipated that the requirements for electricity in 2010 will increase by 50% compared with 2000. According to RAE, this means that, to prevent the risk of energy shortage, new plants should be integrated into the system by 2010, having a total capacity of 5,500 MW, i.e. one with an output of 550 MW should be established each year.

2 It is the fifth plant in Lavrio and is anticipated to be integrated in the PPC interconnected power network in the summer of 2005.

3 These works mainly include the lignite-fired plant at Florina (330 MW capacity) which will be put in operation within the first half of 2003, as well as the hydroelectric project at Mesochora, Trikala (176.5 MW capacity), which will be put in operation within the first half of 2004. In addition, a significant project for the supply of energy is the interconnection of the country's power system with Italy. The submarine cable was inaugurated on 9 July 2002 and it is the first interconnection of a Greek power system with the European one. On the technical side, it is a continuous-current interconnection with a 500 MW capacity, which will be part of the national electricity transfer systems of the two countries. The cable, which belongs to the Italian company ENEL (75%) and to PPC (25%), will be administered by the system managers of the two countries (GRTN and DESMHE).

4 According to Olympic Airways data, passenger transport decreased by 10.4%. By contrast, Aegean Airlines data show a substantial increase (15%) in the company's turnover (expected to exceed €205 million in 2002). In addition, between January and November 2002 the company's share in total domestic market revenue reached 49.4%, an increase of 1.5% compared with the previous year. Finally, the Hellenic Railways Organisation (OSE) cargo transport dropped by 12.5% (January-May 2002).

CHART III.7
ACTIVITY INDICATORS FOR SERVICES¹


¹ Twelve-month moving average centred on the last month of the period.

Sources: IOBE, Ministry of Economy and Finance, Olympic Airways (OA), Piraeus Port Authority (OLP), Hellenic Railways Organisation (OSE).

It should be noted that the deregulation of domestic sea transport (as from 1 November 2002) under Law 2932/2001 will contribute towards upgrading the services rendered in this sector.¹

Moreover, according to data from the Ministry of Economy and Finance, revenue from mobile telephony increased by 27.5% in 2002. Mobile telephony subscribers numbered 9.31 million, of which 3.50 million subscribed to Cosmote (37.6% market share),² 3.22 million to Vodafone-Panafon (34.6% market share), 2.51 million to Telestet (27% market share)³ and 0.08 million to Q-Telecom⁴ (0.8% market share). The rate of population penetration by mobile telephony in Greece stands at 88%. However, the real rate of penetration is about 20% lower than the nominal one, owing to inactive connections.

In the — now deregulated — fixed-voice telephony market, at least 15 companies provide services in local, long-distance and international calls, as well as calls to mobile telephones. The deregulation of the market and the development of competition led to increased demand for products and services, to the improvement of their quality and to a decrease in rates.⁵ The positive results of the deregulation of the Greek telecommunications market and its convergence with the respective European markets are also confirmed in a recent report by the European Commission.⁶ According to this report, sales in the Greek telecommunications market in 2002 amounted to €5,163 million, increased by 8.3% compared with 2001 (against an average increase of 5-7% in the EU). Meanwhile, according to data from the National Telecommunications and Post Commission (EETT), the traffic handled by alternative providers from January to October 2002 amounted to 2% of the domestic traffic on the OTE network. It is estimated that the alternative providers' share in the domestic fixed-voice telephony in 2002 varies between 2.5% and 3%. Data on alternative providers' traffic concern 11 companies.⁷ It should be noted that Tellas, the new telecommunications firm set up as a joint venture by the PPC and the Italian company Wind, began its commercial activity (in fixed-voice telephony and the Internet) in early February 2003. The EETT plays a sig-

1 The regulation on the abolition of cabotage will apply to coastal transport between Greek islands as from 1 January 2004.

2 According to company data, net profits increased by 32.1% and its turnover by 29.6% in 2002 compared with the previous year.

3 The company announced that earnings and pre-tax profits increased by 32% and 68.5% respectively compared with the previous year.

4 It is noted that the commercial activity of the company began in June 2002.

5 As from 1 December 2002, the service provider for international calls may be preselected. In other words, consumers who have also subscribed to an alternative fixed-voice telephony provider may ask to make their calls without entering the four-digit code. As from 1 February 2003 this service applies to all categories of calls (local, long-distance, international calls and calls to mobiles). It is estimated that the services of *preselection of provider* and *telephone number transferability* (consumers maintain the same telephone number even if they switch providers), scheduled to be introduced after the end of July 2003, will favour competition in the fixed-voice telephony market to the benefit of consumers.

6 European Commission, *Eighth Commission Report on the implementation of the regulatory arrangements package for telecommunications*, COM (2002) 695 final, 3 December 2002.

7 The 11 fixed-voice telephony providers are: Algonet, Cosmoline, Forthnet, Grapes, Info-Quest, Lannet, Southgate, Starcom, Teledom, Telepassport and Vivodi.

nificant role in the transition from the monopoly of OTE to the present regime. It is the competent regulatory authority whose objective is the smooth functioning and development of the market through sound competition, as well as the safeguarding of the interests of users. In addition, EETT aims at developing broad-band access of the final user to networks and services. Broad band enables the provision of services requiring large capacity at high speeds, which contributes to the spread of e-commerce and e-transactions and provides fast access to the Internet.

In accordance with European Commission data ("Eurobarometer" survey, Nov. 2002), the rate of penetration of the Internet into Greek households was approximately 14%, compared with 43% in the EU. At the same time, according to data from a recent survey,¹ the use of the Internet by the Greek population increased by almost 10 percentage points in 2002 (19.3% in 2002, compared with 10.5% in 2001). According to the same survey, one out of three households owned a PC in 2002, while two out of 15 had an Internet connection. The use of computers and the Internet was increased in 2002 in all geographical areas of the country and among different groups of the population. Overall, a trend was observed in 2002 leading to the narrowing of the "digital gap" both among different groups of the Greek population and between Greece and the EU. The percentage of computer users with Internet access increased to 67% in 2002, from 50% in 2001. Greeks use the Internet for an increasing number of applications: 21.3% stated that they mainly use computers and the Internet for entertainment, 20.5% for e-mail, 19.1% to look up information on products and services, 13.4% for information (news, weather, sports), while small percentages use the Internet for other applications, e.g. purchases of products and services (1.6%), bank transactions (1.2%) etc. Finally, according to OTE data, the use of the Internet corresponded to 32% of the total telecommunications traffic through the OTE network in 2002 (and the trend is upward).

Although Greece ranks low in the use of the Internet, there has been activity for the development of e-commerce. According to a recent IOBE survey, between 2000 and 2002 e-commerce was adopted by 60% of the enterprises in trade, 61.5% in services and 76.6% in industry. It is estimated that over the next two years e-commerce will expand substantially. At the same time, according to CosmoONE data, the volume of intercompany transactions on the e-market exceeded €310 million in 2002 (increased by 384% compared with 2001). At the same time, the number of e-auctions also increased significantly (166%).

E-banking in Greece is mostly practiced by big companies, while users are generally hesitant in making online transactions. According to Bank of Greece data, at the end of 2000 e-banking subscribers were no more than 50,000, compared with approximately 150,000 in 2001. In addition, according to data from the Greek Banks Association, e-banking subscribers increased to approximately 250,000 between January and May 2002. The

¹ The survey (on new technologies and the "Information Society") was funded by the Operational Programme "Information Society" of the Ministry of Economy and Finance, designed by the National Research and Technology Network (EDET) and implemented by the VPRC company.

latest Forrester Research survey revealed that the rate of penetration of e-banking in Greece was just 5%, a percentage corresponding to about 100,000 users.

In addition, the rate of implementation of the operational programme “Information Society” is being accelerated. According to data from the competent Special Secretariat, projects with a budget of €819 million were included in the programme by 4 April 2003. This figure corresponds to 29% of the total programme budget.

Activity in retail trade increased by 8.9% in accordance with the NSSG retail sales value index. In addition, according to the IOBE retail trade survey, the retail firms’ expectations index rose by 1.2% in 2002, compared with a decline of 8% in 2001.

Concerning tourism, available data show that tourist traffic decreased in 2002 (see Chapter IX.1.3 and Box IX.1).

Developments in banking are reviewed in detail in Chapter X.1-2.

4. EMPLOYMENT-UNEMPLOYMENT

According to the labour force survey conducted by the NSSG, the rate of unemployment fell below 10% in 2002, for the first time since 1997 (see Chart III.8), to 9.9% (average annual level), while the number of jobless fell by 21,000. Total employment, which had dropped or remained stable in 1999-2001, increased by 1% or 38,000 persons. Thus, the employment rate – i.e. employed persons aged 15-64 as a percentage of the population aged 15-64¹ (see Table III.9) – increased by more than one percentage point (to 56.7%).

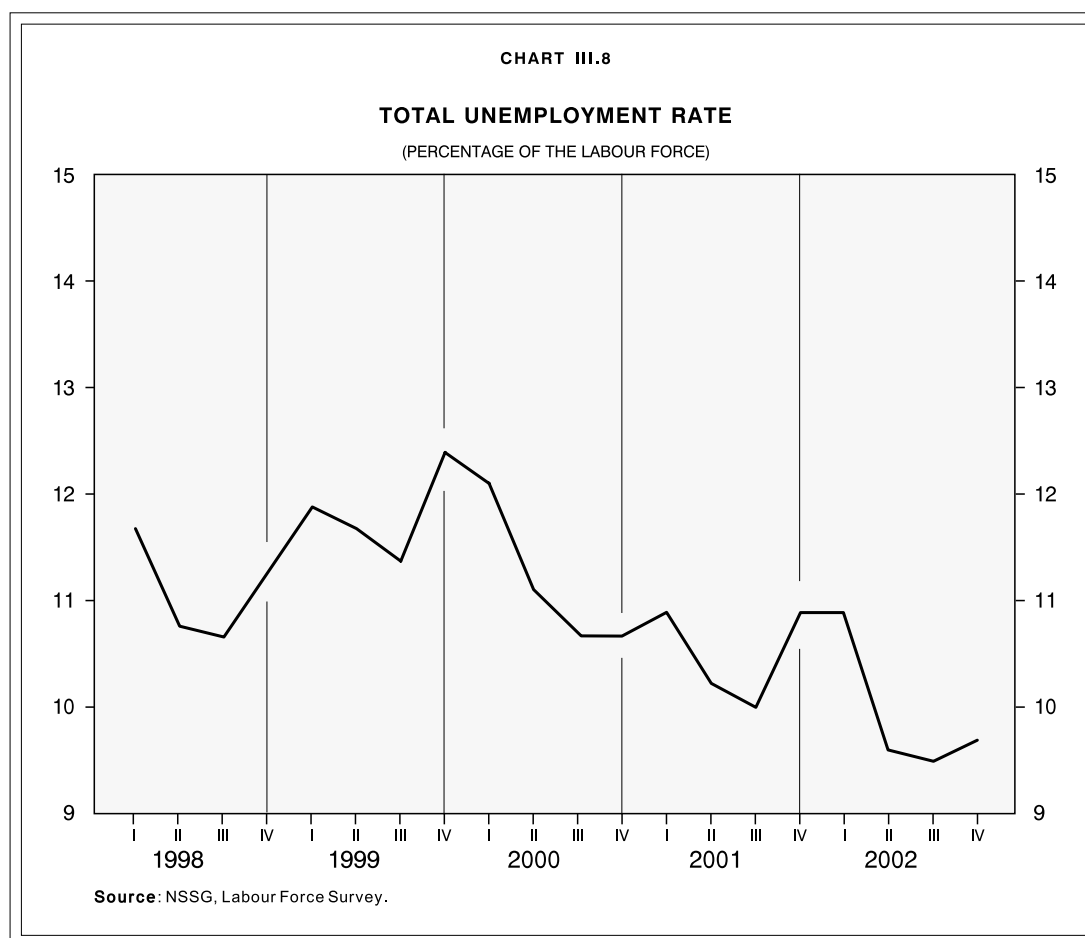
In the 15-29 age group, there was a substantial decrease in the number of unemployed and a small decline in the number of employed, mainly owing to the increasing participation of young persons in education and training programmes. At the same time, the percentage of persons seeking jobs for the first time (i.e. the “new” unemployed) fell to 40.1% of the total unemployed in 2002, from 45.7% in 2001. In addition, the rate of unemployment of young persons aged 15-25 fell to 26.5%, from 28.1% in 2001 (see Table III.10).

However, the rate of unemployment of women past the age of 15 remains high (15.0%, compared with 15.7% in 2001), especially among young women aged 15-24 (34.3%, compared with 35.5% in 2001): in both cases, the rate of unemployment is almost double the respective rate in the EU as a whole. The rate of unemployment of men aged 15-24 is much higher than the respective rate in the EU (19.6% compared with 14.6%). *By contrast, the rate of unemployment of men past the age of 25 is less than that of the EU (5.2% compared with 5.8%).*

The long-term unemployed, i.e. the persons who remain unemployed for more than 12 months, continue to make up a high percentage of total unemployed (52.8% in 2002, compared with 53.0% in 2001), although they decreased by 10,000 persons.

¹ Definition by Eurostat.

In 2002 the growth of employment mainly concerned those aged 30-64 and was higher (in the number of persons) than the relatively small decline in the number of unemployed of the same age group. As a result, the rate of participation of those aged 30-64 in the labour force increased, a development which may reflect the favourable cumulative effect of economic growth for many years, as well as of the programmes for the promotion of employment.



The growth of employment stemmed mainly from certain branches of the sector of services (specifically the “other activities in the provision of services”, which include entertainment, cultural and sports activities, waste collection, sewerage etc., “hotels-restaurants” and “real estate management, equipment and consumer goods leasing, computer-related activities etc.”), constructions and agriculture (where developments in the second half of 2002 did not follow the long-term downward trend). However, a decline was observed in manufacturing and certain other branches of services (“transport-storage-communications”, as well as “financial intermediaries”, which include banks and insurance companies).

In almost all branches of economic activity, the number of self-employed *without personnel* increased (by 50,000 persons in total), while self-employed *with personnel*

TABLE III.9
POPULATION, LABOUR FORCE AND EMPLOYMENT

	2002 (thous. persons)	Annual percentage changes							
		1995	1996	1997	1998	1999	2000	2001	2002
Population									
aged 15 or more ¹	8,977	0.9	1.0	1.2	0.0	1.0	0.8	0.9	0.3
Population aged 15-64 ¹	6,760	0.1	0.3	-0.1	2.1	-0.2	-0.7	-0.2	-1.4
Labour force ¹	4,369	1.1	1.9	-0.5	4.3	0.4	-0.6	-1.7	0.2
Employment: ¹	3,949	0.9	1.2	-0.4	3.0	-0.7	0.2	-0.7	0.8
– Primary sector ¹	624	-1.0	0.5	-2.4	-8.0	-5.0	0.2	-6.5	-0.5
– Secondary sector ¹	887	-0.9	-0.1	-2.1	5.5	-1.3	-1.5	0.7	-0.8
– Tertiary sector ¹	2,438	2.4	2.1	1.1	5.7	0.8	0.8	0.4	1.8
Rate of participation in the labour force ^{1,2}		(49.2)	(49.7)	(48.8)	(51.0)	(50.7)	(50.0)	(48.7)	(48.7)
Employment rate ^{1,3}		(54.5)	(54.9)	(54.8)	(55.6)	(55.4)	(55.8)	(55.6)	(56.9)
Unemployment (as a percentage of the labour force) ¹	420	(9.1)	(9.6)	(9.6)	(10.8)	(11.7)	(11.1)	(10.2)	(9.6)
Employment in:									
– Manufacturing ¹	541	0.0	-0.3	-2.8	3.4	-1.6	-2.1	0.0	-2.9
– Construction ¹	294	-3.4	0.0	-1.2	13.3	-3.2	1.2	2.9	3.1
– Banks ⁴	64	4.0	2.8	1.0	1.8	1.1	2.3	-1.0	1.4
– Civil service ⁵	453 ⁶	2.2	2.3	1.0	0.9	2.4	1.9	1.1	2.2
– Public enterprises and entities ⁷	115 ⁸	0.2	-0.3	-1.5	-2.6	-1.9	-4.3	-3.9	-2.9

1 NSSG, Labour Force Surveys: changes from second quarter to second quarter. Revised data on the basis of Eurostat's definitions, New Cronos database and NSSG.

2 Labour force participation rate of population aged 15 or more.

3 Employed persons aged 15-64 as a percentage of population aged 15-64.

4 Data obtained from banks: *December-on-December changes*.

5 Ministry of Economy and Finance: *December-on-December changes*. Average annual employment is estimated to have increased by 2.2% in 1994, 1.4% in 1995, 2.5% in 1996 and 1.1% in 1997 and to have decreased by 1.1% in 1998. In 1999 average annual employment increased by 2.1% (if the personnel of public hospitals is counted in and the fluctuation of the number of substitute teachers in secondary schools is normalised), in 2000 by 1.8%, in 2001 by 0.6% and in 2002 by 4.0%.

6 Including the personnel of public hospitals.

7 Ministry of Economy and Finance: *December-on-December changes*. Average annual employment increased by 0.6% in 1994, or by 4.8% taking into account the reincorporation of the Athens bus system into the public sector. In 1995 average annual employment increased by 1.5%, in 1996 it remained unchanged, while it fell by 0.6%, 2.9%, 1.6%, 3.9%, 4.1% and 3.8% in 1997, 1998, 1999, 2000, 2001 and 2002, respectively. If only public enterprises are taken into account, the corresponding rates are: +0.6%, -1.3%, -1.2%, -3.4%, -1.9%, -4.2%, -4.6% and -4.7% for 1995, 1996, 1997, 1998, 1999, 2000, 2001 and 2002, respectively.

8 Excluding the Hellenic Telecommunications Organisation (OTE).

(employers) decreased by 18,000 persons. Employees recorded a small increase of 4,000 persons (i.e. 0.2%, compared with 2.2% in 2001). The very small rise in the number of employees (with an average annual rate of 1.8% in 1999-2001) partly reflects the 3.8%

TABLE III.10
POPULATION, LABOUR FORCE, EMPLOYMENT AND UNEMPLOYMENT: SECOND QUARTER
(Thousand persons)

	Population				Labour force				Employed				Unemployed				Unemployment rate			
	1999	2000	2001	2002	1999	2000	2001	2002	1999	2000	2001	2002	1999	2000	2001	2002	1999	2000	2001	2002
Men and women																				
– total (aged 15 or more)	8,803	8,876	8,954	8,977	4,463	4,437	4,362	4,369	3,940	3,946	3,918	3,949	523	491	445	420	11.7	11.1	10.2	9.6
– 15-64 years old	6,922	6,875	6,860	6,760	4,356	4,330	4,258	4,263	3,835	3,840	3,815	3,844	521	490	444	419	11.9	11.3	10.4	9.8
– 15-24 years old	1,406	1,363	1,336	1,273	553	520	483	462	377	366	348	343	175	153	136	119	31.6	29.4	28.2	25.8
– 25 years or more	7,397	7,513	7,618	7,704	3,910	3,917	3,879	3,907	3,562	3,580	3,570	3,606	348	338	309	302	8.9	8.6	8.0	7.7
Men																				
– total (aged 15 or more)	4,222	4,259	4,280	4,298	2,668	2,650	2,607	2,604	2,467	2,457	2,431	2,443	202	193	175	162	7.6	7.2	6.7	6.2
– 15-64 years old	3,371	3,339	3,325	3,300	2,591	2,573	2,533	2,527	2,391	2,380	2,359	2,366	200	193	174	161	7.7	7.5	6.9	6.4
– 15-24 years old	688	667	654	628	284	274	252	247	219	213	199	201	65	60	53	46	22.8	21.9	21.0	18.6
– 25 years or more	3,534	3,592	3,626	3,670	2,384	2,377	2,355	2,357	2,247	2,244	2,232	2,241	136	133	122	115	5.7	5.6	5.2	4.9
Women																				
– total (aged 15 or more)	4,581	4,617	4,674	4,679	1,795	1,787	1,756	1,765	1,473	1,489	1,486	1,506	321	298	269	258	17.9	16.7	15.4	14.6
– 15-64 years old	3,551	3,536	3,535	3,460	1,765	1,757	1,725	1,736	1,444	1,460	1,455	1,477	321	297	270	258	18.1	16.9	15.7	14.5
– 15-24 years old	718	696	682	645	269	246	231	214	158	153	149	142	110	93	82	72	40.9	37.8	35.5	33.6
– 25 years or more	3,863	3,921	3,992	4,034	1,526	1,540	1,525	1,550	1,315	1,336	1,337	1,364	212	205	187	186	13.9	13.3	12.3	12.0

Source: NSSG, Labour force survey, 1999-2002.

decrease of employees in *manufacturing*, mainly due to the slowdown in the growth of manufacturing production, which was affected by the decline in exports of industrial products (except fuel). However, it may also be the “other side” of the substantial increase in self-employed without personnel observed in 2002.

Three alternative and/or interrelated assumptions may be made concerning the reasons for the increase in self-employed as a percentage of overall employment. According to the *first assumption*, economic growth in the last few years encouraged the establishment of small enterprises and/or free-lance professional activity. People may have also chosen such options owing to the effect of certain tax and social security arrangements operating as counter-incentives to dependent/salaried work.¹ According to the *second assumption*, although Law 2874/2000 introduced a certain degree of flexibility in the labour market, there are employment arrangements that may still force some enterprises – especially the bigger ones, since smaller ones may take advantage of the frequently deficient implementation of labour legislation² – to avoid recruiting personnel in dependent jobs. If the supply of such jobs is insufficient for this reason, persons seeking jobs are forced to undertake a personal business or free-lance professional activity. The *third assumption* is based on phenomena already observed in more advanced economies. According to this assumption, developments in technology and production organisation (e.g. increased potential for telework and the use of the Internet) favour, especially in the sector of services, the provision of services by free-lancers who can set their own working hours without depending on a single employer.

Part-time employment amounted to 4.5% of total employment in 2002 (from 4.0% in 2001). This percentage is still much lower than in the EU (approximately 18%). It is also lower than that recorded in Greece in the first quarter of 1999 (6.9%). In fact, between the first quarter of 1999 and the last quarter of 2002, part-time employment decreased by 95,000 persons – reflecting both the increase in *opportunities* for full-time employment and the stronger *preference* of workers for full-time employment. Specifically, in this period part-time workers stating that they *cannot* find full-time jobs decreased by 60,000 persons. At the same time, those stating that they *do not want* a full-time job declined by 27,000 people. However, at least among the unemployed, there is a remarkable supply of labour for part-time work: of the 428,000 unemployed recorded in the last quarter of 2002, 54.4% were ready to take up *either full- or part-time jobs*, while only 38% wanted solely full-time jobs.

As pointed out by the NSSG,³ data on employment from the labour force survey strongly underestimate the total number of foreigners, owing to the lack of relevant data and the geographical mobility of this population group. According to the NSSG, the com-

1 Also see Gary Burtless, “The Greek labour market”, in R. Bryant, N. C. Garganas and G. Tavlas (eds.) *Greece’s economic performance and prospects*, Bank of Greece and the Brookings Institution, Athens, 2001.

2 See Press Release from the Ministry of Labour (26 March 2003) concerning the sanctions imposed during 2002 by the Labour Inspectors Corps for labour legislation violations.

3 Press Release, 11 March 2003.

pletion of processing of the data collected during the Population Census on 18 March 2001 is expected to change the overall picture and upgrade the quality of the survey.

It should be pointed out that, according to data from the *March 2001 census*, immigrants totalled 797,091 (of which 376,732 in the Athens region), i.e. 7.3% of the entire population (10,964,020 persons). During the same period (first quarter of 2001) the *labour force survey* estimated that foreigners (past the age of 15) were only 255,000 and that 177,000 of them were part of the labour force (156,000 employed and 21,000 unemployed). Therefore, these estimates are indeed inaccurate, as admitted by the NSSG. Suffice it to take into account that, during the first procedure for the legalisation of immigrant workers from non-EU countries (1998), 373,000 immigrants submitted initial applications and 225,000 submitted a complete set of supporting documents, while during the recent second procedure (which commenced on the basis of Law 2910/2001, amended by Law 3013/2002) 351,000 applications were submitted and an equal number of temporary stay permits were issued. The procedure for the renewal of these permits and the issue of regular work and stay permits to immigrants is continuing.¹

The anticipated upgrading of NSSG labour force survey data will enable a more precise evaluation of developments in employment in relation to the path of economic activity over the last few years and may show that economic growth has led to the creation of more jobs than normally expected. In such a case, the *prima facie* conclusion will be that the improvement in productivity during the same period was smaller than estimated. However, it should be taken into account that the underestimation of employment may have led to an underestimation of GDP as well. Therefore, a revision of data on employment may lead to a revision of GDP data and, consequently, to *only a small correction* of productivity estimates.

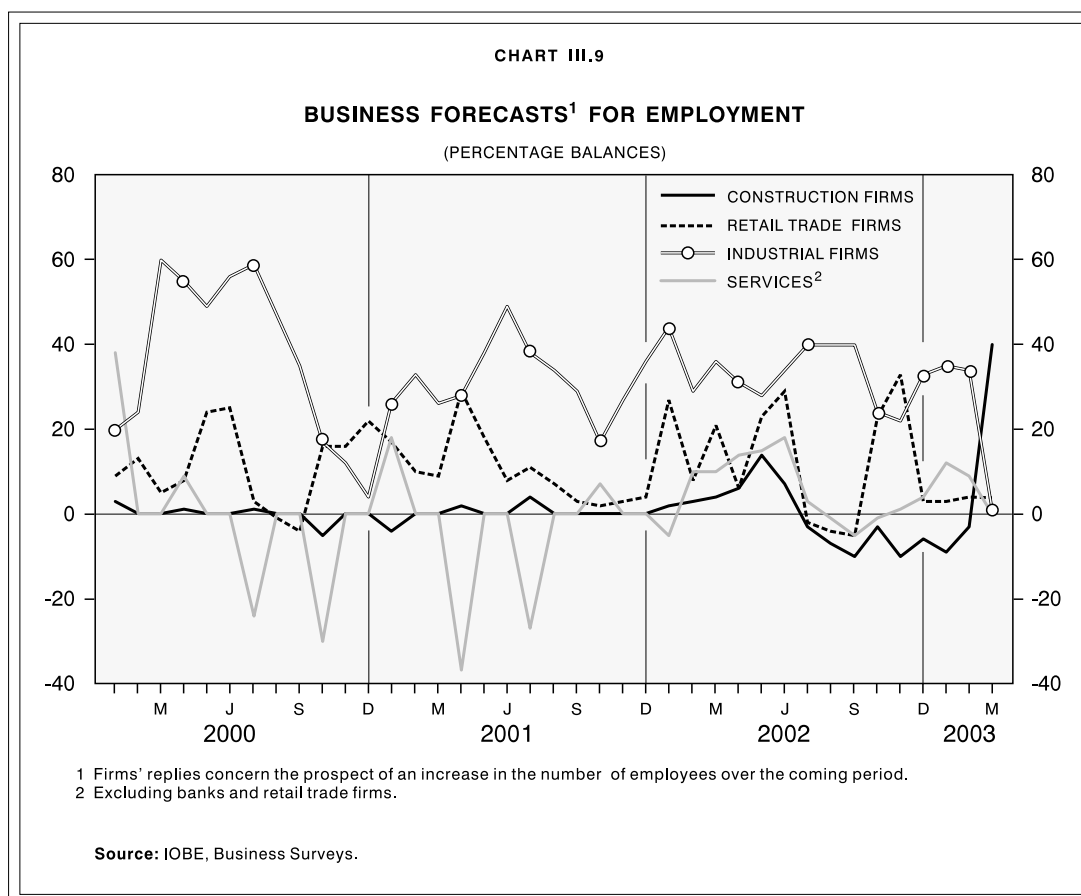
Apart from the NSSG labour force survey, other sources provide useful information on the development of employment in 2002. Specifically:

As regards private sector employees, enterprises' employment expectations (recorded in the IOBE business reports – see Chart III.9) were strongly positive in the constructions sector throughout 2002. Expectations were also positive in retail trade, with the exception of the third quarter of the year. In other services (except banking) they were more moderately positive in the first half of the year, but indicated a standstill or slight decrease in the second half. Finally, in manufacturing, forecasts were slightly positive until June and increasingly negative in the following months. In addition, OAED data on employment flows in the private sector (see Table III.11) show that recruitments increased by 4.6% and layoffs decreased by 1.2% in 2002. However, voluntary quits also increased by 8.3%. Therefore the net balance, which *prima facie* indicates new jobs, reached 71,000 persons (compared with 49,000 in 2001). It should be recalled, however, that the net balance based on these data *overestimates* the new jobs, given that data on recruitments and layoffs are

¹ According to statements by the Minister of Interior (30 January 2003), 460,000 stay permits are expected to be issued by June 2003.

more reliable than data on voluntary quits: the latter are not fully recorded because they are not always declared by employers.

According to data from the banks themselves, the number of bank employees increased by 1.4% between end-2001 and end-2002. By contrast, the number of employees in public enterprises¹ decreased at an average annual rate of 4.7% in 2002 (see Table III.9).



Finally, on the basis of data from the Ministry of Economy and Finance, it is estimated that the number of civil servants (including the personnel of state hospitals) increased at an average annual rate of 4.0% in 2002 (see Table III.9).²

The implementation of the policy aimed at increasing flexibility in the labour market and promoting employment continued in 2002, in accordance with the general guidelines of the "National Action Plan for Employment 2002". In addition, the implementation of two significant laws was anticipated with great interest: Law 2874/2000 on the pro-

1 OTE is not included.

2 As from 2002, civil servants include a substantial number of employees of local authorities (whose payroll is now part of the government budget expenditure).

motion of employment (passed in December 2000) and Law 2956/2001 on the restructuring of OAED and the terms of operation of Temporary Employment Agencies (passed in November 2001).¹

As regards the first law, according to a survey conducted by the Labour Institute of the Greek General Confederation of Labour (GSEE) and the Greek Confederation of Public Servants (ADEDY) (in collaboration with the Metron Analysis company) in June and July 2002 among 2,016 private firms, *of the enterprises that hired personnel* (in the twelve months preceding the survey) approximately 6% attributed such recruitments to the regulations of Law 2874/2000 concerning the decrease in employers' contributions for low-wage personnel, the increase in the cost of overtime and the elimination of "overtime at the discretion of the employer". These recruitments corresponded to 12% of total recruitments made by the surveyed enterprises – a small but not negligible percentage. However, it has been pointed out (by employers' associations *inter alia*) that the regula-

TABLE III.11
PRIVATE SECTOR EMPLOYMENT FLOWS

	1999	2000	2001	2002
New job registrations	886,168	978,266	1,033,085	1,080,305
Labour contract terminations	477,166	534,805	597,575	590,642
Voluntary quits	277,725	341,195	386,043	418,233
Net balance (new jobs)	131,277	102,266	49,467	71,430

Note: Flow data overestimate net job creation (see text).

Source: Ministry of Labour – Greek Manpower Employment Organisation (OAED).

tions of the law for the restriction of overtime and the encouragement of recruitments lead, in several cases, to increased production costs.

As regards the second law, certain significant malfunctions and delays were observed in the OAED restructuring process, in the crucial sector of provision of personalised services (by Employment Promotion Centres –KPAs) to job seekers; these problems will be addressed. According to the law (on "social dialogue for the promotion of employment and social protection") recently passed by Parliament, OAED's subsidiary company "Manpower Support Services S.A." (established under Law 2956/2001) is dissolved because its status was ambiguous and the accomplishment of its objective (the functioning of KPAs) was divided between OAED and its subsidiary. The duties of the dissolved company have been assumed by a special unit, coming directly under the Administration of OAED, to which KPAs will belong. The new law includes regulations on the control of operation of Private Employment Counselling Offices and Temporary

¹ See Bank of Greece, *Annual Report 2001, 2002*, pp. 103-04.

Employment Agencies, while it provides for the establishment of a tripartite National Employment Commission (within which the government and the social partners will jointly examine employment policy issues).

Law 2992/2002 (on the development of entrepreneurship) was passed in March 2002; article 13, paragraph 13, provides for incentives so that enterprises can increase employment. Specifically, for the fiscal year 2002 the income tax rate for Sociétés Anonymes and Limited Liability Companies is reduced in proportion to the increase in employment they achieved.¹ Law 3016/2002 (on “corporate governance”) was passed in April 2002; in article 27 it provides for social policy measures (“measures against poverty”), including the provision of special benefits to long-term unemployed who are no longer entitled to a regular subsidy and have very low family income. Presidential Decree (P.D.) 178/2002 was issued in July 2002 (replacing P.D. 572/1988) concerning the application of Directive 98/50/EC² on the protection of the rights of workers in case of transfer of company ownership. Law 3029/2002 (“social security reform”)³ was passed in the same month, while Law 3051/2002, amending and supplementing the provisions of Law 2190/1994 on the personnel recruitment system in the public sector, was passed in September 2002. In addition, a presidential decree on workers under fixed-term employment contracts will be issued concerning the implementation of the provisions of Directive 99/70/EC. The OAED programmes for 2003 were announced in January 2003 as regards subsidising enterprises to hire jobless persons as well as subsidising the unemployed to establish their own business (“new free-lancers programme”). However, according to OAED estimates,⁴ the number of applications by 31 March 2003 is not expected to cover all 45,000 subsidised jobs; therefore, it was decided to announce the programmes again and change the terms of participation. At the same time, computer training programmes are being promoted for the unemployed, while the “Employment and Vocational Training Account” (funded by employers’ contributions) will finance in-house training programmes. In addition, a draft law was published in February 2003 concerning the National System for Linking Vocational Training with Employment (ESSEEKA), which aims at more effectively implementing the National Action Plans for Employment, matching the employment needs of the labour force with the vocational training provided and thus reducing structural unemployment, especially among young people and new entrants in the labour market.⁵ At the beginning of April 2003, a ministerial decision increased the benefit granted to the long-term unemployed and made the conditions for granting such

1 For an employment increase of 5%, the rate is reduced from 35% to 34%, for a 10% increase it is reduced to 33% and for a 12.5% increase to 32.5%. The tax reduction for the enterprise cannot exceed €15,000 per newly-hired person, while employment cannot be reduced in the following fiscal year (see the relevant explanatory circular of 20 December 2002). It is self-evident that no data are yet available concerning the results of this regulation.

2 It amended Directive 77/187/EEC.

3 See Bank of Greece, *Monetary Policy, Interim Report 2002*, November 2002, Box 2, p. 103.

4 Statements by the OAED Governor during a GSEE workshop on 27 March 2003.

5 Press conference jointly given by the Minister of Labour and the Minister of Education, 25 February 2003.

benefit more flexible. Finally, a draft law is being prepared for the promotion of employment in the field of provision of social services (hospital care, child care, care for the elderly, guarding of school buildings, meeting the needs of insurance agencies, provision of environmental services etc.).

These data lead to certain conclusions regarding the main problems of the labour market. Most of these conclusions have already been taken into account in the preparation of the National Action Plans for Employment. However, more intense efforts are required to implement the policy guidelines resulting therefrom. Specifically:

- The high rate of unemployment among young people indicates inadequacies in the educational system, as well as the mechanism matching supply and demand for work. As regards education, it seems that the problem is not the level of young people's education, but the type of their qualifications. Indeed, according to structural indices compiled by Eurostat, the percentage of those aged 18-24 who hold, at the most, a three-year secondary education certificate and *do not participate* in further training programmes was only 16.1% for Greece in 2002, i.e. the comparison with the higher EU average (18.9%) is *favourable*. By contrast, on the basis of 2000 data, Greece ranked second among 10 EU countries (after Italy) in the *non-correspondence of employment to educational qualifications*.¹ These data indicate the need (i) to upgrade the vocational training system and the general education system, and (ii) to decisively improve the functioning of OAED mechanisms to match supply and demand for work, as well as to control the legitimate functioning of Temporary Employment Agencies and Private Employment Counselling Offices (i.e. bodies that can also contribute to the more effective matching of supply and demand).

- The high rate of female unemployment indicates, *inter alia*, the need to improve the social infrastructure for child care (nurseries, day-long schools, creative past-time centres for children etc.) and further encourage part-time employment (which may be preferred by women with increased family obligations as well as students).

- The high rate of long-term unemployment, in conjunction with the fact that the percentage of *persons aged 25-64* participating in training programmes was — again according to Eurostat's structural indices — only 1.2% for Greece in 2002 (i.e. the lowest in the EU, where the average was 8.4%), suggests the need to put more emphasis on life-long learning.

- The limited — according to OAED — response to its 2003 programmes for employment subsidies indicates that the terms of participation, the goals, the amount and the duration of subsidies etc. should be reviewed.

- Finally, the presence of a large number of foreign workers — which, as has been repeatedly indicated, exerts an overall positive influence on the labour market and the economy² — underlines the need to facilitate their integration into employment and soci-

1 See Eurostat, "School leavers in Europe and the labour market effects of job mismatches", *Statistics in Focus*, Theme 3-5/2003.

2 A recent survey conducted by the Universities of Patra and Ioannina (commissioned by the Ministry of Agriculture) was presented on 28 March 2003, proving the positive role of immigrants in the agricultural economy.

ety through suitable support programmes.¹ The procedure for the legalisation of immigrants and their full integration into the labour market require, *inter alia*, equal treatment of foreign and Greek workers, as well as equal terms of competition between enterprises that employ and those that do not employ foreigners. Equal treatment and equal terms of competition are more general goals and also require effective supervision of the application of labour legislation, especially as regards the protection of health and safety at work.

On a more general note, since the goal is the more efficient functioning of the labour market, the adaptation of working hours and employment itself to the changes in production should be facilitated. In addition, the cost of job creation should be reduced and the labour, insurance and tax legislation should encourage official salaried employment in medium-sized and large firms,² which are more affected by certain inflexible rules in the legal framework.

1 The promotion of integration of immigrants, especially by measures on employment, training, social protection and education, is also supported by GSEE (see INE/GSEE-ADEDY, *Enimerosi*, issue 92, February 2003). In addition, the Association of Greek Industries (SEB) believes that “the great opportunities opened up by legalisation may be lost or become extremely restricted, if they are not accompanied by a large number of measures and policies contributing to the better use of the foreigners’ work force as well as to their smoother and faster social integration, to their cohesion and harmonisation with the Greek general and local society” (see SEB *Bulletin*, Jan.-Feb. 2003). Moreover, according to statements by the Deputy Minister of the Interior (23 January 2003), the Operational Programme for Immigrants in Greece has been prepared for the period 2003-2006 at a total cost of €260 million; it concerns the vocational integration of immigrants, their cultural approximation, the improvement of educational and health services, as well as the creation of infrastructure for their reception and temporary housing.

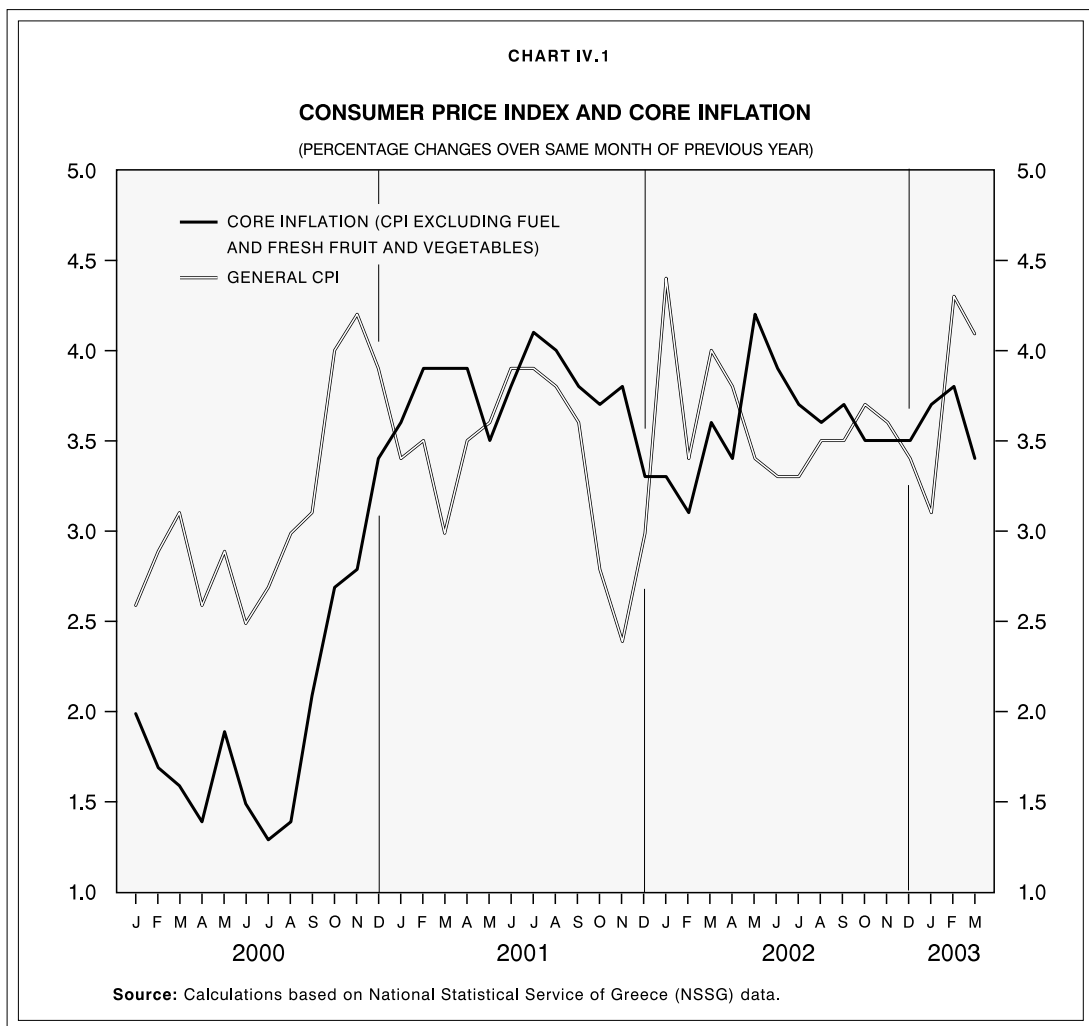
2 See “Introduction” in R. Bryant, N. C. Garganas and G. Tavlas (eds.) *Greece’s economic performance and prospects*, Bank of Greece and the Brookings Institution, Athens, 2001, pp. 26-27.

IV. INFLATION, WAGES AND BUSINESS PROFITS

1. INFLATION

1.1 Price developments in 2002

In 2002, the average annual rate of CPI inflation in Greece stood at 3.6%, marginally higher than in 2001 (3.4%) (see Chart IV.1 and Table IV.1). Average annual HICP inflation in Greece was 3.9% in 2002, compared with 3.7% in 2001 and 2.9% in 2000. Its



differential from the average annual euro area HICP (2.2% in 2002, 2.4% in 2001, and 2.1% in 2000) increased to 1.7 percentage points (up from 1.3 percentage points in 2001 and 0.8 percentage point in 2000¹— see Charts II.3 and II.5).

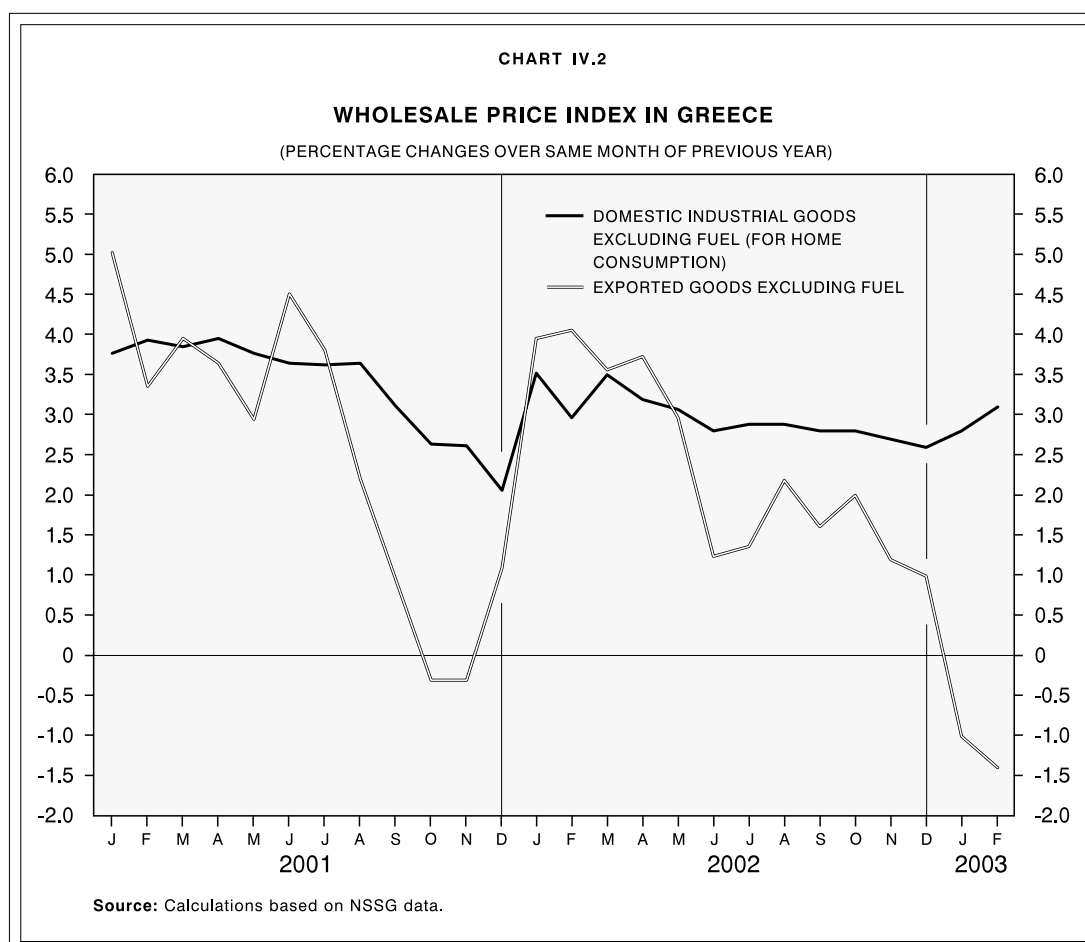
¹ Data for the euro area have been revised by Eurostat.

TABLE IV.1
INFLATION INDICATORS
(Annual percentage changes)

Consumer Price Index										Wholesale Price Index				
Year or quarter	Sub-indices									Sub-indices				
	General index	Goods	Services	CPI excluding fuel & fresh fruit and vegetables	CPI excluding food & fuel	Food and non-alcoholic beverages	Fresh fruit and vegetables	Fuel	General index	Final domestic production for home consumption			Exported products	Imported products
										Primary	Industrial	Industrial excluding fuel		
1996	8.2	7.2	9.9	8.1	8.4	7.0	8.4	10.2	6.5	7.6	8.3	8.1	7.5	2.6
1997	5.5	3.7	8.4	6.0	6.8	4.1	11.0	-4.9	3.5	8.7	3.5	3.8	3.2	2.3
1998	4.8	3.9	6.2	5.3	5.7	4.4	7.0	-5.9	3.8	5.9	3.3	4.2	2.3	5.4
1999	2.6	1.7	4.0	2.9	3.0	2.4	1.8	-1.7	1.8	2.2	2.8	2.6	0.5	0.6
2000	3.2	3.4	2.8	2.0	2.0	1.9	1.4	26.8	6.6	1.5	5.2	3.3	12.3	6.4
2001	3.4	3.2	3.7	3.8	3.7	5.1	9.2	-4.8	2.3	10.0	2.7	3.4	0.7	1.9
2002	3.6	3.2	4.3	3.6	3.6	5.3	13.8	-1.7	2.4	11.2	2.6	3.0	1.9	0.4
1999	3.6	2.8	4.9	4.4	4.5	4.3	6.4	-11.9	2.4	11.4	2.9	3.8	-1.2	1.7
Q ₁	2.4	1.3	4.2	2.9	3.2	1.7	1.7	-6.1	0.3	7.3	1.8	2.0	-3.3	-1.6
Q ₂	2.0	0.8	3.8	2.5	2.5	1.2	-4.6	-2.1	0.7	-11.4	2.5	2.2	0.8	0.7
Q ₃	2.5	2.0	3.1	1.9	1.8	2.4	2.9	14.9	3.6	1.9	4.0	1.5	6.1	1.8
2000	2.9	3.0	2.8	1.7	1.6	1.9	0.3	29.0	5.5	-2.5	4.7	2.6	11.8	5.2
Q ₁	2.7	2.7	2.6	1.6	1.5	1.8	0.0	25.8	6.3	2.6	4.8	3.0	12.0	6.2
Q ₂	3.0	3.2	2.7	1.6	1.7	2.4	9.9	23.8	7.0	10.4	4.9	3.1	12.3	6.4
Q ₃	4.1	4.7	3.2	2.9	3.0	1.5	-2.8	28.9	7.4	-3.0	6.5	4.0	13.2	7.7
2001	3.3	2.9	3.9	3.8	3.8	1.9	-5.7	3.4	3.1	-2.0	3.8	3.9	3.7	4.0
Q ₁	3.7	3.7	3.7	3.8	3.6	4.6	7.4	2.4	3.6	8.8	4.0	3.8	3.4	2.8
Q ₂	3.8	3.9	3.6	4.0	3.9	6.2	14.0	-4.4	2.2	12.2	2.9	3.5	0.0	1.8
Q ₃	2.7	2.2	3.6	3.6	3.4	7.8	23.7	-18.7	0.2	22.2	0.3	2.4	-4.0	-0.8
2002	4.0	4.0	3.9	3.3	3.4	9.9	43.2	-7.4	4.3	34.7	2.6	3.3	2.4	0.6
Q ₁	3.5	3.0	4.4	3.9	3.9	4.7	9.0	-4.9	1.7	6.9	2.2	3.0	1.2	0.2
Q ₂	3.5	2.7	4.6	3.7	3.6	4.0	4.5	-0.4	1.6	4.8	2.4	2.9	1.3	0.2
Q ₃	3.6	3.0	4.5	3.5	3.5	2.9	1.0	6.7	2.0	0.6	3.1	2.7	2.7	0.6
2003	3.8	3.4	4.5	3.6	3.4	2.3	-5.4	15.9	...	...	...	...	...	...
Q ₁														

Source: Calculations based on NSSG data.

In Greece, core inflation remained virtually unchanged in 2002. If measured as the annual rate of change in the CPI excluding fuel and fresh fruit and vegetables, it slowed down slightly to 3.6%, compared with 3.8% in 2001, though it was still high relative to 2000 (2.0%). When measured in terms comparable with the euro area (i.e. the annual growth of HICP excluding energy and unprocessed food¹) core inflation rose slightly to 3.9% in 2002 from 3.8% in 2001 (and just 1.8% in 2000).² However, since euro area core inflation based on the HICP excluding energy and unprocessed food climbed to 2.5% in 2002 from



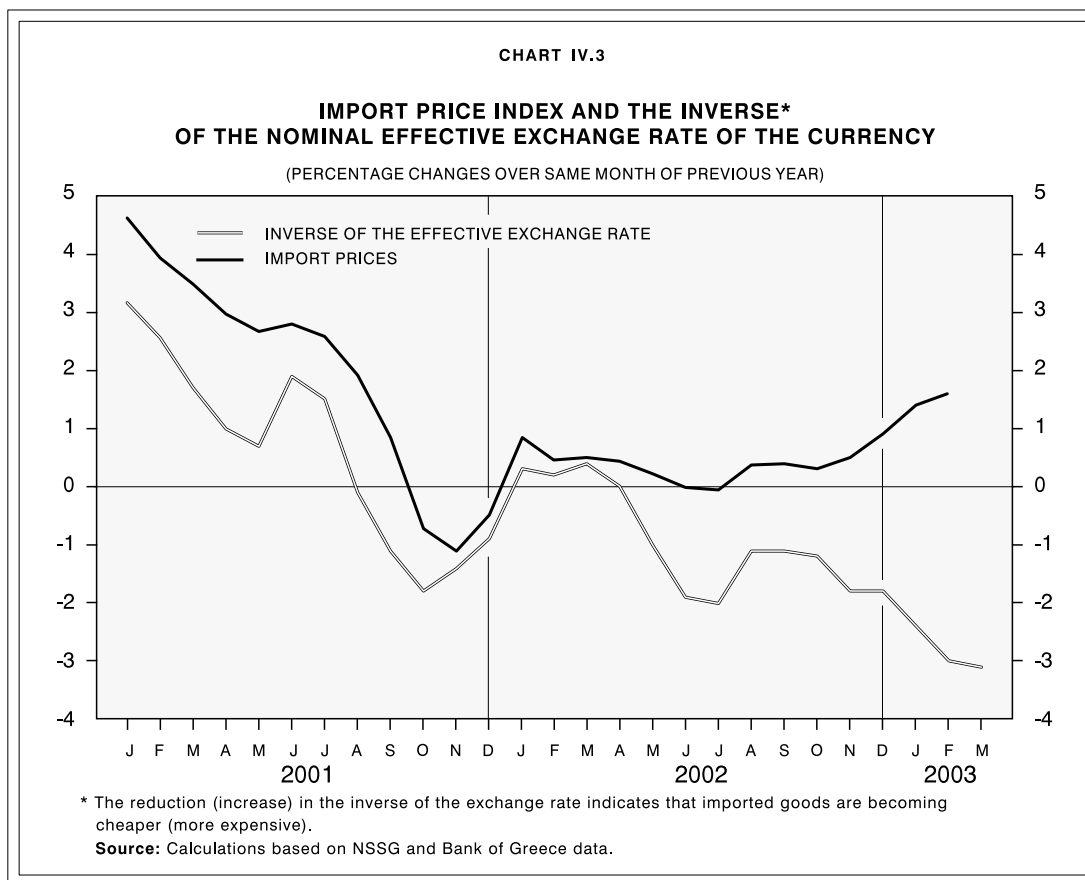
2.0% in 2001 and 1.1% in 2000, the differential between Greek and euro area core inflation was just 1.4 percentage points in 2002, compared with 1.8 percentage points in 2001 and just 0.7 percentage point in 2000 (see Chart II.4).

In December 2002, the year-on-year rate of CPI inflation was 3.4% and of core inflation (i.e. CPI excluding fuel and fresh fruit and vegetables) 3.5%. Among items

¹ This is the definition of “core” inflation employed by the ECB.

² The different course reflects differences in coverage and weighting of the two indices.

included in core inflation, the highest year-on-year price increase in December 2002 was recorded by *services* (4.3%), particularly insurance premia (6.8%), hotels-café-restaurants (6.4%), medical services excluding hospitals (6.3%), rents (5.4%), transport services (5.1%), and hospital care (4.9%). Among *goods excluding fuel and fresh fruit and vegetables*, a relatively high annual increase in prices was recorded by processed food (3.8%), which includes non-alcoholic beverages (for much of the year the increase was even higher, averaging 4.3%).



At the level of *wholesale prices* — which provide a good guide to the future course of consumer prices¹ — the average annual rise in the prices of domestic industrial products (excluding fuel) for home consumption as well as of imported goods (excluding fuel) was considerably lower in 2002 than in 2001 (down from 3.4% to 3.0% in the case of the for-

1 See E. Papapetrou and G. Hondroyannis, "The causal relationship between consumer prices and wholesale prices in Greece", Bank of Greece, *Economic Bulletin* No. 10 (December 1997), and "H. Gibson and S. Lazaretou, "Leading inflation indicators for Greece: an evaluation of their predictive power", Bank of Greece, *Economic Bulletin* No. 14 (December 1999).

mer, and from 2.3% to 0.7% in the case of the latter – see Charts IV.2 and IV.3, and Table IV.1). Moreover, in December 2002 the annual rate of increase in these indicators was 2.6% and 0.7% respectively.

1.2 Inflation determinants

Various factors underlay the persistently high level of average annual inflation and, indeed, its slight increase in 2002 (see Chart IV.4). Several of these factors were *extraordinary or exogenous*. Specifically:

First, fuel prices in the world market increased in 2002. The one-month forward price of Brent oil *in US dollars* rose by 43.9% between December 2001 and December 2002, though *in euro* it increased by just 26.0%. Furthermore, the *average annual* level of the forward price of Brent oil *in US dollars* rose by 0.6% in 2002, but *in euro* it fell by 4.7%.¹ Thus, the *average annual* level of domestic retail fuel prices (in euro) also decreased in 2002 (–1.7%, compared with –4.8% in 2001). The annual rate of increase was 12.1% in December 2002 (compared with an annual *rate of decrease* of 18.3% in December 2001 – see Chart IV.5).

Second, since the prices of fresh fruit and vegetables were very high in December 2001 and January 2002, owing to adverse weather conditions, their average annual rate of increase reached 13.8% in 2002 (compared with 9.2% in 2001).

Third, the introduction of euro banknotes and coins led, particularly in the first months of 2002, to rounding when pricing various consumer goods and services, while in a number of cases it served as a pretext for price increases that could not be justified by increased costs. According to estimates published in previous Bank of Greece Reports, the upward contribution of these phenomena to the annual rate of inflation (in January 2002) was initially in the region of 0.2 percentage point, later rising to 0.5 percentage point,² i.e. slightly higher than the euro area average.³ Moreover, according to the extensive Flash Eurobarometer survey (“The Euro, one year later”) carried out in November 2002 for the European Commission by polling companies participating in EOS Gallup Europe in all euro area countries, the number of consumers who considered that the euro conversion had made them worse off was only slightly higher in Greece than in the euro area as a whole (88.3% compared with 84.4%); conversely, only a low percentage of people believed that the euro contributed to price stability (33.3% in Greece, 36.4% in the

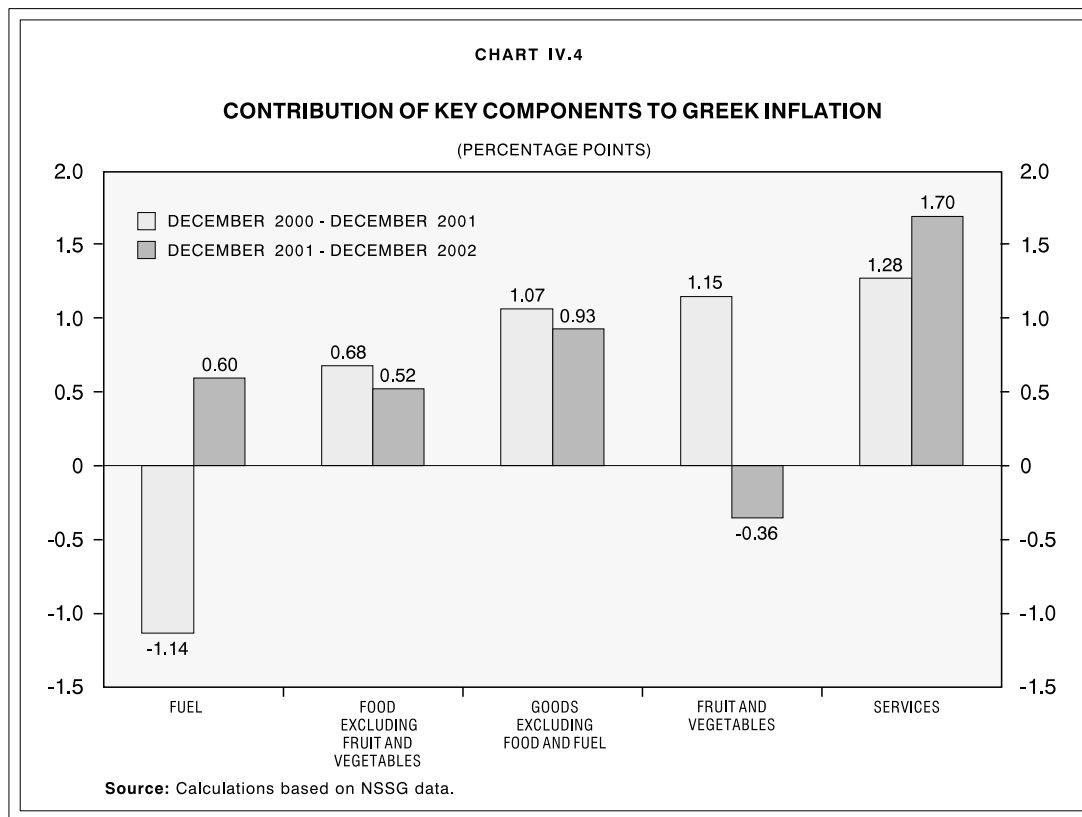
1 See ECB, *Monthly Bulletin*, April 2003, Tables 4.2 and 10, pp. 51* and 76*.

2 See Bank of Greece, *Monetary Policy 2001-2002*, March 2002, Box 5, p. 115 (in Greek), and the *Annual Report 2001, 2002*, Box IV.1, p. 119. The analysis of consumer prices as these evolved after March 2002 does not lead to a marked divergence from earlier estimates regarding the inflation effect of the euro changeover.

3 Eurostat estimates (Press Release, 17 July 2002) indicated the impact on inflation from the introduction of the euro to be in the order of 0.1-0.2 percentage point. However, more recent estimates suggest that the figure for the euro area overall is in fact double this.

euro area), while also low was the percentage of those who believed that the euro had reduced price differences within the euro area (24.7% in Greece, 26.7% in the euro area as a whole).

However, a number of other factors also served to aggravate inflationary tendencies. In particular, profit margins widened in a number of sectors whose influence on consumer prices is substantial (see Section 3 of this chapter). Furthermore, there has been a positive spread between growth in consumer prices and growth in wholesale prices for roughly the same category of goods. For example, the average annual increase in retail



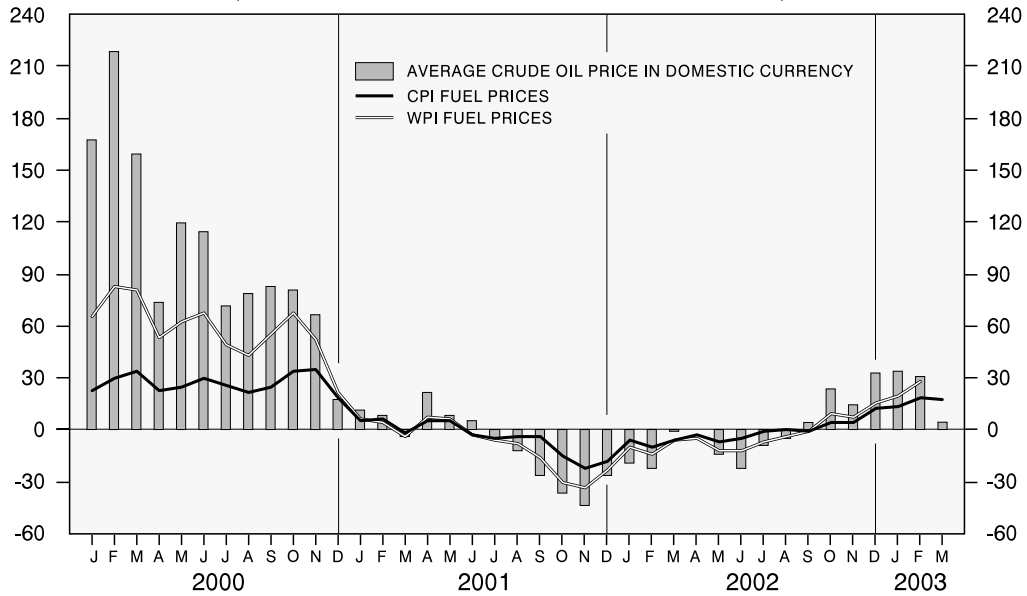
prices of goods excluding fuel and fresh fruit and vegetables (which are included in the CPI) was 3.0% in 2002, i.e. greater than the average annual increase in wholesale prices of “domestic industrial goods for home consumption and imported goods (excluding fuel)”,¹ which was 1.8%. The respective growth rates in 2001 were 3.9% and 2.8%. Consequently, there is divergence between the two rates (indeed, it widened slightly in 2002), suggesting that the market is not functioning efficiently in the sphere of retail

¹ This index is comprised of a combination of the price index for domestic industrial goods for home consumption and the price index for imported goods (excluding fuel).

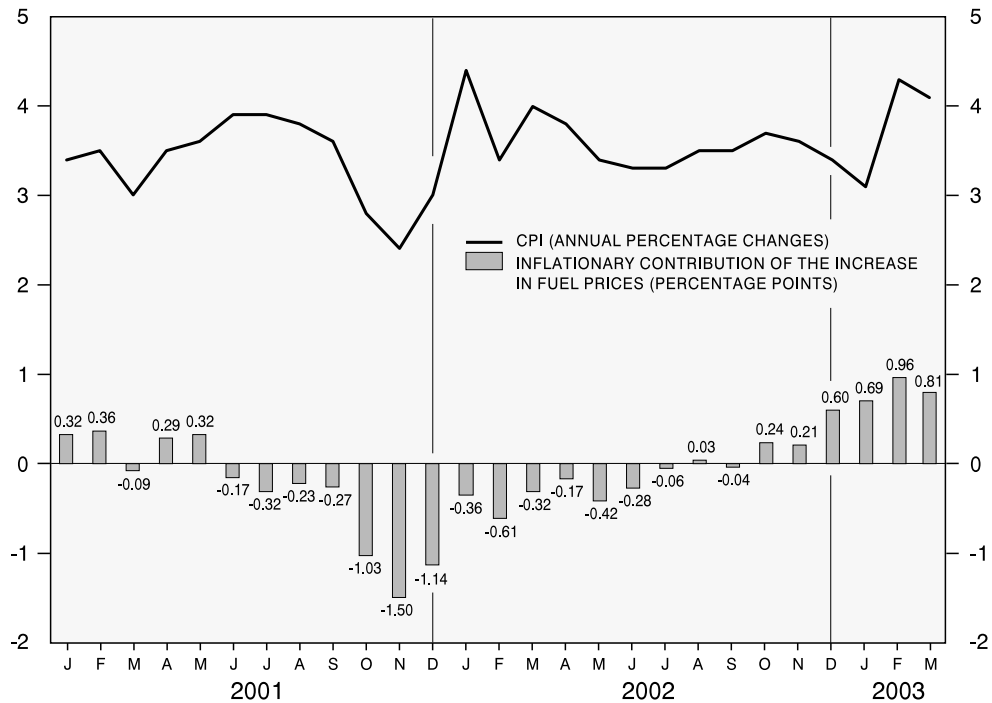
CHART IV.5

A. CPI AND WPI FUEL PRICES AND AVERAGE PRICE (IN DOMESTIC CURRENCY) OF BRENT CRUDE OIL

(PERCENTAGE CHANGES OVER SAME MONTH OF PREVIOUS YEAR)



B. INFLATIONARY CONTRIBUTION OF THE INCREASE IN FUEL PRICES



Source: Calculations based on NSSG data and, for Brent crude oil prices, US Energy Department data.

trade.¹ In general, the widening of profit margins in a number of sectors and the relatively high rate of increase in the prices of services supplied by the private sector reflect the inefficient operation of these markets (explaining perhaps the price increases that many businesses imposed under cover of the introduction of the euro) and, probably, excess demand in many cases.

Non-competitive conditions may be reflected, *inter alia*, in the abuse of dominant position, or in deals and harmonised practices among sellers – i.e. in practices which, according to Law 703/1977, fall within the brief of the Competition Commission, an independent authority.² However, it is very difficult to provide legally appropriate documentation for such cases.³ Furthermore, ineffective competition in sectors where there is a *large* number of businesses, such as hotels-café-restaurants, may well be due to the lack of adequate information among consumers. Finally, the fact that some markets such as electricity and domestic coastal shipping have not been fully opened up yet and that the opening-up of the natural gas market has yet to begin⁴ probably explains why price cuts have not been made in these sectors, in contrast with the telecommunications market. Greece's lag behind the rest of the euro area in terms of opening up certain markets, as well as its being slower in strengthening competition in markets with an oligopolistic structure and/or inefficient operation, tends to sustain the country's higher rate of inflation.

The upward effect of these factors on inflation in 2002 more than offset the downward effect of other factors. In particular:

First, while international prices of imported products (excluding fuel) increased, their final effect on inflation was actually downward owing to the appreciation of the euro. The average annual level of the exchange rate of the euro, weighted on the basis of Greece's external trade, increased by 0.9% in 2002, while between December 2001 and December 2002 the exchange rate rose by 1.8% (see Chart IV.6). The result was that domestic wholesale prices of imported products increased in 2002 by an annual average of just 0.4% (excluding fuel: 0.7%) – see Chart IV.3.

Second, a downward effect (though less marked) was exerted by the decline in the prices of telecommunications services as a result of increased competition in the deregulated market. During 2002, telephone service charges dropped by 7.2% (compared with a decline of 1.9% in 2001). If these charges had not changed, it is estimated that annual inflation in December 2002 would have been around 3.6% (instead of 3.4%). The prices

1 Despite (a) the operation of thousands of retail traders and (b) the intense price competition among large food retailers and department stores (sales by both categories rose in 2002 faster than the total value of retail sales – see Table III.2), the retail trade sector is fragmented and competition does not fully function on a local level.

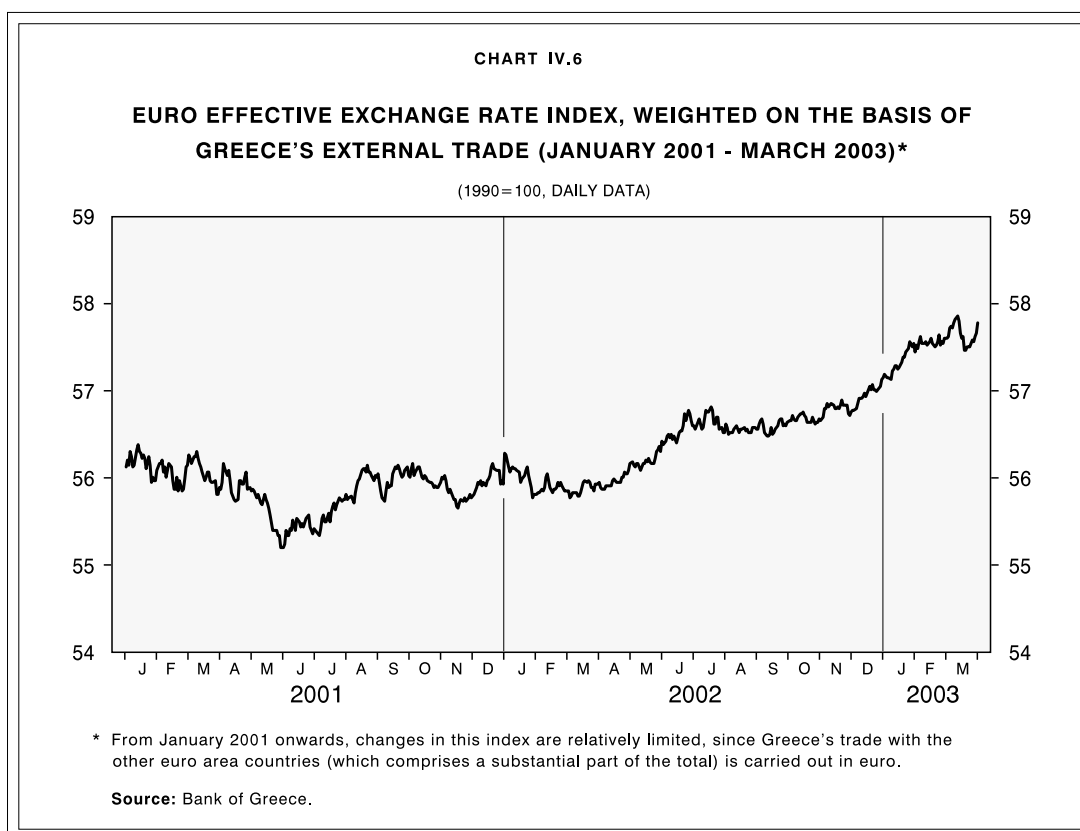
2 See the *2001-2002 Report* of the Competition Commission, June 2002.

3 See the note by the Chairman of the Competition Commission in the newspaper *To Vima*, 13 October 2002, and related statements by the Minister of Development in the magazine *Oikonomikos Tachydromos*, 12 October 2002.

4 Pursuant to Law 2932/2001, as of 1 November 2002 the provision of coastal shipping services is an open market. On the deregulation of the electricity market, see Boxes III.1 and III.5 in, respectively, the 2000 and 2001 *Annual Reports* of the Governor of the Bank of Greece, as well as Chapter III.2.5 and Box III.7 herein.

of other utility services (excluding telecommunications services) supplied by public and private enterprises, as well as certain charges set by the State,¹ increased at an average annual rate of 3.9% in 2002, i.e. at roughly the same rate as the general CPI.

Unit labour cost growth is a factor of particular significance for the evolution of inflation. According to revised estimates (see the next section of this chapter), the rate of increase in unit labour costs in *the whole economy* in 2002 was higher than in 2001, though in *the business sector* it fell markedly. Still, the rise in unit labour costs in the whole economy continued to serve in keeping Greek inflation at a high level. Indeed, the rise in



labour costs exceeded, on the one hand, the maximum level considered compatible with maintaining *price stability* (defined by the ECB as an annual rate of inflation below 2%) and, on the other, the euro area average (on the reasons for this, see Section 1.3 below).

When looking at the inflationary pressures on the demand side in 2002,² it is necessary to take into account the fact that *real* interest rates fell substantially in 2001-2002 to

1 These include the rates set by the Public Power Corporation, the Hellenic Post, the Hellenic Railways Organisation, the Water Supply and Sewerage Company (and other water supply corporations), Olympic Airways and private airline companies, urban public transport fares, public and private hospital charges, national TV fees, municipal rates, highway tolls and road duties.

2 On demand in 2002, see Chapter III.1.

a level below that of the euro area as a whole. For, while nominal interest rates converged, Greek inflation remained higher than overall euro area inflation. This development in real interest rates served to keep the rate of credit expansion to households relatively high and, as a result, to generate inflation pressures via private consumer demand, which continued to rise in 2002 by about 3%, as well as via private investment in housing, which grew substantially (see Chapter III). However, it is worth noting that the *overall* impact of monetary conditions on demand and on the *level of prices in general* – and not simply on the prices of consumer goods and services – was relatively small in 2002, since the rate of change in the quantity of money was very low¹ and the real effective exchange rate of the currency moved upwards.

In assessing the impact of demand it is useful to take into account the concept of the “output gap”.² Estimates by the Bank of Greece, the European Commission and the OECD indicate that the output gap in the Greek economy was slightly positive in 2001 and widened in 2002. Consequently, excess demand in Greece tended to push inflation up during the period in question as compared with early 2000 and, as long as it persists, it signals inflation pressures for the future. The course pursued by prices and profit margins would seem to support the view, as already mentioned, that there was excess demand in a considerable number of sectors.

Of course, the steep rise in public investment in infrastructures and in private business investment in recent years and the expansion of the labour force owing to the large inflow of immigrants³ are estimated to have increased the productive capacity of the economy, and hence the growth rates of potential GDP.⁴ High growth is also fostered by the estimated steady growth of “total factor productivity” – the result of the gradual introduction of new technology and innovations, and the tendency by businesses to save on labour. Nonetheless, the fact that the pace of economic growth has been outstripping, albeit slightly, potential growth would seem to indicate that further increases in investment (aiming at increasing capital reserves in key sectors of the economy) may forestall any tightening in supply in various sectors and, hence, prevent the emergence of inflation pressures arising from the expected increases in demand in 2003 and 2004. In this case, over the coming years it will be possible to contain the differential between the levels of current production and potential GDP and, as a result, reduce the positive “output gap”.

1 See Chapter VI.

2 The output gap is defined as the difference between the *level* of current production (GDP) and the productive capacity of the country (*level* of potential GDP) as a percentage of the *level* of potential GDP. This ratio is not directly measurable, but can be estimated using a variety of methods. This needs to be taken into consideration when assessing the conclusions of related analyses.

3 As noted in Chapter III.4, data regarding the labour force underestimate (this has been acknowledged by the National Statistical Service of Greece) the increase in the labour force and in employment in recent years because not all foreign workers are on official record.

4 Econometric estimates on growth in potential GDP differ according to the method used. The estimate that is based on a production function gives, in the case of Greece, the highest growth levels of potential GDP.

However, various data suggest there are margins for more intense use of productive capacity in certain sectors of the economy, given that, on the one hand, the rate of industrial capacity utilisation – according to Institute for Economic and Industrial Research (IOBE) data – stood at 77.1% in 2002 (2001: 77.7% – see Chart III.5) and, on the other, the rate of unemployment, although falling, is still high (see Chart III.8).

1.3 The inflation differential between Greece and the euro area

The analysis of the course of inflation in Greece serves to highlight the fact that it continues to be faster than inflation in the euro area as a whole (see Chart IV.7). It should be pointed out that the *average annual differential* between Greek and euro area inflation in 2002 *widened solely in terms of the overall HICP*, for special reasons:

- The Greek economy is more sensitive to oil price fluctuations (combined with the overall increase in the price of oil during the year). According to Eurostat data for 2000, domestic energy consumption, expressed as oil equivalents per unit of GDP, is 36% higher in Greece than in the EU, indicating less efficiency in the utilisation of energy resources.¹ This indicator is useful for calculating the *overall impact (direct and indirect)* of increases in fuel prices on the general price level. As regards their *direct* impact on the HICP, it is sufficient to take into account the weights (percentage participation) of liquid fuel in the HICP basket.²

- In Greece, the impact of bad weather, in December 2001 and January 2002 on fresh food prices and on the general level of prices was greater than in the other euro area economies.

- The inflationary impact of the introduction of euro notes and coins was, as already seen, slightly stronger in Greece than in the euro area.

By contrast, the differential between Greek and euro area *core inflation* narrowed somewhat in 2002, though it is still substantial.

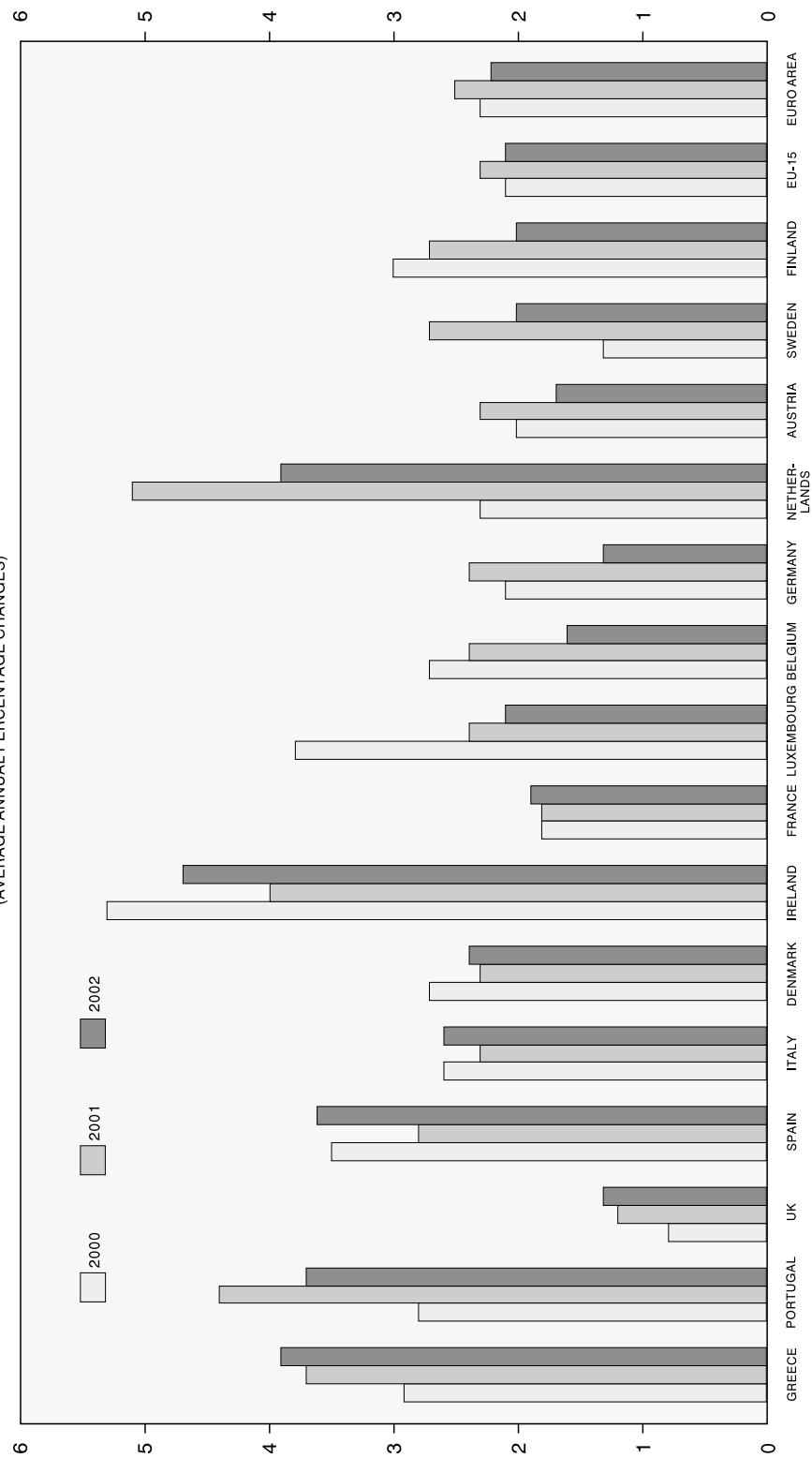
The differential of Greek core inflation from the euro area one reflects the fact that the Greek economy is currently in a different phase of the business cycle from the rest of Europe, as well as a number of more permanent factors:

In the first place, the divergence reflects the lag of the Greek economy behind the other European economies with regard to the operation of the markets for goods and services. Certain key domestic markets, such as fuel and fresh fruit and vegetables, do not function efficiently, thereby increasing the impact of external and internal shocks (e.g. adverse weather, rising oil prices in the world market, or increases in other cost components).

1 This indicator (kilograms of oil equivalents per €1,000 GDP, at constant prices 1995) was 264 for Greece, 194 for the EU and even less in the euro area. See the Eurostat press release of 23 August 2002.

2 In 2002, the weight of heating oil in the HICP was 1.35% for Greece, compared with just 0.66% for the euro area as a whole. This reflects the wider use of natural gas in other euro area countries. On the other hand, the weight of petrol (gasoline) was slightly lower for Greece than for the euro area as a whole (3.31%, compared with 3.65%).

CHART IV.7
INFLATION IN EU COUNTRIES ON THE BASIS OF HICPs
 (AVERAGE ANNUAL PERCENTAGE CHANGES)



Source: Eurostat.

Furthermore, as pointed out in previous Reports, it is quite reasonable for the Greek economy, which displays relatively high growth rates and is in the process of real economic convergence, to have a higher rate of inflation than the more advanced economies of the euro area, particularly as regards goods and services that are not internationally tradable. Balassa and Samuelson argue that,¹ in countries which are in the process of economic convergence, productivity growth in sectors producing internationally tradable goods accelerates and leads to high wage increases, without having an adverse impact on unit labour costs and prices (within the same sectors). However, when high wage increases spill over into sectors producing non-tradable “goods” (mainly services), where productivity growth is lower, prices in these sectors increase faster and the general inflation level rises, though without directly affecting competitiveness (since these price increases concern non-tradable products).

Of course, in recent years deregulation (or the prospect of deregulation) of certain markets, as well as progress towards integrating other markets into the single European market, have resulted in a number of goods, and above all services, becoming far more tradable across borders than in the past. This may lead to faster productivity growth and keener competition in sectors (mainly services) where previously the lag in productivity growth (relative to other sectors of the economy) or an inadequately competitive environment led to steeper price increases and thereby *contributed markedly* to the upward deviation of the Greek rate of inflation from that of our European partners.²

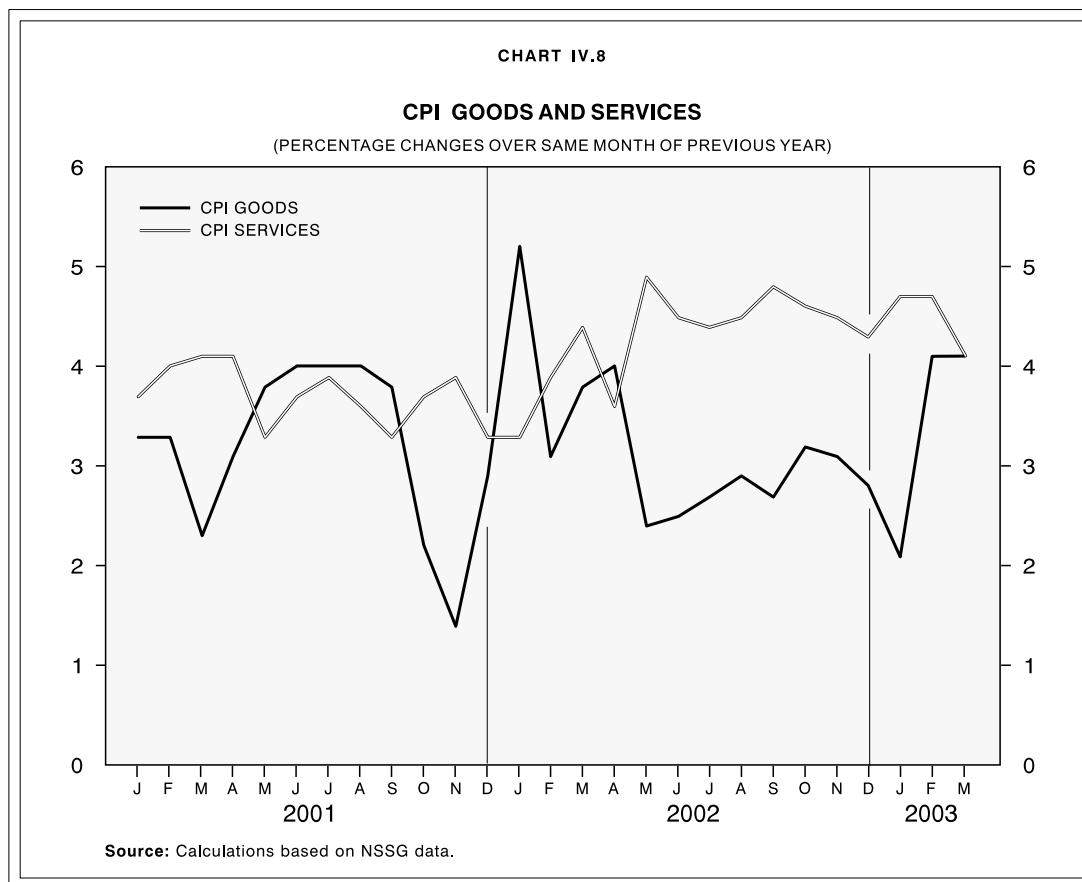
In the case of Greece, until 1999 the prices of services included in the CPI increased faster than the prices of goods; in 2000 the opposite was the case (see Chart IV.8). Since 2001, however, the prices of services again increased at a faster year-on-year rate than the prices of goods (3.7% compared with 3.2% in 2001, 4.3% compared with 3.2% in 2002), suggesting that the anticipated favourable impact of market deregulation on prices has not, as yet, fully materialised. It is worth noting that the euro area as a whole also registered a rise in the prices of services higher than that of goods in 1999 (1.5% compared with 0.9%), 2001 (2.7% compared with 2.3%) and 2002 (3.1% compared with 1.6%), although in 2000 – as also in Greece – the prices of services rose at a slower pace than the prices of goods (1.5% compared with 2.5%).

With regard to competitiveness, however, eliminating the inflation differential regarding *tradable* goods and services is a top priority. On the basis of harmonised indices,

1 For a brief treatment see “Inflation differentials in a monetary union”, ECB, *Monthly Bulletin*, October 1999.

2 According to an IMF study (“The contribution of the Balassa-Samuelson effect to inflation: cross-country evidence”, in IMF, *Greece: Selected Issues*, December 1999, and *Greece: Staff Report*, November 1999), the contribution of this effect to inflation in Greece was considerable in the past. In the period 1960-1990, it is estimated to have been 1 percentage point per annum (with average annual inflation for the period at 11.8%), while in 1990-1996 it rose to 1.6 percentage points (with average annual inflation at 14%). A comparison with various other European countries indicates that during the latter period a significant part of the inflation differential between Greece and these countries (equal to 1.2 percentage points) is attributable to the “Balassa-Samuelson effect”. More recent estimates (IMF, *Monetary and Exchange Rate Policies of the Euro Area – Selected Issues*, IMF Country Report No. 02/236, 2002, Ch. 1) show that the size of this effect was equal to 0.7 percentage point in the period 1995-2001.

the positive differential between Greece and the euro area as regards the average annual increase in prices of *industrial goods excluding energy* (an important category of internationally tradable goods) fell markedly in 2002 to 1.1 percentage points, from 2.0 percentage points in 2001. On the other hand, in the *services* sector (services are not internationally tradable, with the exception of those associated with tourism) the positive differential increased slightly to 1.4 percentage points in 2002, from 1.2 percentage points in 2001. Finally, in the *processed food* sector (also an important category of internationally



tradable goods) the positive inflation differential increased slightly to 2.4 percentage points in 2002, from 2.3 percentage points in 2001 (see Table IV.2 and Chart IV.9).¹

A special factor behind the inflation differential over many years has been the positive difference in unit labour cost growth between Greece and the euro area, which has fallen considerably in the past two years.

It needs to be said that, *in part*, this positive difference is simply the *other side* of the inflation differential. In other words, it is due to the same factors: the Balassa-Samuelson

¹ These three groups (industrial goods excluding energy, processed food, services) make up the “basket” for calculating core inflation on a harmonised basis.

TABLE IV.2

[illegible]

1 Including alcoholic beverages and tobacco.

2 Whole economy.

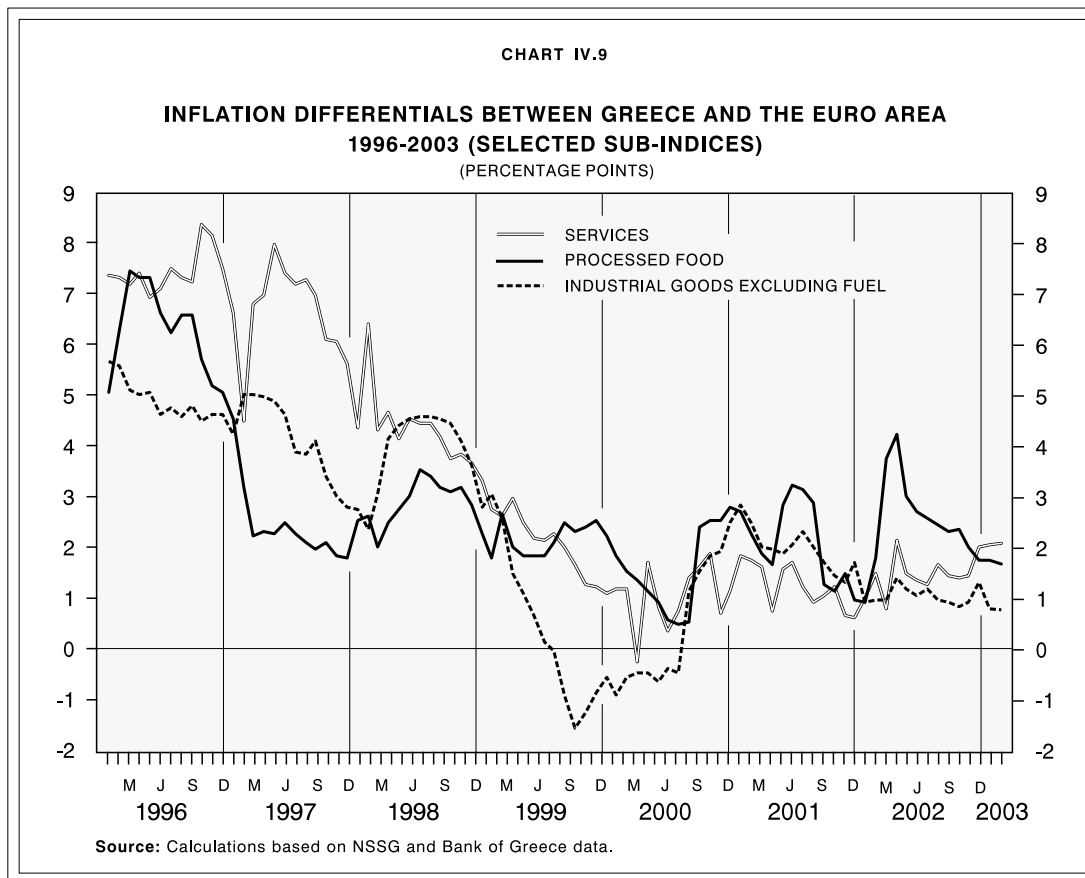
3 Brent blend (delivery after one month).

4 Eurostat's provisional estimate.

Source: Calculations based on ECB, Bank of Greece and NSSG data.

effect, the inefficient operation of markets for goods and services, the difference in the phase of the business cycle and the stronger effect of the rise in the prices of oil or fresh fruit and vegetables. All these factors affect inflation and — through inflation — wage demands.

In part, however, the positive differential in unit labour costs is an independent factor behind the inflation deviation, insofar as it reflects differences in the functioning of the Greek labour market (relative to other euro area countries). Some of these differences reflect rigidities still remaining in the institutional framework of the Greek labour market,



while other differences concern the position and the tactics of trade unions in Greece (especially *in the past*, since from the early 1990s unions have gradually adopted a much more responsible behaviour in wage bargaining).

1.4 Recent developments in prices and the outlook for inflation

In January 2003, CPI inflation fell further to 3.1%, principally owing to a drop in the prices of fresh fruit and vegetables relative to the exceptionally high prices of January 2002, but subsequently edged up again to 4.3% in February and 4.1% in March. This development reflects, first, another round of increases in fresh fruit and vegetable prices during February

and March as a result of a long spell of bad weather; second, the rise in international oil prices as a result of heightened uncertainty, at least until the outbreak of hostilities in Iraq on 20 March; and third, the higher than usual upward adjustment of prices of various services and processed food. These price adjustments more than outweighed the favourable effect due to the fact that the upward impact of price rounding during 2002 following the euro changeover had faded off. Thus, core inflation remained virtually unchanged,¹ suggesting at first sight that the pick-up in inflation is mainly of a temporary nature.

However, recent business surveys by the Foundation for Economic and Industrial Research – IOBE (carried out in December 2002 and the first two months of 2003) recorded a rise in the percentage of businesses in the manufacturing and services sectors (excluding retail trade and banks) expecting an increase in the prices of their products or services over the next 3-4 months, and relative stability in the percentage of construction firms expecting an increase in their prices. In March, however, all three sectors registered a decline in the percentage of businesses expecting their prices to increase.² Further, during the first quarter of 2003, the percentage of consumers expecting a rise in inflation during the next 12 months grew significantly (as recorded in a survey conducted for the European Commission – see Chart IV.10). These inflation expectations (for the period up to 20 March) partly reflect the rise in oil prices in the world market and the heightened uncertainty (at the time) surrounding the likelihood of war in Iraq. Such expectations, should they persist, may become self-fulfilling.

With regard to inflation in the current year, the following factors need to be borne in mind:

First, there is considerable uncertainty regarding the future course of crude oil prices. This will depend mainly on the repercussions of the war in Iraq.

Second, even if the average price of crude oil in dollars rises in the world market, this rise may be offset by the appreciation of the euro. For instance, if one assumes that the euro/dollar exchange rate during 2003 stays around its average rate in March this year, the average annual appreciation of the euro against the US dollar will be of the order of 14%, while the average annual level of the euro's effective exchange rate, weighted on the basis of Greece's external trade, will rise by slightly more than 2%.

Third, the projected deceleration of inflation in the euro area implies a slowdown in the already low rate of price increases in goods and services imported from euro area countries.

Fourth, while estimates suggest that unit labour costs *in the whole economy* will increase this year at a slightly lower rate than in 2002, in the *business sector* they are expected to grow faster (see Section 2 of this chapter).

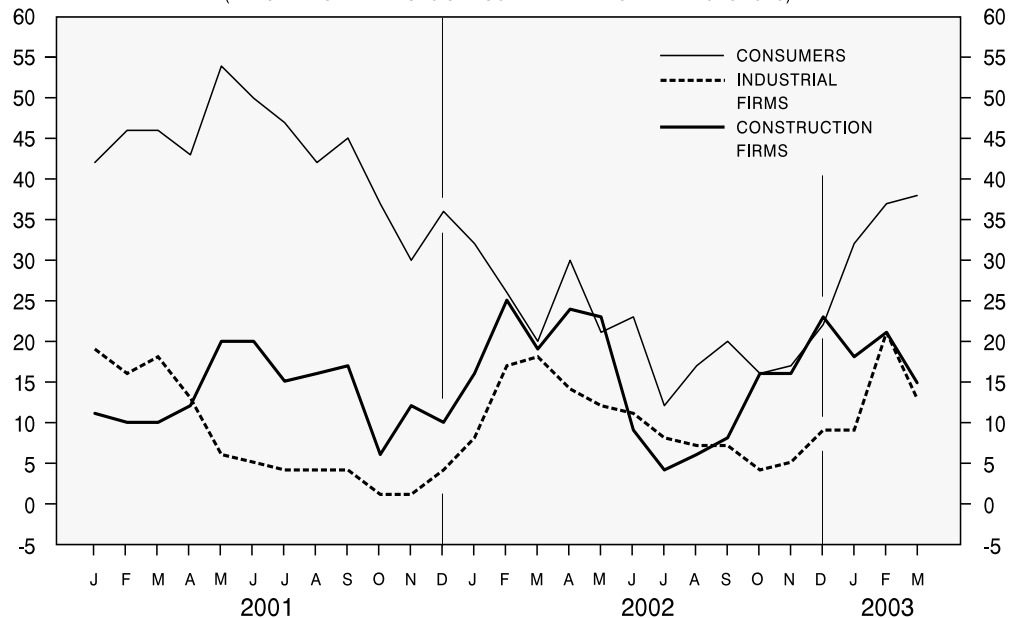
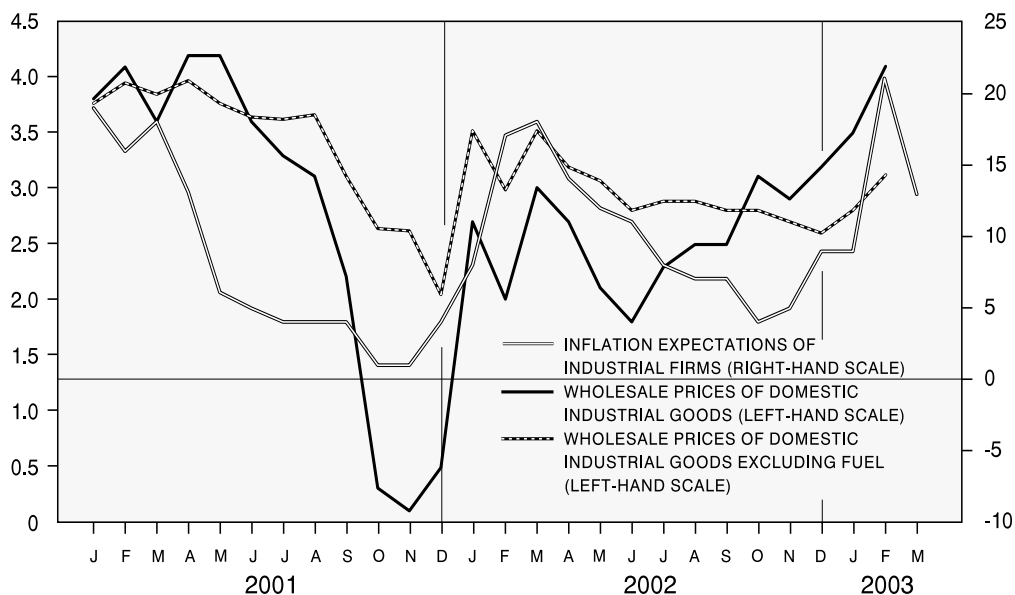
1 Core CPI inflation excluding fuel and fresh fruit and vegetables increased, year-on-year, from 3.5% in December 2002 to 3.7% in January 2003 and 3.8% in February, dropping back to 3.4% in March. Core HICP inflation excluding fuel and unprocessed food increased from 3.6% in December 2002 to 3.7% in January 2003, dropping back to 3.6% in February and 3.2% in March.

2 To be precise, the positive difference between the percentage of businesses predicting an increase in their prices and the percentage of businesses expecting a decrease either rose or remained unchanged.

CHART IV.10

A. INFLATION EXPECTATIONS* OF CONSUMERS AND BUSINESS FIRMS

(PERCENTAGE BALANCES OF POSITIVE AND NEGATIVE RESPONSES)

**B. WHOLESALE PRICE INDEX** FOR DOMESTIC INDUSTRIAL GOODS, AND INFLATION EXPECTATIONS* OF INDUSTRIAL FIRMS**

* Expectations: Percentage balances of responses of (i) business firms vis-à-vis the prospects, over the next 3-4 months, of price increases for the goods they produce and (ii) consumers vis-à-vis the prospects of a faster increase in consumer prices over the next 12 months.

** Prices: Annual percentage changes.

Source: Calculations based on NSSG, IOBE and European Commission (*European Economy, Supplement B*) data.

Given the net effect of the factors outlined above, today's situation and trends at first glance suggest that the average annual rate of increase in the CPI this year will be higher than in 2002 (when it reached 3.6%). This projection, however, is marked by considerable uncertainty. Instead, the projection for core inflation should be seen to be more reliable. Specifically, it is estimated that the average annual rate of increase in CPI inflation excluding fuel and fresh fruit and vegetables in 2003 will be roughly the same as in 2002, i.e. 3.6%.

2. WAGES AND SALARIES

According to recent estimates by the Bank of Greece, the rate of increase in unit labour costs for the *whole economy* accelerated to 3.2% in 2002 from 2.8% in 2001.¹ However, in the *business sector*² (where changes in cost bear more directly on inflation), the rate of increase slowed down considerably to 1.8% in 2002 (from 3.2% in 2001). In the whole economy, the sharper (relative to 2001) increase in unit labour costs mainly reflected the fact that the substantially faster increase in average nominal earnings was not fully offset by the also faster growth of GDP per employee. If, however, non-wage labour costs had not fallen with the abolition of stamp duties, the rate of increase in labour costs would have been even higher in 2002, reaching 3.5% in the whole economy and 2.3% in the business sector. Until 31 December 2001, stamp duties were calculated as 0.6% of wage expenditure, the cost being borne by business sector employers. In the whole economy, the rate of increase in unit labour costs was higher than the maximum rate compatible with maintaining price stability (i.e. 2%) as well as than the corresponding rate in the euro area, which is estimated at 2.2%-2.4% in 2002 compared with 2.7%-2.8% in 2001.³ In this sense, unit labour costs continued to be a key factor underlying the relatively high Greek inflation rate, its upward deviation from the euro area average and, as a consequence, the worsening of the economy's competitiveness.

Average gross (pre-tax) earnings in the whole economy are estimated to have increased by 7.2% in 2001 compared with 5.2% in 2000. This reflects the faster rise in average earnings in all sectors of the economy except banks (see Table IV.3). The rate of increase in compensation per employee, including employer contributions (social security and other), also accelerated, from 5.3% in 2001 to 6.5% in 2002, though less than average earnings, due to the abolition of stamp duties (which are included in "other" contributions

1 In this Report, the rates of increase in unit labour costs for the Greek economy reflect changes in the ratio of total expenditure on wages and employer contributions (at current prices) to GDP. These rates differ from those calculated – on the basis of another definition – by the NSSG and Eurostat (see Bank of Greece, *Monetary Policy 2002-2003*, March 2003, Box 2, p. 47).

2 This includes public and private enterprises, and banks.

3 According to the Commission's *Spring Forecasts* (9 April 2003). According to the ECB *Monthly Bulletin* (April 2003, Table 5.4.3, p. 57*), in the first quarter of 2002 the average annual increase in unit labour costs in the euro area was unusually high (3.6%), though in the second and the third quarter it dropped back to 2.5% and 2.1%, and in the fourth quarter to around 1.5% (average for 2002: 2.4%, 2001: 2.7%).

TABLE IV.3
EARNINGS, UNIT LABOUR COSTS AND PRODUCTIVITY: 1995 - 2002
(Annual percentage changes)

	1995	1996	1997	1998	1999	2000	2001	2002
WHOLE ECONOMY								
– Average gross earnings ¹ (nominal)	11.9	11.5	10.5	6.3	4.5	6.5	5.2	7.2
– Average gross earnings ¹ (real)	2.8	3.0	4.7	1.4	1.9	3.2	1.7	3.5
– Employees' average take-home pay ¹ (nominal)	10.3	9.7	10.7	5.7	3.6	8.5	3.8	6.7
– Employees' average take-home pay ¹ (real)	1.3	1.4	4.9	0.9	1.0	5.1	0.4	3.0
– Total compensation of employees ^{1,2}	12.6	12.5	10.7	7.7	6.3	7.3	7.1	7.3
– Compensation (earnings and employer contributions) per employee	11.6	11.2	10.1	6.8	4.6	6.3	5.3	6.5
– Unit labour costs ^{1,3}	10.3	9.9	6.9	4.2	2.6	3.0	2.8	3.2
– Consumer price index ⁴	8.9	8.2	5.5	4.8	2.6	3.2	3.4	3.6
– Gross domestic product ⁵	2.1	2.4	3.6	3.4	3.6	4.2	4.1	4.0
BUSINESS SECTOR⁶								
– Total compensation of employees ¹	12.4	10.9	9.4	6.8	6.4	6.7	7.4	5.9
– Unit labour costs ¹	10.1	8.3	5.6	3.3	2.7	2.4	3.2	1.8
CIVIL SERVICE⁷								
– Average gross earnings of employees	12.3	14.9	13.5	9.2	3.5	7.1	5.5	7.3
– Total outlays for salaries and pensions	13.1	16.4	13.3	9.9	6.1	8.5	6.3	10.5
– Total outlays for salaries (excluding pensions)	13.9	17.8	14.7	8.0	5.7	9.0	6.1	11.6
PUBLIC ENTERPRISES								
– Average gross earnings of employees ⁸	10.9	14.1	11.0	5.7	5.1	13.7	8.2	11.2
– Total compensation of employees ⁸	11.6	12.6	9.7	2.1	3.1	8.9	3.2	5.5
– Monthly earnings of white-collar workers in electricity-water supply ⁴	11.2	14.0	9.9	8.9	...	...	...	...
– Hourly earnings of blue-collar workers in electricity-water supply ⁴	15.8	8.7	10.4	11.4	...	...	...	...
BANKS								
– Average gross earnings of employees ¹	15.4	13.4	9.7	4.0	13.1	6.8	6.4	2.9
– Total outlays for salaries ⁹	20.0	16.6	10.8	5.9	14.3	9.3	5.3	4.3
– Total compensation of employees ⁹	17.3	16.0	9.8	6.6	12.7	9.4	6.4	3.6
– Monthly earnings of employees ^{4,10}	13.1	12.7	9.4	8.6	...	...	...	...
NON-BANK PRIVATE SECTOR								
– Minimum earnings ¹¹ (nominal)	9.4	8.2	8.0	5.4	3.5	4.2	3.5	5.4
– Minimum earnings ¹¹ (real)	0.5	0.0	2.4	0.6	0.9	1.0	0.1	1.7
– Average contractual earnings ¹²	10.1	8.6	8.2	5.7	3.9	4.2	4.2	5.7
– Average gross earnings ¹	11.2	8.8	8.8	5.8	4.4	5.0	5.3	6.5
– Total compensation of employees ¹	12.2	10.2	9.3	7.6	6.5	6.0	8.2	6.7
– Hourly earnings of blue-collar workers in manufacturing ⁴	13.2	8.6	8.9	4.7	4.4*	5.5*	5.5*	6.4*
– Monthly earnings of white-collar workers in manufacturing ⁴	13.2	9.4	9.8	5.9	...	...	...	...
– Output per hour worked (manufacturing) ⁴	2.0	1.1	4.4	4.4	1.9*	3.2*	2.5*	3.1*
– Unit labour costs (manufacturing) ⁴	11.0	7.5	4.4	0.2	2.5*	2.2*	3.0*	2.8*
– Weekly earnings of blue-collar workers in mining ⁴	14.0	12.7	12.2	5.2	...	...	...	...
– Monthly earnings of white-collar workers in mining ⁴	11.3	11.7	14.3	13.7	...	...	...	...
– Monthly earnings of employees in retail trade ⁴	12.8	9.7	12.0	9.6	...	...	...	...
– Monthly earnings of employees in wholesale trade ⁴	15.3	9.9	10.5	6.3	...	...	...	...

1 Bank of Greece estimates.

2 NSSG estimates of the growth in total compensation of employees (March 2003): 1994: 12.9%, 1995: 15.3%, 1996: 8.8%, 1997: 13.6%, 1998: 10.4%, 1999: 7.1%, 2000: 6.9%, 2001: 7.8% and 2002: 7.1%.

3 NSSG estimates on the rate of increase in unit labour costs (as defined by the Ministry of Economy and Finance): 1994: 10.7%, 1995: 11.6%, 1996: 5.9%, 1997: 9.1%, 1998: 6.1%, 1999: 1.1%, 2000: 1.6%, 2001: 1.5% and 2002: 2.6%.

4 Calculations based on NSSG survey data.

5 NSSG estimates (March 2003).

6 The business sector comprises public enterprises, banks and the non-bank private sector.

7 Estimates based on data from the Ministry of Economy and Finance, and Introductory Reports on the Budget. Data for 1997 have been adjusted for comparability. In calculating expenditure growth from 1998 onwards, healthcare outlays were not taken into account.

8 Calculations based on Ministry of Economy and Finance data and estimates. To facilitate comparison, public enterprises include OTE for the entire period.

9 Data from annual profit and loss accounts (1994-2002).

10 October-on-October rates of change.

11 National General Collective Labour Agreement.

12 Calculations based on data from collective labour agreements at branch and occupational level.

* Estimates.

of employers). Likewise, the take-home pay of an average employee (estimated as gross earnings minus income tax and social security contributions paid by such an employee) increased in real terms by 3.0%, compared with 0.4% in 2001, owing to tax cuts that had been announced in November 2001 and were put into effect in 2002.¹ Box IV.1 presents the latest available data from the Ministry of Economy and Finance on taxation of income earned up to the end of 2001 (fiscal year 2002).

¹ That is, the reduction in income tax and the abolition of stamp duties which were deducted from salaries and burdened employees. The abolition of stamp duties (employers paid an amount equivalent to 0.6% of their staff's wage bill and workers also paid 0.6%) was brought into effect on 21 December 2001. The income tax cuts were introduced by virtue of article 13, paragraphs 1-4, of Law 2990/2002.

BOX IV.1

Personal income tax, 1989-2001

Data on personal income tax have been derived from tax returns submitted for fiscal years 1990-2002. Consequently, they reflect income earned by households during the period 1989-2001.¹ When examining the data presented in the table below, the following points should be borne in mind:

First, the number of tax returns submitted by individuals is increasing over time. This is mainly due to the fact that legislation has steadily broadened the population groups required to file tax returns (farmers, individuals aged 25 and over, and others). New persons required to file tax returns are usually at the lower end of the income scale.

Second, family income is held to be income derived from any source whatsoever and earned by the taxpayer, his/her spouse and their underage children (provided the latter are not required to submit a separate tax return), after the deduction of outlays.

Third, the Tax Office sorts the tax returns by occupation groups, in accordance with the occupation stated by the taxpayer. When the taxpayer's income derives from more than one source, his/her principal occupation or the activity generating the greater part of his/her income is taken into consideration. Consequently, each tax return may in fact include income from a variety of sources, whether of the taxpayer or his/her spouse or their underage children.

In the table, taxpayers are divided into six major occupation groups:

- The first group consists of rentiers (675,900 tax returns were submitted in 2002). Income of this type derives basically from building and land rentals, as well as from financial assets. This group, as a percentage of the total number of taxpayers, rose from 8.3% in the fiscal year 1990 to 13.6% in 2002. While the average tax burden of this group throughout the period 1989-1999 was higher than that of all taxpayers, since 2000 it has been almost 2 percentage points below that of the entire population. ➔

¹ These data are published with a time lag by the NSSG. The most recent publication gives data for the fiscal year 1999 (income for 1998). For more recent years, the data in the table and the chart in this Box are taken from the General Secretariat for Information Systems of the Ministry of Economy and Finance and can be viewed on the Ministry's website.

PERSONAL INCOME TAX DATA BY OCCUPATIONAL GROUP, 1990-2002													
Description	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002
A. Number of taxpayers (thousands)													
All groups	2,522	2,655	2,904	3,096	3,219	3,840	3,986	4,269	4,435	4,585	4,751	4,904	4,953
Rentiers	210	223	257	281	294	410	428	503	533	555	604	603	676
Traders, small-scale manufacturers etc.	635	655	677	687	689	705	712	710	696	697	755	902	760
Farmers	48	57	84	109	122	301	328	363	372	379	375	372	385
Employees	1,095	1,151	1,259	1,334	1,379	1,466	1,508	1,554	1,628	1,711	1,782	1,794	1,875
Self-employed	102	106	110	116	121	127	132	135	138	142	154	147	161
Pensioners	431	463	516	569	614	832	879	1,004	1,068	1,101	1,080	1,085	1,096
B. Declared family income (billion drachmas)													
All groups	3,675	4,594	5,628	6,473	7,436	9,748	11,075	12,494	14,480	15,988	16,899	18,575	19,987
Rentiers	153	186	233	287	333	436	495	558	649	733	914	967	1,225
Traders, small-scale manufacturers etc.	696	864	1,048	1,124	1,303	2,104	2,356	2,556	2,850	3,087	2,991	3,961	3,484
Farmers	28	37	67	99	128	243	312	365	435	499	546	601	724
Employees	1,912	2,389	2,901	3,329	3,767	4,432	4,974	5,557	6,529	7,168	5,940	8,087	9,048
Self-employed	226	282	340	405	476	637	728	821	968	1,100	1,269	1,277	1,499
Pensioners	661	837	1,040	1,230	1,428	1,897	2,210	2,637	3,048	3,402	3,473	3,683	4,006
C. Average declared family income (thousand drachmas)													
All groups	1,458	1,730	1,938	2,091	2,310	2,539	2,778	2,927	3,265	3,487	3,557	3,788	4,035
Rentiers	728	833	905	1,019	1,133	1,064	1,156	1,111	1,217	1,320	1,514	1,604	1,813
Traders, small-scale manufacturers etc.	1,095	1,319	1,548	1,636	1,891	2,986	3,311	3,603	4,094	4,429	3,959	4,391	4,586
Farmers	570	654	792	911	1,054	807	950	1,004	1,171	1,315	1,455	1,614	1,880
Employees	1,746	2,075	2,304	2,496	2,731	3,022	3,299	3,575	4,009	4,190	3,333	4,508	4,826
Self-employed	2,215	2,652	3,073	3,477	3,951	5,013	5,520	6,101	7,008	7,743	8,217	8,663	9,329
Pensioners	1,536	1,807	2,014	2,161	2,324	2,281	2,515	2,626	2,854	3,089	3,214	3,393	3,654
(continued)													

(continued)

PERSONAL INCOME TAX DATA BY OCCUPATIONAL GROUP, 1990-2002 (continued)													
Description	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002
D. Total tax (billion drachmas)													
All groups	315	420	508	273	363	501	652	859	1,094	1,335	1,386	1,557	1,669
Rentiers	15	19	26	16	21	27	34	45	54	62	69	65	80
Traders, small-scale manufacturers etc.	80	103	127	57	73	131	166	206	250	294	300	407	352
Farmers	1	1	2	2	3	5	7	10	12	15	12	11	14
Employees	133	182	215	119	161	196	262	354	477	583	604	657	748
Self-employed	33	44	55	33	45	70	86	110	139	174	207	213	251
Pensioners	53	70	83	45	60	72	97	134	162	207	194	204	225
E. Average tax (thousand drachmas)													
All groups	125	158	175	88	113	130	164	201	247	291	292	317	337
Rentiers	72	87	101	58	71	66	80	89	101	112	114	108	118
Traders, small-scale manufacturers etc.	125	157	187	84	106	187	233	290	359	422	398	451	463
Farmers	17	23	25	21	26	15	21	27	33	39	32	30	37
Employees	122	158	171	89	117	134	174	228	293	341	339	366	399
Self-employed	323	414	501	284	371	549	655	818	1,010	1,223	1,339	1,442	1,564
Pensioners	123	151	162	80	97	87	111	133	151	188	179	188	206
F. Average tax burden as a percentage of declared income													
All groups	8.6	9.1	9.0	4.2	4.9	5.1	5.9	6.9	7.6	8.4	8.2	8.4	8.4
Rentiers	9.9	10.5	11.1	5.7	6.3	6.2	6.9	8.0	8.3	8.5	7.5	6.8	6.5
Traders, small-scale manufacturers etc.	11.4	11.9	12.1	5.1	5.6	6.2	7.0	8.1	8.8	9.5	10.0	10.3	10.1
Farmers	3.1	3.5	3.2	2.3	2.5	1.9	2.2	2.7	2.8	3.0	2.2	1.9	1.9
Employees	7.0	7.6	7.4	3.6	4.3	4.4	5.3	6.4	7.3	8.1	10.2	8.1	8.3
Self-employed	14.6	15.6	16.3	8.2	9.4	11.0	11.9	13.4	14.4	15.8	16.3	16.6	16.8
Pensioners	8.0	8.3	8.0	3.7	4.2	3.8	4.4	5.1	5.3	6.1	5.6	5.5	5.6

Note: To facilitate comparison, the Ministry of Economy and Finance (General Secretariat for Information Systems) presents 2002 data in drachmas, not in euro.

Source: General Secretariat for Information Systems of the Ministry of Economy and Finance.

→ — The second group comprises taxpayers whose income derives principally from trade, industry, small-scale manufacturing and other entrepreneurial activity. This class of taxpayer in fact grew at a slower pace than the other five categories of occupation and total taxpayers during the period under review: as a percentage of total taxpayers it declined from 25.2% in 1990 to 17.9% in 1996 and 15.3% in 2002. The average tax burden of this group has remained at just over 10% during the last three years (compared with an average of 8.4% for all taxpayers).

— The third group consists of farmers, livestock breeders, fishermen and those involved in forestry. The number of taxpayers belonging to this group increased eightfold between 1990 and 2002 (despite the steady decline of the rural population), solely as a result of legislation that broadened the tax base to include rural households. During the period in question, the rapid increase in the number of farmers submitting tax returns led to a steady decrease — despite the continuous rise in declared income — in the average tax burden of this group (merely 1.9% in fiscal year 2001).

— Employees, although declining as a percentage of the total number of taxpayers (since the beginning of the period in question they have decreased from 43.4% to 37.9%), are still the largest group of taxpayers. The average tax burden of employees is very close to the average paid by the total number of taxpayers.

— The second largest group of taxpayers is pensioners. This group has steadily increased as a percentage of the total (from 17.1% to 22.1% during the period in question), most likely on account of the ageing population, though also due to legislative changes that have broadened the tax base.

— Lastly, during the period 1990-2002, the self-employed made up 3%-4% of the total number of taxpayers. Following the tax reforms of 1993, their average tax burden has increased steadily, and in the fiscal year 2002 it was double the average tax burden of the whole group of taxpayers.

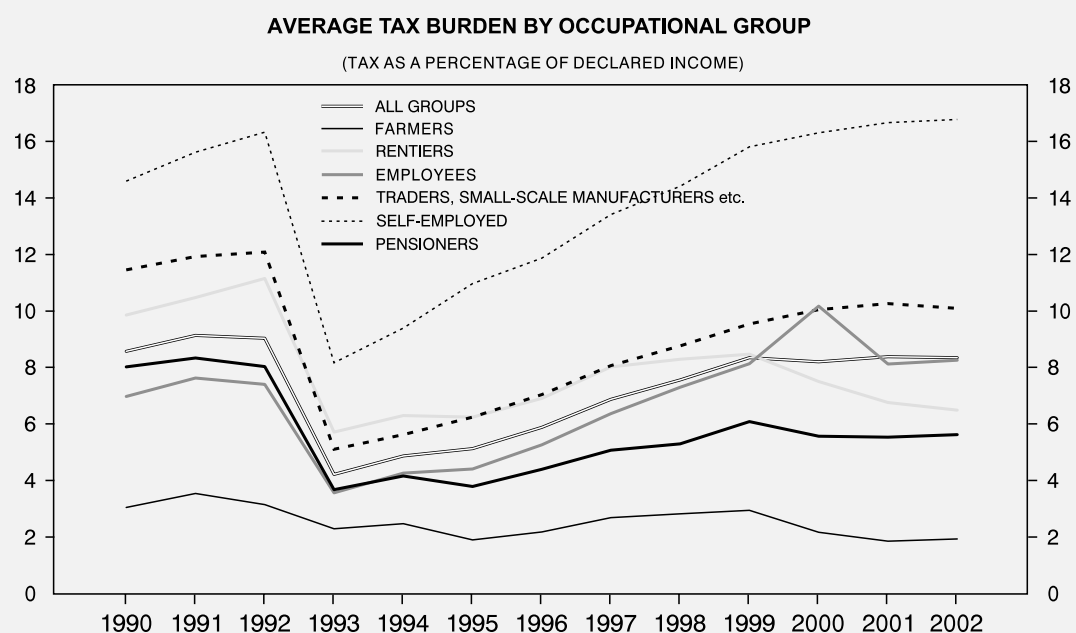
Total family income grew substantially during the period in question. Average income declared by the self-employed, traders/small-scale manufacturers and farmers increased relatively faster, while the income of pensioners and rentiers grew at lower rates. Average income declared by employees increased as much as the average for all taxpayers.

The highest average family income throughout the period was declared by the self-employed, followed by traders/small-scale manufacturers and employees. (The average income of employees was slightly higher than that of traders and small-scale manufacturers in 2001-2002.) The lowest average income was declared by farmers and rentiers, followed by pensioners. It is noteworthy that the income of the self-employed in the fiscal year 2002 was more than double the average income of all taxpayers and almost fivefold the income of farmers and rentiers. In terms of average declared income, the relative position of traders and small-scale manufacturers improved significantly during the period under review, while the opposite was true of pensioners. Specifically, the average income of traders and small-scale manufacturers rose from 75.2% of the average income of all taxpayers in the fiscal year 1990 to 127.0% in the fiscal year 1999 (though it fell to 113.6% in the fiscal year 2002). The average income of pensioners declined from 105.4% of the average income of all taxpayers in 1990 to 90.6% in the fiscal year 2002.

→

→ *Total tax* due by individuals increased in the last three-year period at an average annual rate of 7.8%, well below the rate of the previous six-year period (which exceeded 30%). The year-on-year increases in the *average tax burden* during these two sub-periods were approximately 5% and 21%, respectively.

The chart presents the average tax burden of each of the six occupational groups in the table (tax as a percentage of declared family income). The average tax burden of the self-employed was almost double that of taxpayers as a whole, particularly after 1993. Also, during the entire period under review, the average tax burden of traders and small-scale manufacturers was greater than that of all taxpayers, while the average tax burden of rentiers, farmers and



Source: General Secretariat for Information Systems of the Ministry of Economy and Finance.

pensioners was smaller. The tax burden of employees was below average until the fiscal year 1999, but in the last three years it has been slightly above or below the average.

It is worth noting the decrease in tax revenue, average tax and the tax burden to roughly half between fiscal years 1992 and 1993 as a result of the tax reform introduced by Law 2065/1992. This reform brought about very substantial changes in personal and corporate income (streamlining of direct taxation and significant cuts in tax rates). However, in the four-year period 1998-2001 (fiscal years 1999-2002), the tax burden stabilised at 8.4%, which was close to the 1991 level of 9.0%. In other words, the benefits of the reforms of 1992 were almost cancelled out. It is expected that data for fiscal years 2003-2004 will show a fresh drop in the tax burden, owing to tax relief on income earned in 2002 and 2003, under Laws 2992/2002 and 3091/2002.

Productivity data indicate that *GDP (at constant market prices) per employee* grew by 3.2% in 2002, faster than the previous year's 2.4%. This reflects efforts by businesses to economise on labour: while output grew at roughly the same pace as in 2001, the number of employees in the whole economy grew at a low rate (less, indeed, than in 2001) or, as in the business sector, remained virtually unchanged. This method of measuring productivity is deemed the most appropriate for the purposes of the present analysis for reasons outlined in a previous Bank of Greece publication.¹ On the other hand, the ratio of *GDP (at constant market prices) per employed person in general* grew less in 2002 than in 2001 (for alternative methods of measuring productivity and available data, see Box IV.2).

¹ See *Monetary Policy 2002-2003*, March 2003, Box 2, p. 47.

BOX IV.2

Productivity indicators, 1996-2002

On the basis of the latest National Accounts detailed data from the NSSG concerning output and employment in the period 1995-2002, it is possible to estimate productivity in the Greek economy as a whole, as well as in the non-agricultural sector. These estimates are set out below:

In analysing developments in the economy, GDP at market prices usually serves as the output indicator, which is calculated on the demand side and includes indirect taxes. However, detailed data based on the European System of Accounts 1995 (ESA 95) also include “gross value added at basic prices” (GVA), which excludes indirect taxes and corresponds to “GDP at factor prices” of the national accounts previously applicable. To calculate productivity in this Box, GVA at 1995 prices serves as the measure for product. To calculate *employment*, two alternative *sources* – National Accounts (NA) estimates and NSSG Labour Force Survey (LFS) data – and two alternative *measures* – total employment and employees – were taken into consideration.

It should be noted that NA estimates of employment differ from LFS data, for three main reasons: (i) with regard to employment in the primary sector, the NA use the more analytical data of the NSSG Agricultural Structuring Survey; (ii) with regard to public sector employment, the NA use data from the official census of public sector employees carried out by the Ministry of the Interior, Public Administration and Decentralisation; (iii) the NA estimate additional employment in certain sectors, on the basis of evidence regarding the number of people employed in two jobs.

These measurements lead to a number of interesting conclusions for the seven-year period 1996-2002:¹

– Non-agricultural GDP rose slightly faster than GDP in the whole economy (30.3% compared with 27.0%). →

¹ The drop in productivity in 1998 reflects the apparent sharp rise in the number of employed, which, however, was due to the fuller recording of immigrant workers in that year (see Bank of Greece, *Monetary Policy, Interim Report 1999*, Box, p. 53).

- — Employment in the non-agricultural sector rose much faster than in the whole economy (6.9% compared with 2.5% on the basis of NA, 8.8% compared with 3.1% on the basis of LFS).
- Employees increased much faster than total employment,¹ both in the whole economy (10.1% compared with 2.5% on the basis of NA, 14.5% compared with 3.1% on the basis of LFS) and in the non-agricultural sector (10.6% compared with 6.9% on the basis of NA, 15.3% compared with 8.8% on the basis of LFS).

**PRODUCTIVITY INDICATORS FOR THE WHOLE ECONOMY
AND FOR THE NON-AGRICULTURAL SECTOR, 1996-2002**

(Annual percentage changes)

	1996	1997	1998	1999	2000	2001	2002
NON-AGRICULTURAL SECTOR							
Gross value added (GVA – 1995 constant prices)	2.4	3.6	4.1	2.8	5.4	4.6	4.1
Total employment (NA)	-0.1	0.1	5.2	0.0	0.7	0.3	0.5
Total employment (LFS)	1.4	0.1	5.7	-0.1	0.7	0.3	0.8
Employees (NA)	0.0	0.1	4.9	2.5	0.8	1.7	0.3
Employees (LFS)	2.2	0.7	6.5	1.9	1.5	2.2	0.1
Productivity							
– GVA/employment (NA)	2.5	3.5	-1.0	2.9	4.7	4.2	3.5
– GVA/employment (LFS)	0.9	3.5	-1.5	2.9	4.6	4.3	3.2
– GVA/employees (NA)	2.3	3.5	-0.7	0.3	4.5	2.9	3.8
– GVA/employees (LFS)	0.1	2.9	-2.3	0.9	3.9	2.4	3.9
WHOLE ECONOMY							
Gross value added (GVA – 1995 constant prices)	1.8	3.3	3.9	3.2	4.4	4.0	3.7
Total employment (NA)	-0.4	-0.6	4.1	0.0	-0.2	-0.3	-0.2
Total employment (LFS)	1.2	-0.4	3.0	-0.5	0.0	-0.8	1.0
Employees (NA)	0.0	-0.1	4.8	2.2	0.8	1.7	0.4
Employees (LFS)	2.0	0.5	6.3	1.8	1.3	2.2	0.2
Productivity							
– GVA/employment (NA)	2.2	3.9	-0.2	3.2	4.6	4.3	3.9
– GVA/employment (LFS)	0.6	3.7	1.0	3.7	4.4	4.8	2.7
– GVA/employees (NA)	1.8	3.4	-0.8	0.9	3.6	2.2	3.3
– GVA/employees (LFS)	-0.2	2.8	-2.3	1.4	3.1	1.7	3.6

Note: (i) "Gross value added at basic prices" (GVA) differs from "GDP at market prices" because it does not include indirect taxes. (ii) Changes in employment on the basis of LFS data up to and including 1998 are calculated on the basis of data for the second quarter of each year, while from 1999 onwards they are calculated on the basis of the average annual level of employment.

Source: Processing of National Accounts (NA) and NSSG Labour Force Survey (LFS) data.

Consequently, productivity has grown faster in the whole economy, if defined as *the ratio of GVA to total employment* (23.9% on the basis² of NA or 23.2% on the basis of LFS), as compared with the non-agricultural sector (21.9% on the basis of NA or 19.8% on the basis of LFS). If productivity is defined as *the ratio of GVA to employees*, it displays a higher increase in the *non-agricultural sector* (17.8% on the basis of NA or 13.0% on the basis of LFS) than in the whole economy (15.3% on the basis of NA or 10.9% on the basis of LFS). →

1 This did not occur in 2002, at least according to LFS data. For possible explanations of this, see Chapter III.4.

2 If NA or LFS data on *employment* are used.

→ It may be noted that on the basis of the indicator closest to that included in the majority of official reports (such as those prepared by the Ministry of Economy and Finance, or the European Commission),¹ i.e. GVA to total employment (on the basis of NA) in the whole economy, productivity grew by an *annual average* of 3.1% over the seven years 1996-2002. This high growth rate partly reflects the reduction in employment in the agricultural sector. *If, however, the average of the eight different measurements included in the table is taken into account, productivity can be seen to have grown at an average annual rate of 2.4% over the same period.* This figure is considered as better reflecting the medium-term trend of productivity in the Greek economy.

1 These reports use the ratio of GDP at market prices (and not GVA) to total employment (on the basis of NA).

In 2002, wage increases of most private sector employees were in line with the two-year collective labour agreements that had been signed for 2002-2003. The number of collective labour agreements concluded in 2002 was therefore noticeably higher than in 2001, the second year of the previous round of two-year agreements (2000-2001). According to the Ministry of Labour, during 2002 a total of 348 collective agreements were signed (compared with 263 in 2001), while 56 arbitration decisions were issued by the Organisation for Mediation and Arbitration (compared with 40 in 2001).¹ It is worth noting that there has been a steady decentralisation of the collective wage bargaining process, reflected in the continuous rise in the number of enterprise-level agreements in recent years (122 in 2000, 146 in 2001 and 175 in 2002). These agreements already exceed 50% of the total number of labour agreements.

Wages and salaries by category of employees showed the following developments during 2002 (see Table IV.3):

Pursuant to article 49 of Law 3016/2002, civil servants' salaries were increased by 2.5%-3.2%. According to recent estimates by the State General Accounting Office, total public sector expenditure on salaries and pensions (excluding healthcare) increased by 10.5% in 2002 (compared with 6.3% in 2001). Given that the average annual level of employment in the public sector grew by 4.0%,² *per capita* salary expenditure rose by 7.3%, i.e. more than in 2001 (5.5%).

According to Ministry of Economy and Finance data,³ public enterprises' wage bill increased by 5.5% in 2002 (compared with 3.2% in 2001), while the average annual level of employment declined by 4.7% (compared with a reduction of 4.6% in 2001). Consequently, compensation per employee rose by 11.2%, compared with 8.2% in 2000. In the major public enterprises, collective two-year agreements had been signed in 2001, which provided for pay rises in 2002 of 4.0%-4.5% in two equal instalments, on 1 January and 1 July.

1 See also European Industrial Relations Observatory (EIRO), *2002 Annual Review for Greece* (ed. E. Soumeli), at www.eiro.eurofound.ie/2003/country/Greece.html.

2 See Chapter III.4.

3 As Ministry of Economy and Finance data no longer include OTE, they have been supplemented with the respective data, for the sake of comparability with previous years.

In banks, the two-year branch-level agreement signed on 23 May 2002 provided for an increase of 4.2% on 1 January 2002 and 3.8% on 1 January 2003. This was supplemented by the Special Collective Labour Agreement signed on 18 January 2002, which provided for a one-off bonus of €450 (for extra work related to the introduction of euro notes and coins), as well as by significant increases granted under the collective agreements at the individual bank level. Nevertheless, there was a *reduction in the level of average earnings* resulting from the substantial number of retirements among higher-salary earners (and/or the hiring of employees with salaries lower than of those of employees moving to retirement), a phenomenon associated primarily with the completion of mergers in the Greek banking sector. The reduction in average earnings was evident across the sector as a whole rather than, as in 2001, in just one major bank. This also explains why the increase in average gross earnings of bank employees was less than the increase in contractual earnings. Indeed, the published annual statements of the major Greek banks for 2002 indicate that wage outlays grew by 4.3%, while personnel outlays, which include employers' social security and other contributions, grew by just 3.6% (reflecting lower costs for employers following the abolition of stamp duties). With employment in banks as a whole growing by 1.4%, average gross earnings are estimated to have increased by 2.9% (compared with 6.4% in 2001), while earnings after social security contribution deductions grew faster, by 3.6% (on account of the abolition of stamp duty costs borne by employees), compared with 6.4% in 2001.

Lastly, in the majority of segments of the non-bank private sector, collective labour agreements were signed for the two years 2002-2003, together with minimum wage agreements for unskilled workers. According to the National General Collective Agreement signed on 15 April 2002, minimum wages were raised by 2.5% as of 1 January 2002 (on top of the corrective 1.1% increase already agreed for the same date in the previous agreement) and 1.8% as of 1 July 2002, while an increase of 3.9% was agreed for the current year (as of 1 January 2003) as well as a corrective increase as of the same date in the event that the average annual inflation rate in 2002 turned out to be higher than 3.3%.¹ The average rate of increase in the minimum wage in 2002 reached 5.4%, compared with 3.5% in 2001. An analysis of 60 collective agreements indicates that the average rise in contractual earnings at both the branch and occupational levels was slightly higher, at 5.7% (2001: 4.2%), than that of minimum wages. It is estimated that the average annual increase in actual earnings in the non-bank private sector was 6.5% in 2002, compared with 5.3% in 2001.

Particularly in *manufacturing*, it is estimated that hourly earnings of blue-collar workers increased by 6.4% compared with 5.5% in 2001. (Data, however, from sample surveys by the NSSG on earnings and labour costs are still not available for the period after 1998 – see Box IV.3.) According to revised estimates, the growth rate of unit labour costs slowed down slightly in 2002 to 2.8%, compared with 3.0% in 2001. This conclusion is

¹ Since the CPI rose by 3.6% on average in 2002, a corrective increase of 0.3% for the minimum wage was granted as of 1 January 2003.

based on the estimate that productivity growth (*growth of output per hour worked*) in manufacturing accelerated to 3.1% in 2002, from 2.5% in 2000.¹ With the average annual level of the effective exchange rate rising by 0.9% (as compared with a fall of 0.6% in 2001), the real effective exchange rate of the currency (calculated on the basis of unit labour costs in manufacturing) increased by 1.8% in 2002 (while it had decreased by 0.2% in 2001), thus leading to a substantial decline in competitiveness, which had remained virtually unchanged in 2001. However, in estimating competitiveness, apart from *changes* on the basis of relative unit labour costs expressed in a common currency (i.e. apart from comparisons between countries in terms of changes in unit labour costs), it is useful to compare countries on the basis of *levels in hourly or monthly labour costs*, as well as *productivity levels* (see Box IV.3).

1 It should be noted that, according to the NSSG's labour force survey, productivity growth in manufacturing slowed from 1.8% in 2001 to 1.2% in 2002, while the number of persons employed in manufacturing declined by 3.8% in 2002 (in 2001 it increased by 2.1% and in 2000 it declined by 0.5%). This suggests that the level of *output per employee* declined by 0.3% in 2001 and increased by 5.2% in 2002. However, it is estimated that *average weekly working hours* have declined substantially since April 2001, owing to the provisions of Law 2874/2000, by which extra work ("overtime at the discretion of the employer") was restricted drastically to 3 hours (from 8 hours) per week, while the cost of such work, as also the cost of overtime, increased markedly. If, as estimated, the number of average working hours declined by 2.6% in 2001, but increased by 2.1% in 2002, employment measured in terms of *total working hours* declined by 0.6% in 2001 and by 1.8% in 2002. On the basis of this result it is possible to calculate developments in output per working hour.

BOX IV.3

Wages and labour costs in Greece and the EU

A. Availability of data

Up to the fourth quarter of 1998, the NSSG regularly published data on the average gross earnings of employees. These data originated from sample surveys at *enterprise level* in manufacturing (from November 1961), retail trade (from the 2nd quarter of 1974), mining (from 1977), banks and insurance companies (from 1985), electricity and water supply and wholesale trade (from 1989). The surveys were conducted on a quarterly basis, with the exception of those for banks and insurance, which were carried out only in April and October.

Since the first quarter of 1999 the NSSG, in line with Eurostat guidelines and Community regulations, has carried out quarterly sample surveys at *enterprise level in a wider range of sectors and covering a broader spectrum of information*. The new surveys covered not only gross earnings but also other factors determining labour costs (whether hourly or monthly), i.e. the various indirect benefits, employer contributions to employees' social security funds, and job-related taxes paid by firms (such as stamp duties of 0.6% on employees' earnings, though this was abolished on 1 January 2002). To date, however, processing of data related to these new surveys by the NSSG has not been completed, and publication of the results is still expected. The Eurostat quarterly press releases on labour costs in all EU countries simply state that, for Greece, statistics are "not available". The short-term indicators published for other countries concern the nominal hourly cost of labour in →

→ the whole economy, which is held to include *all market activities apart from agriculture*, i.e. industry (mining and quarrying, manufacturing, electricity and water supply), construction, trade, hotels and restaurants, transport, telecommunications, as well as financial and business services.

However, the NSSG recently started to publish (on its website) quarterly statistics on “average monthly labour costs” by sector of economic activity (primary, secondary, tertiary), covering the period from the 1st quarter of 1999 to the present. The NSSG quotes its source as being the Labour Force Survey, carried out at the level of households, together with “data from administrative sources”. This means that, at least as far as the Labour Force Survey is concerned, data are based on the answers of a changing sample of workers and not – as would be more reliable – on data supplied to the NSSG by organised accounting departments of firms (which is the case for the *other* NSSG surveys, the results of which have not yet been published).

On the basis of the new series, the average annual increase in “average monthly labour costs” in the whole economy in 2002 was 6% (a figure that does not diverge appreciably from other available estimates), though for 2001 and 2000 it was just 1.6% and 3.5% respectively. It should be borne in mind that, according to Bank of Greece estimates, *average gross earnings* increased by 7.2% in 2002, 5.2% in 2001 and 6.5% in 2000, while, according to national accounting estimates of the NSSG, *compensation per employee (including employers’ social security and other contributions)* increased by 6.7% in 2002, 6.0% in 2001 and 6.0% in 2000.

Furthermore – and this is particularly evident for 2000 – the level of average monthly labour costs, according to the new series (€1,197 in the secondary sector and €1,296 in the tertiary sector) deviates considerably (lower by 20%-30%) from the published data of the special “labour costs survey” of the NSSG and Eurostat for the same year (carried out every four years at enterprise level). According to the latest such survey, the results of which are available in Eurostat’s New Cronos database (summarised in “Labour Costs Survey 2000 – Member States”, *Statistics in Focus*, Theme 3-7/2003), the monthly cost of a full-time employee was €1,570 in 2000 in Greece (in the whole economy, excluding agriculture, in the sense mentioned above).

These comparisons suggest at first sight that the new NSSG series underestimates the level of “average monthly labour costs”, probably because it is difficult, objectively speaking, for a survey conducted on households and relying principally on the answers given by workers to reflect fully all the costs borne by employers. In addition, the new series does not correctly estimate the rate of change in labour costs.

B. Greece and the EU: comparing labour costs and productivity

The 2000 “labour costs survey” enables us to compare Greece and the EU-13 average (Belgium and Italy are excluded from the comparison). For instance, monthly labour costs (in euro) per *full-time employee* in Greece amounted to 48.8% of the EU-13 average (the second lowest in the EU, after Portugal). If the comparison is made in terms of purchasing power standards, as would be more correct, this figure rises to 61.5% of the EU-13 average.¹ Furthermore, →

¹ Given that the average level of final consumption prices in Greece in 2000 was equivalent to 79.3% of the average price level in the EU (see Eurostat, *Revised Indices*, 14 March 2003).

→ hourly labour costs (in euro) were 45.8% of the EU-13 average, while in terms of purchasing power standards they were 57.8%.¹ The latter percentage can be compared with *productivity* (GDP per hour worked,² in purchasing power standards) in Greece for the same year, being equivalent to 67.3% of the EU-15 average³ and, according to estimates, 69.5% of the EU-13 average. Two significant conclusions can be drawn from juxtaposing these figures:

— First, *unit labour costs* in Greece in 2000 amounted to 83.2% of the EU-13 average (or approximately 86% of the EU-15 average). This is positive as regards the competitiveness of the Greek economy. However, with the exception of the last two years, unit labour costs in Greece⁴ have increased at an appreciably faster pace than in the EU, with the result that the country's competitive advantage has been considerably reduced.

— Second, the distance to be covered so that the ratio “average earnings in Greece/average earnings in the EU” corresponds to the ratio “average productivity in Greece/average productivity in the EU” (which is a demand put forward by the Greek General Confederation of Labour) is rather small.⁵ This convergence process is ongoing, as is apparent from the statistics, but its progress must be gradual so that it does not lead to a loss of competitiveness and thereby have a negative effect on production, incomes and employment. Indeed, since it is necessary to reduce the upward deviation of Greek inflation from the euro area average (and so enhance competitiveness), it would be advisable, until this objective is achieved and besides the other policy measures that need to be taken, for real wages to grow at a slower pace than productivity.

1 Monthly labour costs per full-time employee and hourly labour costs in essence amount to equivalent indices (at least when comparing Greece and the EU-13). The spread between the two reflects only the difference between Greece and the EU-13 with respect to the duration of *regular* working hours, suggesting (in the case of the year 2000) that the normal full-time working week in Greece is about 2.5 hours longer than the EU average. Of course, if monthly labour costs were calculated *per employee* (and not *per full-time employee*), the difference from the hourly labour costs (as regards the comparison between Greece and the EU-13) would be more significant, since it would reflect also the fact that part-time employment is far more widespread in the other EU countries and, by inference, average *actual* working hours (per employee) are substantially less than in Greece.

2 Hourly costs need to be compared with GDP per hour worked and not with GDP per employee, in which respect the ratio of Greece to the EU-15 in 2000 was much higher (80.3%), precisely because part-time employment is more widespread in the EU.

3 For 2002, Eurostat estimates this index to have been 68.6%.

4 See Bank of Greece, *Monetary Policy 2002-2003*, March 2003, Box 2, p. 47.

5 See the GSEE-ADEDY Labour Institute Study, *The Greek Economy and Employment, Annual Report 2002*, Part 3 (“Wages in Greece and the European Union”).

In 2003, it is estimated that unit labour costs in the whole economy will grow at a slightly slower pace than in 2002 (3.0%, compared with 3.2%), on the basis of forecasts for GDP growth of 3.7% in 2003 and the assumption that the number of employees will grow faster than in 2002. As already mentioned, in the non-bank private sector (in the majority of cases), as well as in banks, increases in employees' contractual earnings in 2003 have already been set by the two-year (2002-2003) collective agreements signed in 2002, and thus the level of certainty regarding developments in this area is high. According to these agreements, the corrective increase of 1 January 2003 was small: 0.3% for minimum wages, while in the case of contractual earnings at branch level (which rose by slightly

more in 2002 than minimum wages) the average corrective increase was even smaller, at around 0.1%. As a result, average annual growth in *contractual earnings* in the non-bank private sector (at branch level) will *decelerate* slightly to 5.0% in 2003 (from 5.7% in 2002), while average annual growth in minimum wages will be 5.1% (as against 5.4% in 2002). Moreover, in banks the contractual increase of 1 January 2003 was 3.8%, as noted earlier. The waning, however, since the beginning of 2003, of the favourable impact (of around half a percentage point) arising from the abolition of stamp duties on 1 January 2002 is contributing to the faster annual growth of unit labour costs in the *business sector* to an estimated 3.5% in 2003 (compared with 1.8% in 2001). In central government, the wage bill (excluding pensions) is forecast, according to the Budget, to grow in 2003 at a markedly slower pace than in 2002, i.e. by 5.9%, compared with 11.6% (the central government wage bill and pension expenditure will increase by 5.6%, compared with 10.5% in 2002). According to the Ministry of Economy and Finance, increases in regular pre-tax earnings of civil servants, as of 1 January 2003, will be in the region of 3.1%-3.3% on average (including the “extra benefit” of €176), while a new payroll for civil servants will be introduced on 1 January 2004. Given this situation, average pre-tax earnings for the whole economy are likely to rise by 5.5%, compared with 6.9% in 2002, while total compensation per employee, which includes employer contributions (social security etc.), is estimated to rise by 5.4%, compared with 6.3% in 2002.¹

3. BUSINESS PROFITS

Data concerning the evolution of profits in 2002, based on the annual income statements of *all* sociétés anonymes and limited liability companies in Greece, are not yet available. It is, however, possible to draw a number of useful conclusions from a sample of 418 companies that have published their balance sheets or summary financial statements for the year. *The sample does not include certain enterprises whose published data are not comparable with those of 2001,² as well as financial corporations (i.e. banks,³ insurance companies and leasing companies).* ASE-listed companies make up over 60% of the sample.

Total pre-tax profits of the sample range of companies grew by 5.4% in 2002, while sales increased even more markedly (10.0%), leading to a fall in profit margins (i.e. the ratio of profits to sales) by half a percentage point relative to the previous year. Further, return on equity declined to 11.8% in 2002, down from 12.0% in 2001. Detailed company data indicate that the subdued growth of profits and the slight contraction of profit margins reflect principally developments in “extraordinary” losses and expenses and are there-

¹ Tax reliefs will apply to income earned in 2003, in accordance with Law 3091/2002.

² The most important of these is the Public Power Corporation, which published for the first time in 2002 its results and financial statements for a 24-month period. Also, the sample does not include Hellenic Exchanges S.A.

³ For more details on banks, see Chapter X.

fore considered to be of a temporary nature. In particular, in 2002 (as in 2001) a number of companies wrote off losses recorded in previous financial years, while others, in the context of their restructuring programmes, formed provisions to cover possible future losses.

If businesses are examined by major branch categories, it can be seen that profit margins remained virtually unchanged in industry (industrial enterprises in the sample show an increase of 2.5% in pre-tax profits and 2.1% in sales), increased marginally (by 0.3 percentage point) in trade, and declined noticeably in the other branches taken as a whole.

However, it should be noted that *profit margins widened in a number of branches significantly affecting consumer prices*, particularly the branches of food-beverages-tobacco, refineries-chemicals-plastics, wholesale trade of consumer goods, and retail trade.

Furthermore, profit margins widened substantially in the non-metallic minerals branch (cement etc.), while a small increase was noted in the telecommunications sector,¹ where the growth rates of profits *and* sales were both high (around 30%). Lastly, the construction industry showed a strong performance in profits, sales, capital formation and investment. In fact, the considerable increase in construction industry sales led to a significant (though smaller) rise in profits, enabling businesses to carry out fixed capital formation programmes and to push ahead with acquisitions.²

1 Including mobile telephony firms, but not OTE.

2 Given the large number of mergers and acquisitions that have taken place in the industry, comparability of figures required special checking of data.

V. MONETARY POLICY AND MONETARY AND CREDIT DEVELOPMENTS IN THE EURO AREA

1. THE SINGLE MONETARY POLICY IN 2002

The objective of the monetary policy decisions of the Governing Council of the European Central Bank (ECB) is to maintain price stability in the euro area over the medium term.¹ The Eurosystem assesses risks to price stability on the basis of two pillars. The first pillar involves the analysis of monetary and credit developments, while, under the second pillar, a broad range of economic and financial indicators are monitored. For the most part of 2002, the single monetary policy was conducted amid significant uncertainty

TABLE V.1
ADJUSTMENT OF KEY ECB INTEREST RATES
(Percentages per annum)

Date of interest rate change ¹			Deposit facility	Main refinancing operations	Marginal lending facility
11	May	2001	3.50	4.50	5.50
31	Aug.	2001	3.25	4.25	5.25
18	Sept.	2001	2.75	3.75	4.75
9	Nov.	2001	2.25	3.25	4.25
6	Dec.	2002	1.75	2.75	3.75
7	March	2003	1.50	2.50	3.50

¹ The date refers to the deposit and marginal lending facilities. For main refinancing operations, changes in the rate are effective from the first operation following the date indicated. The change on 18 September 2001 was effective on that same day.

Source: ECB.

and changing prospects for the future path of inflation. Against this background, the Governing Council of the ECB kept its key interest rates unchanged until the beginning of December 2002, at the level set at its meeting on 8 November 2001² (see Chart II.9 and Table V.1). However, at its meetings on 5 December 2002 and 6 March 2003, the Governing Council decided to lower its key interest rates (by 50 and 25 basis points respectively), as it considered that inflationary pressures had subsided, mainly owing to the sluggishness of economic recovery.

¹ Price stability has been defined by the ECB as annual increases in the level of prices, as measured by the Harmonised Index of Consumer Prices (HICP), of less than 2%.

² The minimum bid rate for the main refinancing operations was then set at 3.25%, the marginal lending facility rate at 4.25% and the deposit facility rate at 2.25%.

In the first few months of 2002, the strong annual growth rate¹ of money (M3)² was attributed by the Governing Council of the ECB to the temporary portfolio shifts towards more liquid assets included in M3. These shifts were caused by uncertainty in the stock markets after the events in autumn 2001 and were also fuelled by the low opportunity cost of holding money. However, the continuing slowdown of the annual growth rate of M3 until April, in conjunction with the slowdown in credit expansion to the private sector, supported the Governing Council's assessment that monetary developments did not signal risks to price stability. Regarding the second pillar, there were favourable market expectations that the annual growth of economic activity would reach levels close to potential rate in the course of 2002, since uncertainty seemed to decrease somewhat and there were no major macroeconomic imbalances in the euro area, while low interest rates and the effects on disposable income from the expected decline in inflation would underpin growth in domestic demand. The high inflation rate observed in the course of the first few months of 2002 was attributed to temporary factors such as the unfavourable weather conditions affecting food prices, the (limited) effect of the euro cash changeover, especially on the prices of services, the increases in indirect taxes and the base effect of the rise in energy prices in 2001. However, the Governing Council judged that inflationary pressures would ease and anticipated that the annual inflation rate would fall below 2% in the course of 2002.

At its meetings from May 2002 onwards, the Governing Council considered that the available liquidity in the euro area was higher than may have been needed to finance sustainable non-inflationary growth. This fact, in conjunction with the increases in the prices of services and energy, as well as wages, reinforced inflationary pressures. In the same period, market expectations for economic recovery in the euro area were adversely affected by the renewed uncertainty in stock markets. This was attributed to concerns about the reliability of financial accounting information of certain companies, to weaker than expected corporate earnings, as well as to the effect of geopolitical tensions on oil prices. In addition, significant macroeconomic imbalances outside the euro area contributed to the revision of the expectations that real GDP growth in the euro area would reach levels close to potential later in 2003. Inflation stood close to 2%, reflecting the strong dynamics in services prices and the upward trend in nominal wage increases, as well as structural rigidities that prevented prices and wages from adjusting to subdued economic activity. The Governing Council considered that upward risks to price stability were counterbalanced by weak economic growth in the euro area, the slowdown of credit expansion to the private sector and the strengthening of the exchange rate of the euro. Taking the above factors into consideration, the Governing Council left the key ECB interest rates unchanged for more than one year, until the beginning of December 2002.

1 The annual rate of change in a monetary aggregate is defined as the percentage change in the outstanding balance of this aggregate during the twelve-month period to a given month. The ECB monitors the average annual rate of change using three-month moving averages.

2 The definitions of monetary aggregates can be found in the Glossary.

At its meeting on 5 December 2002 the Governing Council decided to lower its key interest rates by 50 basis points each. In particular, the minimum bid rate for the main refinancing operations was set at 2.75%, the marginal lending facility rate at 3.75% and the deposit facility rate at 1.75% (see Table V.1). Underlying this decision was the Governing Council's assessment that inflationary pressures were subdued, taking into account the sluggish economic recovery and the risks of a further slowdown in economic activity. In this context, a reduction in key interest rates would contribute to the improvement of market confidence and expectations about the outlook of the euro area economy. Finally, the Governing Council reviewed the reference value for the annual growth rate of M3 and decided to leave it unchanged at 4.5%, as in the preceding four years.

According to the assessment of the Governing Council under the first pillar of the monetary policy strategy, the high annual growth rate of M3 (August-October 2002: 7.1%) continued to stem from portfolio shifts towards more liquid assets, as stock market uncertainty persisted and interest rates stood at very low levels. However, owing to the deceleration of credit expansion to the private sector, as well as to weak GDP growth, the Governing Council considered that the presence of excess liquidity in the euro area did not signal any inflationary pressures.

Among the factors examined under the second pillar of the monetary policy strategy, the quarter-on-quarter GDP growth rate fell slightly to 0.3%¹ in the third quarter of 2002 (from 0.4% in the first two quarters) and was expected to remain at low levels in the last few months of 2002, according to a market survey showing a decline in consumer confidence. The Governing Council attributed this weakening to the high uncertainty prevailing in the euro area, owing to concerns about the possible effect of geopolitical tensions on oil prices, to stock market developments and to global economic weakness and imbalances. Looking at inflation developments, the Governing Council noted that the inflation rate remained high (flash estimate for November: 2.2%) owing to the base effect of past increases in oil and food prices and of the euro cash changeover, as well as because of the structural rigidities in the labour and product markets. In addition, it was estimated that increases in certain indirect taxes and administered prices would keep the inflation rate above 2% in early 2003. However, the Governing Council considered that the slowdown in economic activity and the appreciation of the euro would counterbalance inflationary risks by dampening the effect of the above temporary factors. Indeed, it estimated that the inflation rate would fall below 2% during 2003, thus improving real disposable income. This in turn would support private consumption, as perceived inflation would converge to actual inflation. In addition, strengthened foreign demand and low interest rates would be beneficial to investment and would contribute to economic recovery during 2003, at a rate close to the potential GDP growth rate.

¹ The data presented in this section are derived from press releases issued after the meetings of the Governing Council of the ECB and may have been slightly revised since then.

At its meetings on 9 January and 6 February 2003, the Governing Council judged that the monetary policy stance continued to be appropriate for maintaining price stability and that the key ECB interest rates should therefore remain unchanged. It was noted that the high annual growth rate of M3 continued to reflect (i) uncertainty about the stock market and economic and global political developments and (ii) the low interest rates, without signalling any inflationary risks, given the slow GDP growth rate and the stabilisation of credit expansion below 5%.

Examining the economic indicators included in the second pillar of the monetary policy strategy, the Governing Council considered that the appreciation of the euro, the strong base effects related to developments in the prices of unprocessed food and services in early 2002 and weak economic growth had offset the inflationary effect of the increase in certain indirect taxes and administered prices, as well as in oil prices, and had led to a drop in the inflation rate (provisional estimate for January 2003: 2.1%). Moreover, inflation was projected to fall below 2% during 2003, provided that wage moderation prevailed. Finally, it was noted that economic activity was expected to recover from the second half of 2003 onwards, once the effect of the factors contributing to the slowdown of 2002 would weaken, while the improved competitiveness of euro area enterprises and the anticipated global economic recovery were expected to counterbalance the impact of the appreciation of the euro on export growth.

At its meeting on 6 March 2003 the Governing Council considered that prospects for price stability over the medium term had improved, since the growth rate of economic activity remained low and the euro strengthened further. For this reason, it decided to further reduce the key ECB interest rates by 25 basis points, bringing the minimum bid rate for the main refinancing operations back to the historically low level (2.5%) of 9 April 1999 (see Table V.1).

Looking into monetary developments, the Governing Council took the view that high liquidity in the euro area did not signal inflationary risks, despite the acceleration of M3 growth (November 2002-January 2003: 7.1%). This assessment was based on the low GDP growth rate, the significant deceleration in the growth of loans to non-financial corporations and expectations that portfolio shifts to liquid assets included in M3 would reverse once the uncertainty would dissipate.

Under the second pillar of the Eurosystem's strategy, the Governing Council of the ECB considered that economic prospects had worsened, compared with earlier estimates, owing to the geopolitical tensions and the subsequent rise in oil prices. With the three-month GDP growth rate having fallen to 0.2% in the fourth quarter of 2002 (according to provisional estimates), very weak growth was to be anticipated for 2003. However, economic activity would pick up later in the year, provided that the effect of the factors causing market uncertainty would weaken and be counterbalanced by global economic recovery, low interest rates and reduced inflation, which would boost real disposable income and domestic demand. The rise in inflation in February 2003 (provisional estimate: 2.3%) was seen as temporary and was attributed to the increase in oil prices. Finally, the

Governing Council expressed the view that the strengthening of the euro in 2002, the low GDP growth rate and the anticipated return of oil prices to normal levels, if combined with moderate wage increases, would cause inflation to drop below 2% during 2003 and be maintained at levels consistent with price stability.

The meeting of the Governing Council of the ECB on 3 April took place in the exceptional circumstances associated with warfare in Iraq. Since it was not easy to assess the effects of military operations on the global economy and on the growth and inflation outlook of the euro area, the Governing Council decided to leave the key ECB interest rates unchanged. In addition, the Governing Council noted that the outbreak of war did not affect the functioning of financial markets in the euro area and that it would act to ensure the proper functioning of these markets by providing sufficient liquidity whenever needed.

2. THE EVOLUTION OF M3 AND ITS COMPONENTS

The average annual growth rate of M3 rose to 7.2% in 2002 from 5.3% in 2001 (well above the reference value of 4.5%). During the year, the annual growth rate of M3 (see Table V.2 and Chart V.1), following a small increase to 7.5% in the first quarter of 2002 from 7.4% in the last quarter of 2001, moderated gradually and stood at 7.0% in the fourth quarter of 2002. The relatively strong growth of M3 cannot be attributed to increased demand for transactions, since the gap between the growth rates of real M3 and real GDP widened throughout 2002; rather, it should be mainly associated with stock market developments. In early 2002, the strong monetary dynamics of M3 reflected investors' preference for safe and liquid assets in response to declining stock prices and high volatility following the events in autumn 2001. While uncertainty eased somewhat in the first quarter of 2002, renewed declines in stock prices and heightened stock market volatility from April onwards led investors to shift back again to M3 instruments and longer-term interest-bearing assets. In addition, the flattening of the yield curve and higher volatility in euro area bond markets after May, as well as the low short-term rates prevailing throughout 2002, reduced the opportunity cost of holding money (i.e. the spread between the 3-month EURIBOR and the own rate of return of M3) and fuelled demand for M3 components. In the first months of 2003, heightened geopolitical tensions increased market uncertainty and led to a speed-up of the annual growth rate of M3, which reached 8.1% in February.

The annual growth rate of the monetary aggregate M1 (comprising currency in circulation and overnight deposits) accelerated significantly throughout 2002 and stood at 8.8% in the fourth quarter of 2002, compared with 5.5% in the respective quarter of 2001 (see Table V.2). This rise was due to portfolio shifts towards safe and liquid assets, for the above mentioned reasons, and mainly to the gradual rebound of currency in circulation to normal levels, following the completion of the euro cash changeover. The negative (from

December 2000 onwards) annual rate of change in currency in circulation began to moderate after the introduction of euro banknotes and coins in January 2002, became positive again in October and stood at 12.9% in the fourth quarter of 2002 (compared with -18.6% in the respective quarter of 2001). By contrast, the annual growth rate of overnight deposits, after a gradual increase during 2001, subsided to 8.2% in the last quarter of 2002, from 10.4% in the same period of 2001. The acceleration in the growth rate of currency in

TABLE V.2
COMPONENTS OF M3 IN THE EURO AREA

(Annual percentage changes;¹ data adjusted for seasonal and calendar effects, unless otherwise indicated; quarterly averages²)

	2001	2002				
	Q ₄	Q ₁	Q ₂	Q ₃	Q ₄	December
M1	5.5	6.2	6.6	7.6	8.8	9.8
Currency in circulation, M0	-18.6	-28.0	-19.9	-7.7	12.9	42.7
Overnight deposits	10.4	13.0	11.7	10.3	8.2	5.8
Other short-term deposits (=M2-M1)	5.9	6.7	6.4	5.5	4.9	3.5
Deposits with an agreed maturity of up to two years ³	7.3	3.6	2.9	1.4	1.3	-0.3
Deposits redeemable at notice of up to three months ³	5.0	9.1	9.4	8.9	7.7	6.6
M2	5.7	6.5	6.5	6.5	6.7	6.5
Marketable instruments (=M3-M2)	18.6	14.2	12.5	10.2	8.4	8.5
Repurchase agreements ³	19.5	4.6	2.3	2.9	2.3	4.2
Money market fund shares/units ³	25.6	29.5	25.1	22.4	18.6	17.5
Money market paper and debt securities with a maturity of up to two years ³	2.1	-6.0	-3.2	-9.9	-9.2	-9.6
M3	7.4	7.5	7.3	7.0	7.0	6.8

1 Annual rates of change in the corresponding index, which is compiled on the basis of the balance of the corresponding monetary aggregate in December 1998 and the accumulated monthly flows, adjusted for exchange rate variations, reclassifications etc.

2 The quarterly average is derived from the arithmetic annual averages for each month (calculated as the average of the rates at the end of the reference month and the end of the previous month) and is not the average of the rates at the end of each of the quarter's months (see the "Technical Notes" in the ECB Monthly Bulletin).

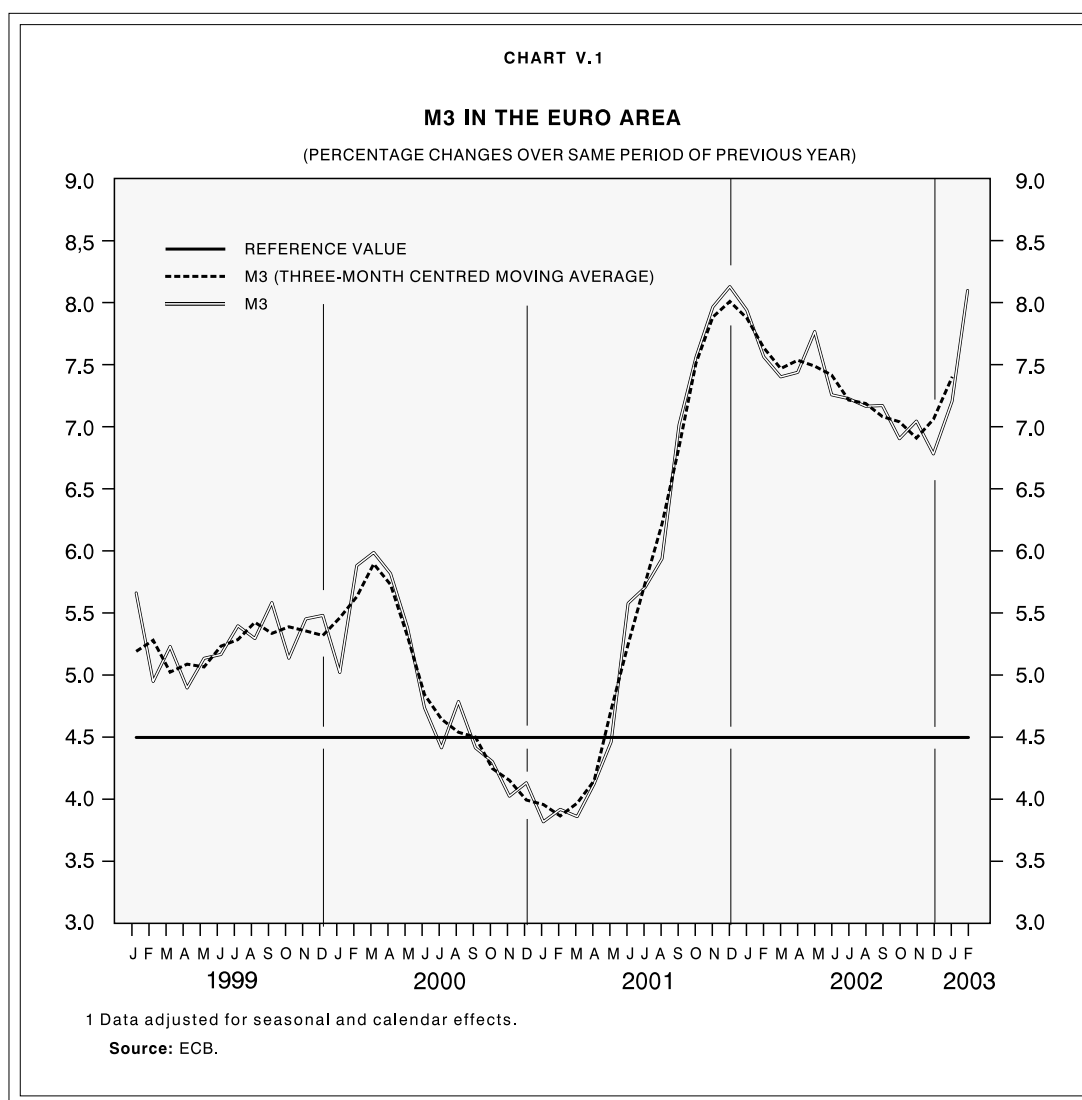
3 Data not adjusted for seasonal and calendar effects.

Source: ECB.

circulation continued in the first two months of 2003 (February: 41.5%) and led to a higher growth rate of M1 (February: 10.3%).

The annual growth rate of other short-term deposits (i.e. the difference between M2 and M1), which make up the bulk of M3, decelerated gradually to 4.9% in the fourth quarter of 2002 and 4.7% in February 2003, from 5.9% in the last quarter of 2001, mainly driven by a significant slowdown in deposits with an agreed maturity of up to two years (fourth quarter: 2002: 1.3%, 2001: 7.3%), which was only partially offset by an acceleration of the annual growth rate of deposits redeemable at notice of up to three months

(fourth quarter: 2002: 7.7%, 2001: 5.0%). These developments are attributed to the fact that the significant slowdown in the growth rate of deposits with an agreed maturity of up to two years shifted the preference of investors to deposits redeemable at notice of up to three months, as well as to assets included in M1.



The annual growth rate of marketable instruments¹ subsided significantly to 8.4% in the fourth quarter of 2002 (from 18.6% in the respective quarter of 2001), but remained high, reflecting investors' preference for money market fund shares/units amid stock market uncertainty. By contrast, in the first two months of 2003 the continued strong growth

¹ This category comprises repurchase agreements, money market fund shares/units, money market paper and debt securities with an agreed maturity of up to two years.

rate of money market fund shares/units (February: 16.4%) and the faster rate of growth of repurchase agreements (February: 11.3%) resulted in the acceleration of the growth rate of marketable instruments (February: 12.4%).

3. THE COUNTERPARTS OF M3

Among the counterparts of M3, credit expansion to the private sector slowed down to 4.8% in the fourth quarter of 2002 (and remained at that level in the first two months of 2003), from 6.9% in the last quarter of 2001 (see Table V.3), mainly reflect-

TABLE V.3
MAIN COUNTERPARTS OF M3 IN THE EURO AREA
(Annual percentage changes;¹ data not adjusted for seasonal and calendar effects; quarterly averages²)

	2001	2002				
	Q ₄	Q ₁	Q ₂	Q ₃	Q ₄	December
Longer-term financial liabilities	3.2	4.8	4.8	5.0	4.9	4.3
Deposits with an agreed maturity of over 2 years	-0.2	0.2	0.9	1.9	2.6	3.3
Deposits redeemable at notice of over 3 months	-5.7	-11.5	-13.2	-11.1	-9.0	-8.7
Debt securities with an agreed maturity of over 2 years	5.9	6.5	7.7	8.8	8.1	7.0
Capital and reserves	4.3	9.8	7.0	4.8	4.1	2.5
Credit to euro area residents	5.2	5.1	4.5	4.2	4.1	4.1
Credit to general government	-0.7	1.7	1.8	1.1	1.9	1.7
Securities (other than shares)	-0.7	3.5	3.8	2.5	4.1	3.8
Loans	-0.8	-0.8	-0.9	-0.9	-1.2	-1.2
Credit to other euro area residents	6.9	6.1	5.2	5.0	4.8	4.7
Securities (other than shares)	23.8	22.3	14.8	7.5	6.9	9.2
Shares and other equity	3.2	2.1	-3.5	1.0	3.3	2.2
Loans	6.5	5.7	5.6	5.3	4.8	4.7

1 Annual rates of change in the corresponding index, which is compiled on the basis of the balance of the corresponding monetary aggregate in December 1998 and the accumulated monthly flows, adjusted for exchange rate variations, reclassifications etc.

2 The quarterly average is derived from the arithmetic annual averages for each month (calculated as the average of the rates at the end of the reference month and the end of the previous month) and is not the average of the rates at the end of each of the quarter's months (see the "Technical Notes" in the ECB *Monthly Bulletin*).

Source: ECB.

ing a decline in the growth rate of loans to the private sector. In particular, the annual growth rate of bank loans to non-financial corporations dropped significantly during 2002 and stood at 3.5% in the fourth quarter of 2002, compared with 6.2% in the corresponding quarter of 2001. This outcome reflected the weaker need to finance mergers and acquisitions, subdued investment activity, the efforts of enterprises to improve their balance sheet position, as well as a more cautious lending approach adopted by banks, in the face of falling corporate profits. By contrast, the annual growth rate of loans to consumers sped up slightly to 5.8% in the fourth quarter of 2002, from 5.2% in the same

quarter of 2001, mainly owing to heightened demand for housing loans, which was fuelled by the low level of their interest rates and the rise in house prices in some euro area countries.

The annual rate of credit expansion to general government fluctuated during 2002 but accelerated overall to 1.9% in the last quarter of 2002, from -0.7% in the respective quarter of 2001, owing to the increased borrowing requirement of the public sector, against a background of modest economic growth. The rise continued in the first two months of 2003 and the annual rate of credit expansion stood at 2.4% in February.

The annual growth rate of longer-term financial liabilities¹ of euro area monetary financial institutions (MFIs) sped up to 5% in the third quarter of 2002, from 3.2% in the last quarter of 2001, owing to the widening of the spread between long-term and short-term interest rates until May 2002 and private portfolio shifts from shares to longer-term debt securities, caused by stock market uncertainty. By contrast, in the last quarter of 2002 the annual growth rate of these liabilities fell to 4.9% and in February 2003 to 4.1%, as the effect of stock market uncertainty on the preference of investors was offset by a gradual decline in long-term interest rates after the end of May.

The net external assets of the euro area MFI sector, following a slight decline in 2001, rose by €164 billion in 2002, as capital outflows from the euro area in the first four months were more than offset by much higher inflows from May onwards. This strengthened net asset position of euro area MFIs is attributable to an improvement in the euro area current account balance and larger net inflows of combined direct and portfolio investment, as well as to a moderation in portfolio investment by euro area residents in foreign equity and debt instruments. The improved net external asset position of euro area MFIs was sustained through the first two months of 2003.

4. MONEY MARKET INTEREST RATES

In 2002 short-term money market interest rates,² i.e. for maturities from overnight to one month, remained broadly stable. In particular, the overnight rate (EONIA) moved in line with the minimum bid rate on the Eurosystem's main refinancing operations (see Chart II.9), standing slightly above the latter rate throughout the year, with minor exceptions,³ and declined following the decision of the ECB on 5 December to cut its key inter-

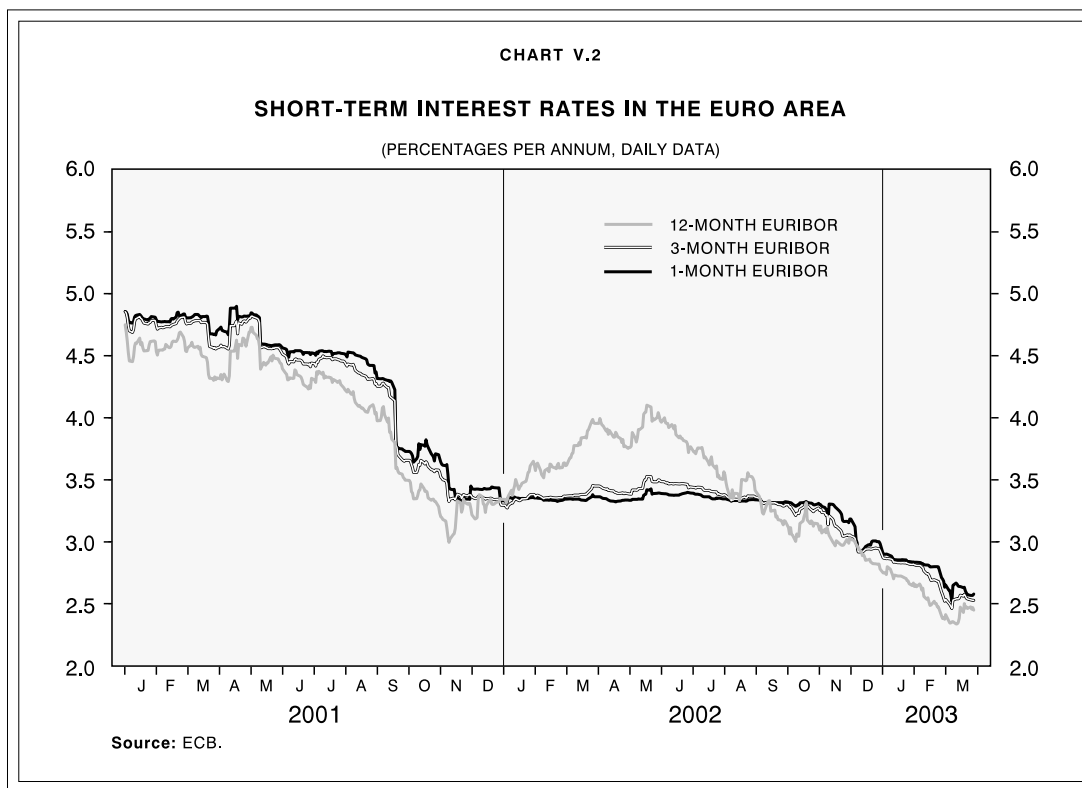
1 These comprise deposits with an agreed maturity of over two years, deposits redeemable at notice of over three months, debt securities issued with a maturity of over two years, as well as capital and reserves.

2 Data on the evolution of interest rates refer to average monthly values.

3 The EONIA is usually higher at the end of every minimum reserve maintenance period, as well as on the last trading day of each month (and even more so at the end of the year), because of increased liquidity demand by credit institutions. In January 2002 the EONIA temporarily stood at a relatively high level, owing to the increased liquidity needs of the banking system, associated with the euro cash changeover. However, the situation came back to normal following two fine-tuning operations conducted by the Eurosystem.

est rates by 50 basis points. In early 2003 the EONIA stabilised slightly above the minimum bid rate on the main refinancing operations (February 2003: 2.76%), while towards the end of March it fell, after the decrease in the minimum bid rate decided by the ECB on 6 March.

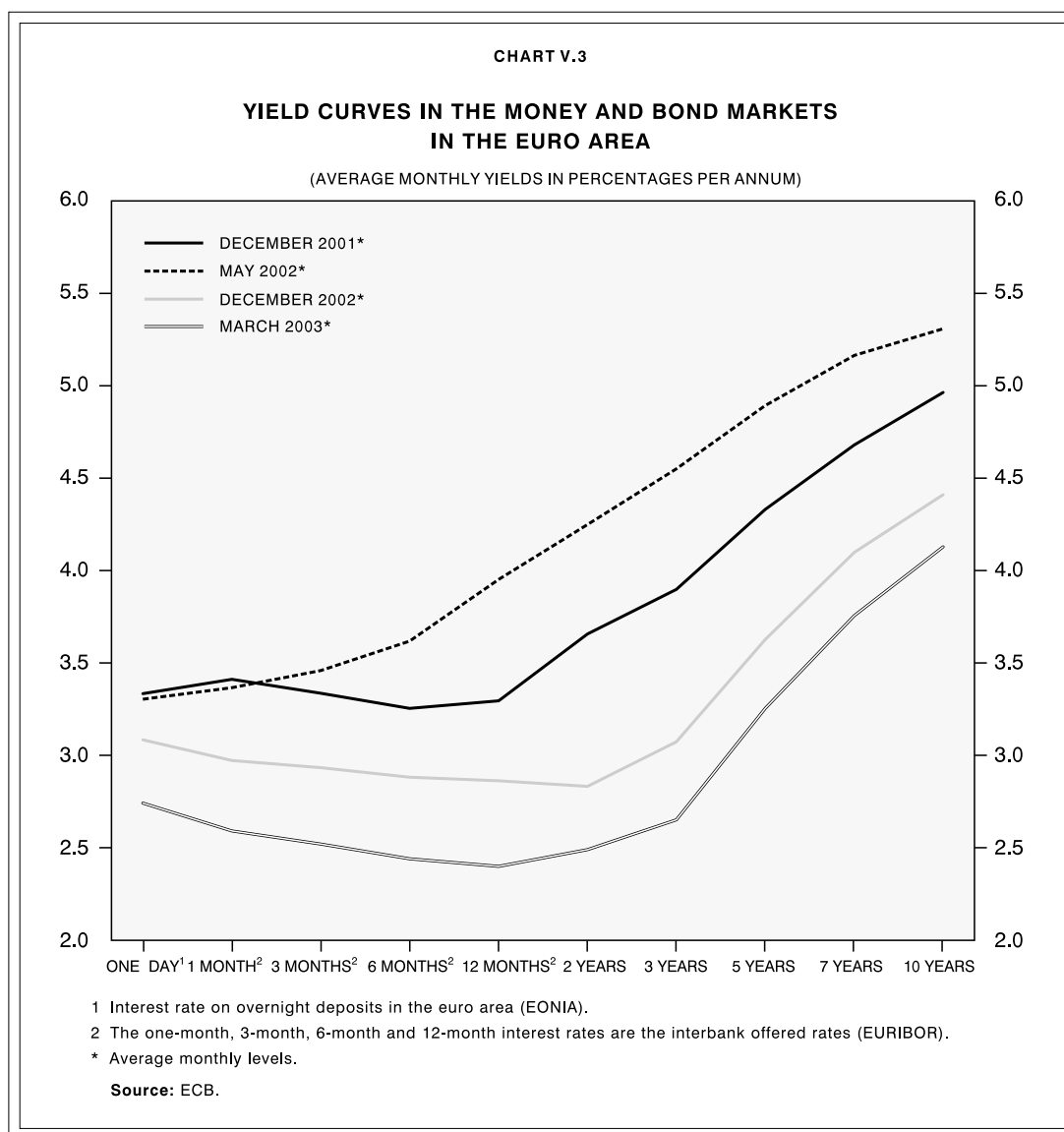
Longer-term money market rates (for maturities of 3 to 12 months) picked up in the first five months before starting to decline after May 2002 (see Chart V.2). The evolution of money market rates reflected market participants' expectations for future short-term money market rates, associated with prospects about inflation and economic growth. The three-month EURIBOR, considered representative of short-term rates, increased by



12 basis points from December 2001 (3.34%) to May 2002 (3.46%). The rise in money market rates was most pronounced at the longer maturities (6 and 12 months). Consequently, the slope of the money market yield curve, as measured by the difference between the twelve-month and the one-month EURIBOR, increased substantially from the beginning of 2002 to May (see Chart V.3).

However, from mid-May onwards, longer-term money market rates started to fall, owing to mounting uncertainty about the strength and timing of economic recovery that fostered expectations of a drop in short-term rates. The twelve-month EURIBOR experienced the sharpest decline, falling by 108 basis points (from 3.95% in May to

2.87% in December 2002). The three-month EURIBOR dropped by 52 basis points, from 3.46% in May to 2.94% in December 2002 and further to 2.53% in March 2003. At the shorter maturities, the decrease in money market rates was less pronounced. Consequently, the slope of the money market yield curve, which was strongly positive in



May, gradually inverted and became negative in September. In early 2003, the spread between the twelve-month and the one-month EURIBOR widened (September 2002: –8 basis points, March 2003: –19 basis points). However, after the end of February, forward rates increased slightly, implying an upward revision of expectations about future short-term rates.

5. RETAIL BANK INTEREST RATES

Euro area short-term retail bank interest rates fell in 2002, mostly towards the end of the year, in line with the evolution of money market rates. In particular, the retail bank rate for overnight deposits dropped by 6 basis points in 2002 (December 2002: 0.68%), while the rate for deposits redeemable at notice of up to three months fell by 12 basis points (December 2002: 2.05%). A greater decline, of 27 basis points, was recorded in the rate for deposits with an agreed maturity of up to two years (December 2002: 2.51%) and the rate for short-term loans to enterprises, which dropped by 29 basis points (December 2002: 5.97%). Following the cut of the key ECB interest rates in December 2002, short-term retail bank rates decreased slightly in the first two months of 2003.

Long-term retail bank rates for deposits followed an upward path until May 2002 and then fell to levels lower than those of December 2001. This pattern reflected similar developments in bond market yields, specifically in the five-year bond yield, to which long-term retail bank rates are more closely linked. The overall drop in interest rates during 2002 amounted to 32 basis points for deposits with an agreed maturity of over two years (December 2002: 3.45%) and 38 basis points for deposits redeemable at notice of over three months (December 2002: 2.41%). In the same period, the five-year government bond yield dropped by 70 basis points (December 2002: 3.63%). The comparatively small decline in long-term retail bank deposit rates reflects the usual lags in the pass-through of yield changes in bond markets.

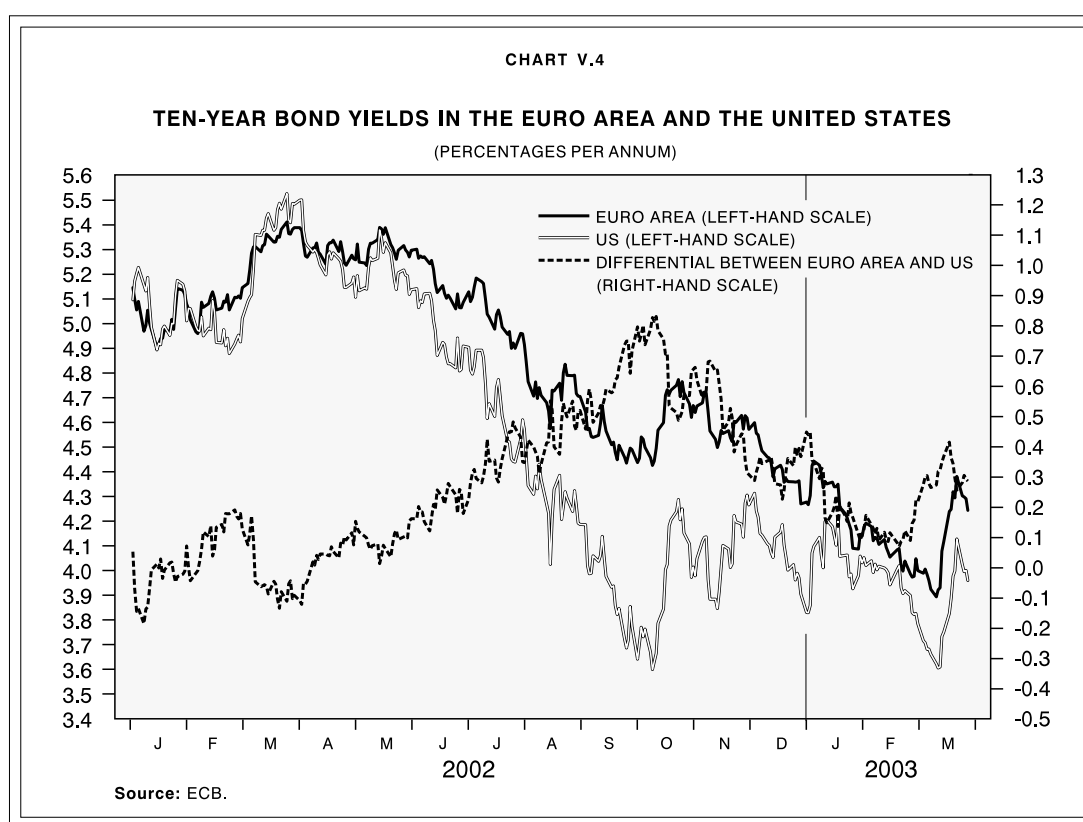
Similar was the evolution of long-term bank lending rates in 2002. After May, their adjustment to changes in bond yields was very sluggish, mainly owing to the drop in the credit-rating of enterprises and the rise in the number of bankruptcies. The interest rate on loans to enterprises maturing in over one year dropped by a total of 35 basis points in 2002 (December 2002: 5.34%). In the first two months of 2003, long-term retail bank rates declined further.

6. YIELDS ON LONG-TERM GOVERNMENT BONDS

The evolution of yields in the euro area government bond markets in 2002 and in the first two months of 2003 was in line with similar yields in the US, although there was generally less fluctuation in the euro area. Thus, in the first few months of 2002 the greater optimism of market participants about growth prospects and the expectations of increased inflationary pressures led to a slight rise in government bond yields. However, the release of less favourable macroeconomic data and the drop in stock prices contributed to a downward revision of expectations about economic recovery and pessimism returned to the market, causing a drop in government bond yields. At the same time, concerns about the reliability of financial accounting information of certain US corporations caused market participants to question the underlying profit performance in the euro area as well and

induced portfolio shifts to safer investments. In October 2002, government bond yields, especially longer-term, rose temporarily, owing to the recovery of stock markets and the release of more favourable macroeconomic and corporate profits data. However, from November on, yields took up a declining path again, which continued in the first few months of 2003.

US government bond yields recorded an overall higher decline in 2002. Thus, the spread between euro area and US yields, having been close to zero in 2001, became positive for most of 2002 (see Chart V.4). However, from October 2002 to March 2003, the spread between euro area and US ten-year bond yields narrowed substantially, owing to



less favourable economic growth prospects in the euro area. Overall, government bond yields in the euro area dropped in 2002, mainly from mid-May to early October. In particular, ten-year bond yields fell from 4.96% in December 2001 to 4.41% in December 2002. In the first few months of 2003, less favourable market expectations about short- and medium-term economic prospects, associated with macroeconomic data releases, as well as the uncertainty caused by heightened geopolitical tensions, led to a further decline in government bond yields. However, in March bond yields in both the euro area and the United States recovered, owing to favourable economic growth prospects generated by the drop in oil prices. At the same time, the recent rise in yields could also be attributed to the

correction of the very low yields in the last few months. The slope of the yield curve, as measured by the difference between the ten-year government bond yield and the three-month EURIBOR, fluctuated in 2002 and decreased at the end of the year, compared with the end of 2001 (December 2002: 1.47%, December 2001: 1.62%).

7. ISSUANCE OF BONDS AND OTHER DEBT SECURITIES

The annual growth rate of issuance of euro-denominated debt securities by euro area banks and other MFIs subsided to 5.1% in the fourth quarter of 2002 from 5.4% in the respective quarter of 2001. This is attributed to the reduced financing needs of the MFI sector, resulting from limited credit demand by the private sector and increased deposits at MFIs amid economic slowdown and heightened uncertainty in stock markets. The sharpest decline was recorded in the annual growth rate of issuance of debt securities by private non-financial corporations, which fell to 4.3% in the fourth quarter of 2002, from 20.2% in the respective quarter of 2001. This decline reflected lower funding needs of enterprises against a background of sluggish economic activity and heightened uncertainty, increasing concerns of investors about the credit risk of enterprises, as reflected in the widening of the yield spread between corporate and government bonds until the beginning of the fourth quarter of 2002, and finally the credit-rating downgrade of certain enterprises.

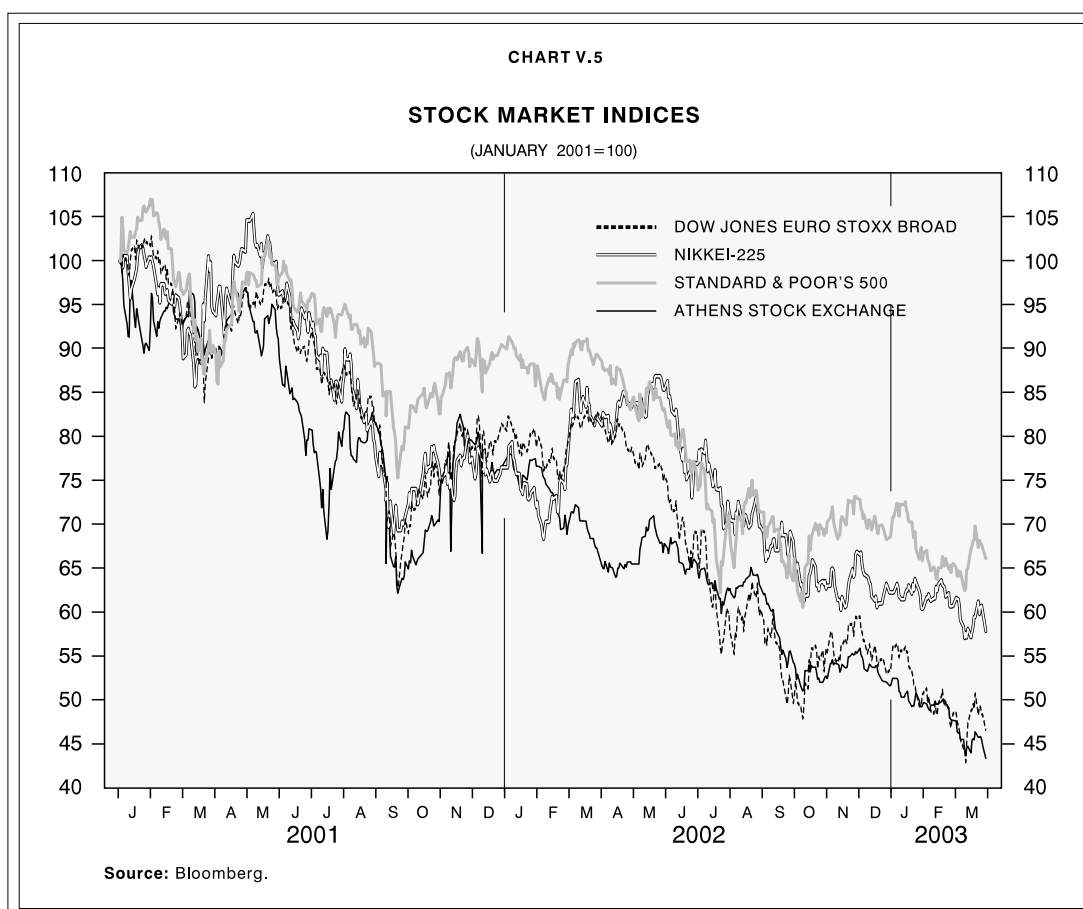
By contrast, the annual growth rate of debt securities issued by the general governments of the euro area countries accelerated during 2002 and reached 5.6% in the fourth quarter of that year, from 3.2% in the respective quarter of 2001. This reflects the need to cater for the increased borrowing requirement of this sector, owing to worsened budgetary positions.

8. STOCK MARKET DEVELOPMENTS

Share prices in euro area stock markets have been following a downward path since the beginning of the previous year, which intensified from April onwards (see Chart V.5). Despite the recovery from mid-October to the beginning of December 2002, prices fell again until the end of the year. Between end-December 2001 and end-December 2002, the Dow Jones EURO STOXX index, which aggregates the prices of a broad range of shares of euro area enterprises, declined by 34.5%. The volatility of stock prices was kept at low levels in the first half of 2002, but, from June onwards, it rose to levels higher than the average volatility observed in 2000 and 2001. These stock market developments reflected the weak economic activity and the downward revision of forecasts about euro area corporate earnings. In addition, they were influenced by external factors, such as uncertainty about the global economic recovery, the effects of stock market developments in the USA,

where there were concerns about the reliability of financial accounting information of certain enterprises and, finally, concerns about the (then probable) conflict in Iraq.

The downward trend in stock prices continued until mid-March 2003 and was then partially reversed, reflecting the positive influence on growth prospects from the drop in oil prices, following the outbreak of war in Iraq. However, mixed signals about corporate profitability and macroeconomic indicators maintained stock price volatility at high levels.



Overall, the broad Dow Jones EURO STOXX index dropped by 12.9% between end-December 2002 and end-March 2003.

Among the sectors included in the broad stock price index, the sharpest price declines and the highest volatility were recorded in the technology, telecommunications and financial sectors, with sectoral sub-indices falling by 51.8%, 36% and 35.5% respectively between end-December 2001 and end-December 2002, which accounted for more than half of the total decline in the overall index. The decrease in the stock prices of technology-based corporations and telecommunications firms was attributed to the fact that market participants continued to revise their earnings expectations downwards, as well as

to growing concerns about the high level of indebtedness of telecommunications corporations. The profitability of financial corporations was adversely affected by the general drop in stock prices, as well as by natural disasters in some euro area countries. The downward path of stock prices in the financial sector continued in the first few months of 2003 (a drop of 14.9% between end-December 2002 and end-March 2003).

APPENDIX TO CHAPTER V

CHRONOLOGY OF MAIN MONETARY POLICY MEASURES OF THE EUROSISTEM

3 January 2002

— The Governing Council of the ECB decides that the minimum bid rate on the main refinancing operations and the interest rates on the marginal lending facility and the deposit facility will remain unchanged at 3.25%, 4.25% and 2.25% respectively.

— The Governing Council also decides on an allotment amount of €20 billion per operation for the longer-term refinancing operations to be conducted in 2002. This amount takes into consideration the expected liquidity needs of the euro area banking system in 2002 and the desire of the Eurosystem to continue to provide the bulk of refinancing of the financial sector through its main refinancing operations. The Governing Council of the ECB may adjust the allotment amount in the course of the year in the event of unexpected developments in liquidity needs.

7 February, 7 March, 4 April 2002

The Governing Council of the ECB decides that the minimum bid rate on the main refinancing operations and the interest rates on the marginal lending facility and the deposit facility will remain unchanged at 3.25%, 4.25% and 2.25% respectively.

23 April 2002

Effective from 24 June 2002, the Governing Council of the ECB approves a new regulation on the application of minimum reserves. According to the new regulation, electronic money institutions will be subject to minimum reserve requirements. The regulation further introduces the automatic exemption of institutions from minimum reserve requirements in the event that their license has been withdrawn or renounced, as well as in the event that they are subject to winding-up proceedings. Finally, the formula concerning the calculation of the remuneration of holdings of required reserves is adjusted.

2 May, 6 June 2002

The Governing Council of the ECB decides that the minimum bid rate on the main refinancing operations and the interest rates on the marginal lending facility and the deposit facility will remain unchanged at 3.25%, 4.25% and 2.25% respectively.

2 July 2002

Effective from 7 July 2002, within the framework of a relevant Guideline of the ECB, the Bank of Greece amends and complements some of the provisions by which the monetary policy instruments and procedures applied after its admission into the Eurosystem were laid down. These changes reflect the needs for adjustment created by developments in the conduct of the single monetary policy.

4 July 2002

The Governing Council of the ECB decides that the minimum bid rate on the main refinancing operations and the interest rates on the marginal lending facility and the deposit facility will remain unchanged at 3.25%, 4.25% and 2.25% respectively.

10 July 2002

The Governing Council of the ECB decides to reduce from €20 billion to €15 billion the allotment amount for each of the longer-term refinancing operations to be conducted in the second half of 2002. The new amount takes into consideration the expected liquidity needs of the euro area banking system in the second half of 2002 and the desire of the Eurosystem to continue to provide the bulk of refinancing for the financial sector through its main refinancing operations.

1 August, 12 September, 10 October, 7 November 2002

The Governing Council of the ECB decides that the minimum bid rate on the main refinancing operations and the interest rates on the marginal lending facility and the deposit facility will remain unchanged at 3.25%, 4.25% and 2.25% respectively.

5 December 2002

— The Governing Council of the ECB decides to lower the minimum bid rate on the main refinancing operations by 0.50 percentage point to 2.75%, starting from the operation to be settled on 11 December 2002. It also decides to lower the interest rates on both the marginal lending facility and the deposit facility by 0.50 percentage point, to 3.75% and 1.75% respectively, both with effect from 6 December 2002.

— In addition, it decides that the reference value for the annual growth rate of the broad monetary aggregate M3 will remain at 4.5%.

9 January 2003

The Governing Council of the ECB decides that the minimum bid rate on the main refinancing operations and the interest rates on the marginal lending facility and the deposit facility will remain unchanged at 2.75%, 3.75% and 1.75% respectively.

23 January 2003

The Governing Council of the ECB decides to implement the following two measures to improve the operational framework for monetary policy:

- First, the timing of the reserve maintenance period will be changed so that it will always start on the settlement day of the main refinancing operation (MRO) following the Governing Council meeting at which the monthly assessment of the monetary policy stance is pre-scheduled. Furthermore, as a rule, the implementation of changes to the standing facility rates will be aligned with the start of the new reserve maintenance period.
- Secondly, the maturity of the MROs will be shortened from two weeks to one week.

These measures are scheduled to come into effect during the first quarter of 2004.

Further to the press release of 10 July 2002, the Governing Council also decides to maintain at €15 billion the allotment amount for each of the longer-term refinancing operations to be conducted in the year 2003. This amount takes into consideration the expected liquidity needs of the euro area banking system in 2003 and reflects the desire of the Eurosystem to continue to provide the bulk of liquidity through its main refinancing operations.

6 February 2003

The Governing Council of the ECB decides that the minimum bid rate on the main refinancing operations and the interest rates on the marginal lending facility and the deposit facility will remain unchanged at 2.75%, 3.75% and 1.75% respectively.

6 March 2003

The Governing Council of the ECB decides to lower the minimum bid rate on the main refinancing operations by 0.25 percentage point to 2.50%, starting from the operation to be settled on 12 March 2003. It also decides to lower the interest rates on both the marginal lending facility and the deposit facility by 0.25 percentage point, to 3.50% and 1.50% respectively, both with effect from 7 March 2003.

3 April 2003

The Governing Council of the ECB decides that the minimum bid rate on the main refinancing operations and the interest rates on the marginal lending facility and the deposit facility will remain unchanged at 2.50%, 3.50% and 1.50% respectively.

VI. MONETARY AND CREDIT DEVELOPMENTS IN GREECE

1. MONETARY DEVELOPMENTS

During 2002, the annual growth rate of the monetary aggregate that constitutes Greece's contribution¹ to the euro area M3 decelerated considerably. This rate fell gradually to 2.1% in the last quarter of 2002 from 4.4% in the last quarter of 2001 and remained positive until the end of November; it turned negative for the first time in December (−0.2%, see Table VI.1). It should be noted that Greece's M3 was rising last year at a rate about one-third that of the euro area M3 (see Chart VI.1).

The drop in the M3 growth rate was caused by the transfer of savings from repos (a tax on their yield was re-imposed in January 2002) to longer-term deposits (not included in M3) and to government securities (holdings of which by the private sector, excluding Monetary Financial Institutions – MFIs –, increased in 2002, after a significant drop in 2001²). The slowdown in the M3 growth rate is connected with the deceleration of total credit expansion in 2002, due to slower credit expansion mainly to enterprises as well as households, while MFI financing of general government decreased further last year, though at a lower rate. The greater deceleration of the M3 growth rate in Greece relative to the euro area reflects the faster increase in longer-term liabilities of the domestic MFI sector and the decrease in its net external asset position. In the euro area as a whole, the MFI sector's net external position increased. Specifically in Greece, the MFIs' net position against non-residents (including residents of other euro area countries) decreased by €11,936 million (2001: €−2,897 million) because MFI external liabilities rose faster than claims (see Chart VI.2). The increase in MFI liabilities largely concerns liabilities vis-à-vis residents of other euro area countries and reflects the high degree of integration of the Greek banking market into the European one.

Regarding the main M3 components, it is worth mentioning that the quantity of currency in circulation (M0) fluctuated, during most of 2002, at lower levels than in 2001. It was only from October onwards that M0 recorded positive rates of change. The annual growth rate in the fourth quarter of 2002 was 1.6%, compared with 0.5% in the same quarter of 2001.³

1 Beginning in August 2002, Greece's M3 was adjusted and now includes money market fund units in accordance with the ECB's uniform definition (see "Monetary aggregates" in the Glossary). To compute the new M3 aggregate, claims/liabilities between credit institutions and money market funds are mutually set off. Greece's M3 is added to the corresponding aggregates of the other euro area Member States to make up the total M3 quantity of money in the euro area.

2 We note that government paper holdings by the private sector, excluding MFIs, increased by €1,038 million in 2002 after falling by €1,855 million in 2001.

3 We must take into account (as already mentioned in the following Bank of Greece reports: *Monetary Policy, Interim Report 2002* and *Monetary Policy 2002-2003*) that it is difficult to measure the quantity of M0 in individual euro area countries because part of the euro banknotes and coins minted in each of these countries is in the possession of residents of other euro area countries, as well as residents of third countries. The quantity of banknotes in individual countries is estimated on the basis of the capital key determining each country's share in the ECB capital and, therefore, data on M0 for 2002 are not fully comparable with those for 2001. Also, beginning in 2003, the banknotes and coins in national currencies not yet converted into euro are not included in the computation of M0. Because of these technicalities, it has been decided at Eurosystem level not to comment on national M0 components but only on the total euro area M0.

TABLE VI.1
GREEK CONTRIBUTION TO THE MONETARY AGGREGATES OF THE EURO AREA
(Data not seasonally adjusted)

	Outstanding balances on 31.12.02	Annual percentage changes ¹					
		2001		2002			
	(million euro)	Q ₄ ²	Q ₁ ²	Q ₂ ²	Q ₃ ²	Q ₄ ²	December ³
1. Currency in circulation, M0	7,401	0.5	-16.3	-17.0	-12.7	1.6	3.1
2. Overnight deposits	15,225	5.3	13.0	12.0	15.8	5.7	-4.8
3. M1 (1+2)	22,626	3.5	2.7	1.4	5.2	4.1	-2.3
4. Savings deposits and deposits redeemable at notice of up to 3 months	58,757	12.9	16.5	16.3	14.6	9.7	3.3
5. Deposits with an agreed maturity of up to 2 years (time deposits)	28,908	-9.3	-2.7	2.2	6.1	10.1	5.4
6. M2 (3+4+5)	110,292	4.3	8.2	9.4	10.5	8.7	2.6
7. Repurchase agreements	20,004	38.3	10.3	-10.1	-20.2	-19.0	-17.4
8. Money market fund units	10,709	-38.4	-32.6	-25.9	-18.8	-3.7	10.9
9. Debt securities maturing in up to 2 years	154	-1.1	-27.8	-87.1	-79.3	-26.2	-3.1
10. M3 (6+7+8+9)	141,159	4.4	4.0	2.3	1.6	2.1	-0.2

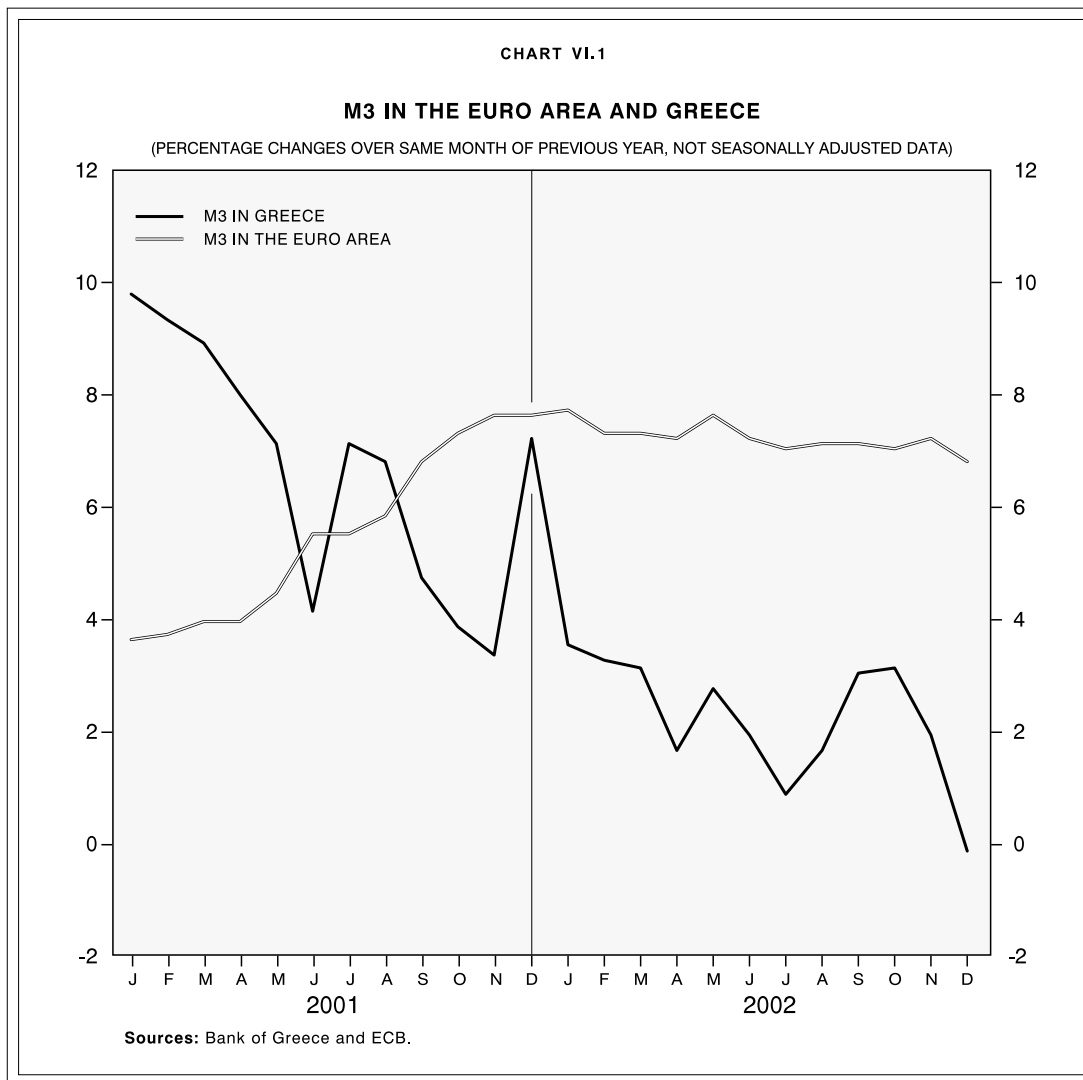
1 Annual rates of change in the corresponding index, which is compiled on the basis of the balance of the corresponding monetary aggregate in December 1998 and the accumulated monthly flows, adjusted for exchange rate variations, reclassifications etc.

2 Quarterly averages. They are derived from the arithmetic annual averages for each month (calculated as the average of the rates at the end of the reference month and the end of the previous month) and are not the average of the rates at the end of each of the quarter's months (see the "Technical notes" in the section "Euro area statistics" of the *Monthly Bulletin* of the European Central Bank (ECB)).

3 Annual rates of change on the basis of the corresponding index at the end of the month.

Sources: Bank of Greece and ECB.

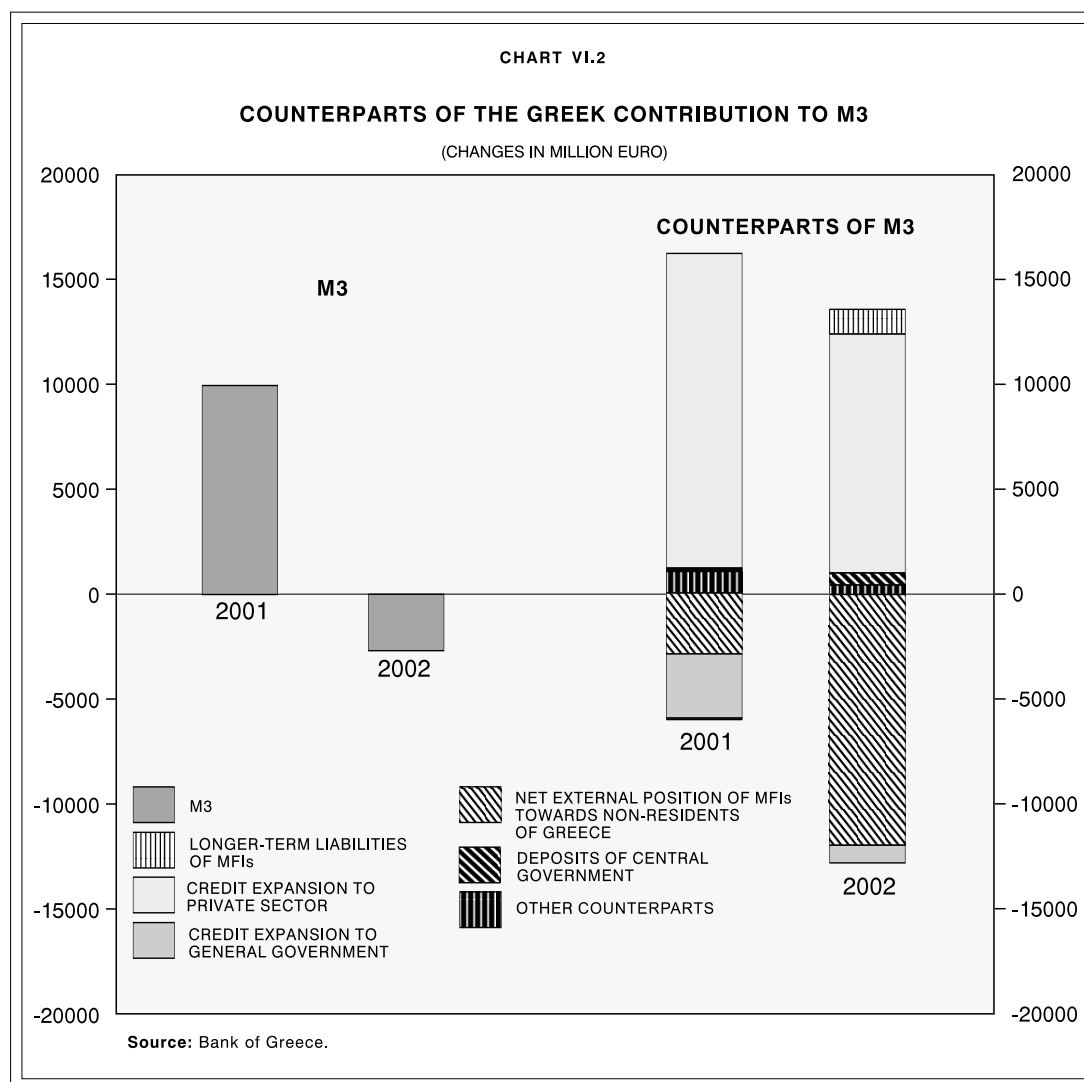
Specifically, from the beginning of last year and up to September, M0 changed at negative rates, which were higher in the early months of the year, started falling in May (a development related to the circulation of the euro as from 1 January 2002) and, as already mentioned, turned positive during the last quarter of 2002. This differentiation in the rate of change in M0 suggests that, with the completion of the changeover to the euro, the pub-



lic began once again to hold large quantities of currency. It seems there was also increased demand for euro by residents of Greece's neighbouring countries. Moreover, the larger currency holdings are a result of interest rate cuts and the consequent drop in the opportunity cost of holding money. Nevertheless, currency in circulation in Greece at the end of 2002 accounted for 5.2% of Greek M3, while the corresponding percentage ten years earlier (in 1992) was 8.6% (see Chart VI.3A and VI.3B), since the greater use of credit cards

and the expansion of the ATM network have considerably limited the amounts of cash that people need to hold.

Deposits by residents of Greece (except central government) and the other euro area countries¹ with financial institutions operating in Greece were increasing at higher rates than in 2001 during the period from January to September 2002. Thereafter, there



was a differentiation in the growth rates of individual categories. The comparatively high rates of change prevalent until September 2002 reflect to a considerable extent the shift of savings from repos (on whose yields a tax was re-imposed on 1 January 2002) to deposits.

¹ In December 2002, deposits by residents of other euro area countries accounted for just 0.6% of the deposits included in Greece's M3.

There was also a similar move away from equity, owing to unfavourable conditions in the stock market. During the last quarter of the year, however, there was a new rearrangement of investors'/depositors' portfolios and a shift of funds from short-term to longer-term deposits, as well as to government paper.

As regards individual deposit categories, overnight deposits (sight deposits and current accounts) grew at comparatively high rates until September. Their annual growth rate gradually came to 15.8% in the third quarter of 2002 from 5.3% in the last quarter of 2001. However, the annual growth rate slowed down considerably in the last quarter of 2002 (5.7%), a development which was due to an actual decline in deposits during October and November, as well as to their high level at the end of 2001, as the public awaited the then imminent introduction of euro banknotes and coins. The share of overnight deposits in M3 during the period 1992-2002 rose to 10.8% at the end of 2002 (from 6.0% at the end of 1992), mostly because of the greater use of cheques and current accounts for payroll purposes.

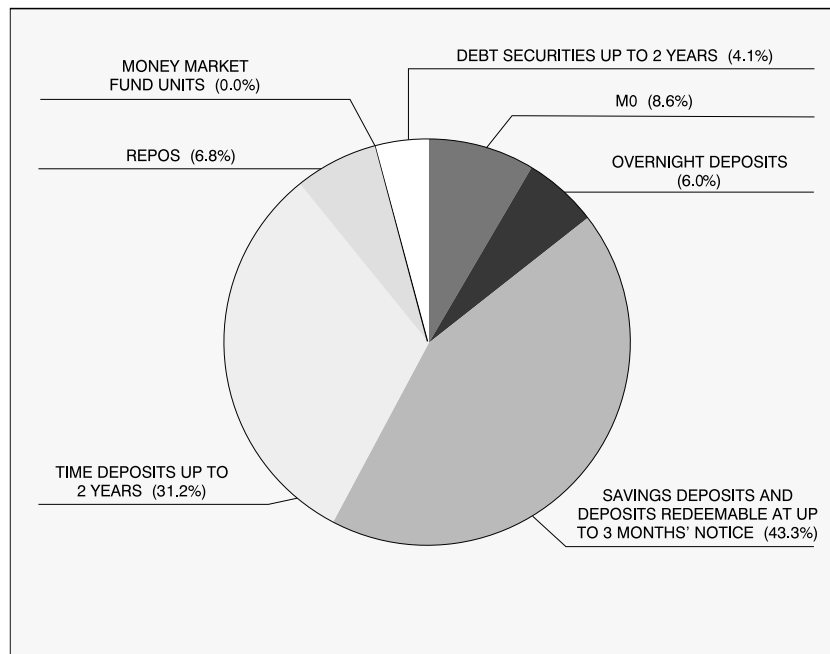
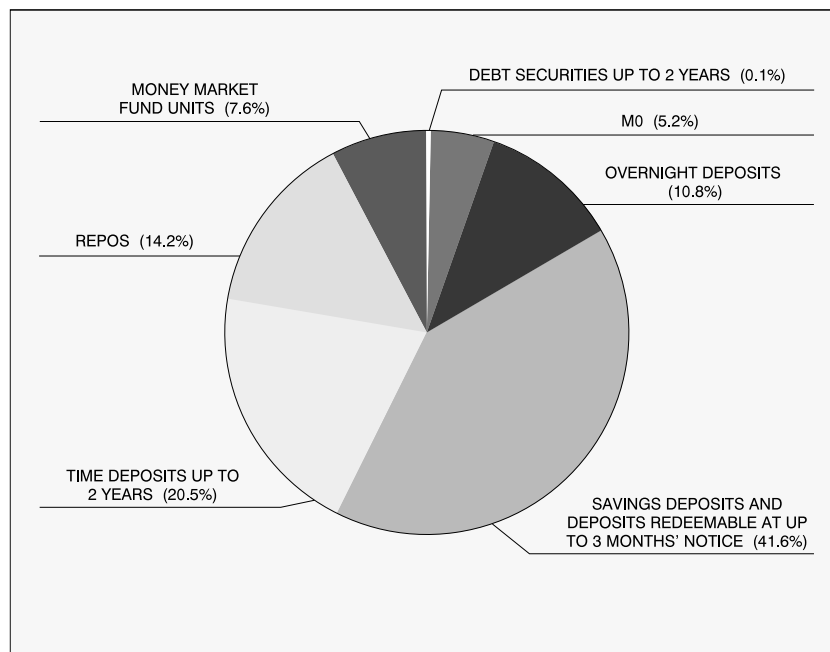
Savings accounts and deposits at up to three months' notice grew at a fast pace without considerable fluctuations during the period January-September 2002. In the last quarter of 2002, however, they decreased by €1,183 billion and their twelve-month growth rate fell to 9.7%, from 12.1% in the corresponding quarter of 2001. This development is connected with the reduction of interest rates on savings accounts, combined with a slight increase in time deposit rates, which apparently led savers towards investments with higher yields. The share of savings accounts and deposits at up to three months' notice in M3 did not change significantly over the 1992-2002 period (1992: 43.3%, 2002: 41.6%). Indeed, these deposits are the prevalent type in Greece, since they are highly liquid and allow depositors immediate access to their assets. They also offer the possibility of payment through standing orders. It is because of these features that savings accounts in Greece are similar to overnight deposits in many other euro area countries, where overnight deposits are prevalent.

The annual growth rate of time deposits maturing in up to two years accelerated to 10.1% in the fourth quarter of 2002, from -9.3% in the same quarter of 2001. The growth rate of time deposits sped up significantly during the last quarter of 2002 (Q3 2002: 6.1%), a development related to the savers' effort to achieve higher yields, given the expectations of an ECB rate cut (which was finally decided on 5 December 2002). The share of time deposits of up to two years' maturity in M3 at the end of 2002 was, in contrast to that of savings accounts, about 11 percentage points lower than in 1992, because, in that year, the use of other investment instruments (repos, money market funds) was limited.

Investments in repos with credit institutions operating in Greece declined considerably last year. Their annual growth rate turned negative for the first time in April 2002; the slowdown had started in October 2001. These investments decreased by €4,226 million in 2002. The annual growth rate in the fourth quarter of 2002 was -19%, compared with a positive growth rate of 38.3% in the last quarter of 2001. This development, as mentioned above, is related to the 7% tax¹ imposed on repo yields for agreements concluded

1 The decision to tax repo yields was announced in November 2001.

CHART VI.3
PERCENTAGE CONTRIBUTION OF M3 COMPONENTS IN GREECE
 (END-OF-YEAR DATA)

A. IN 1992

B. IN 2002


Source: Bank of Greece.

from January 2002 onwards and the shift of savers to investments with higher yields. Still, the share of repos in M3 at the end of 2002, at 14.2%, was 7.5 percentage points higher than in 1992. Finally, investments in money market fund units showed negative, albeit declining, growth rates until the end of November 2002. The growth rate turned positive in December (10.9%). In the fourth quarter of 2002, these investments decreased at an annual rate of 3.7%, compared with 38.4% in the same quarter of 2001. This development reflects investors' preference for safer investments during periods of stock market uncertainty. At the end of 2002, investments in money market fund units made up 7.6% of M3 compared with almost zero in 1992, when money market funds had just appeared.

Total deposits in euro and other currencies by residents of Greece (households and enterprises) increased by €2,952 million last year. This was due to a rise of €8,166 million in deposits in euro, which accounted for 83.7% of total deposits at the end of 2002, while deposits in other currencies fell by €5,215 billion, reflecting savers' trust in the single European currency. The growth of euro deposits was also due to an increase in the positive spread between deposit rates in euro and in US dollars,¹ as well as to the drop in the exchange rate of the dollar against the euro.

2. CREDIT DEVELOPMENTS

2.1 Total credit expansion and bank financing of general government

Total financing of the Greek economy by MFIs grew by €11,645 million in 2002, about the same as in 2001 (€11,641 million). The annual growth rate thus fell to 8.5% from 9.3% in 2001, owing to the slower expansion of credit to enterprises and households. On the other hand, the financing of general government by MFIs² decreased further in 2002, but at a lower rate than in 2001 (see Table VI.2).

Specifically, the financing of general government declined by €838 million or 1.3%, compared with a drop of €3,056 million or 4.6% in 2001. MFI claims on general government under the heading "loans" rose by 3.7%, compared with a fall of 3.1% in 2001. However, this increase was more than offset by a further decrease in credit institutions' and money market funds' investment in Greek government paper. To some extent, the decline in MFI holdings of Greek government securities reflects a substitution of this paper with government securities from other euro area countries. The portfolio of MFIs

1 The positive spread of the interbank 3-month deposit rates between deposits in euro and deposits in US dollars increased, despite the ECB rate cut in early December 2002, from 142 basis points in December 2001 to 153 basis points in December 2002.

2 The financing of general government by MFIs includes loans by credit institutions, as well as all paper held by credit institutions and money market funds. Credit to general government mainly concerns loans to public entities, social security funds and local authorities. These organisations did not issue debt securities. Changes in general government financing do not take into account the effect of any adjustments in the market value of government securities.

—excluding the Bank of Greece— at the end of 2002 included: domestic government paper of €40,477 million (97.8%) and government securities from other euro area countries of €896 million (2.2%), compared with €42,108 million (99.8%) and €64 million (0.2%), respectively, at the end of 2001.

TABLE VI.2
TOTAL CREDIT EXPANSION IN GREECE
(Annual percentage changes in outstanding balances)

	December		
	2000	2001	2002
1. Total credit expansion	15.3	9.3	8.5
2. Credit expansion to general government	6.1	-4.6	-1.3
3. Credit expansion to enterprises and households	27.6	24.8	16.9
3.1 Credit expansion to enterprises	24.6	18.5	9.6
3.2 Credit expansion to households	35.5	40.4	32.2

Source: Bank of Greece.

It should be noted that the borrowing requirements of general government were slightly less in 2002 and, on a cash basis, amounted to €5,542 million compared with €5,715 million in 2001. Moreover, the amount of government paper held by the private sector, excluding MFIs, grew by €1.038 million (2001: €-1,855 million). The amount held by non-residents also increased (2002: +€11,302 million, 2001: +€8,567 million).

2.2 Bank credit to enterprises and households

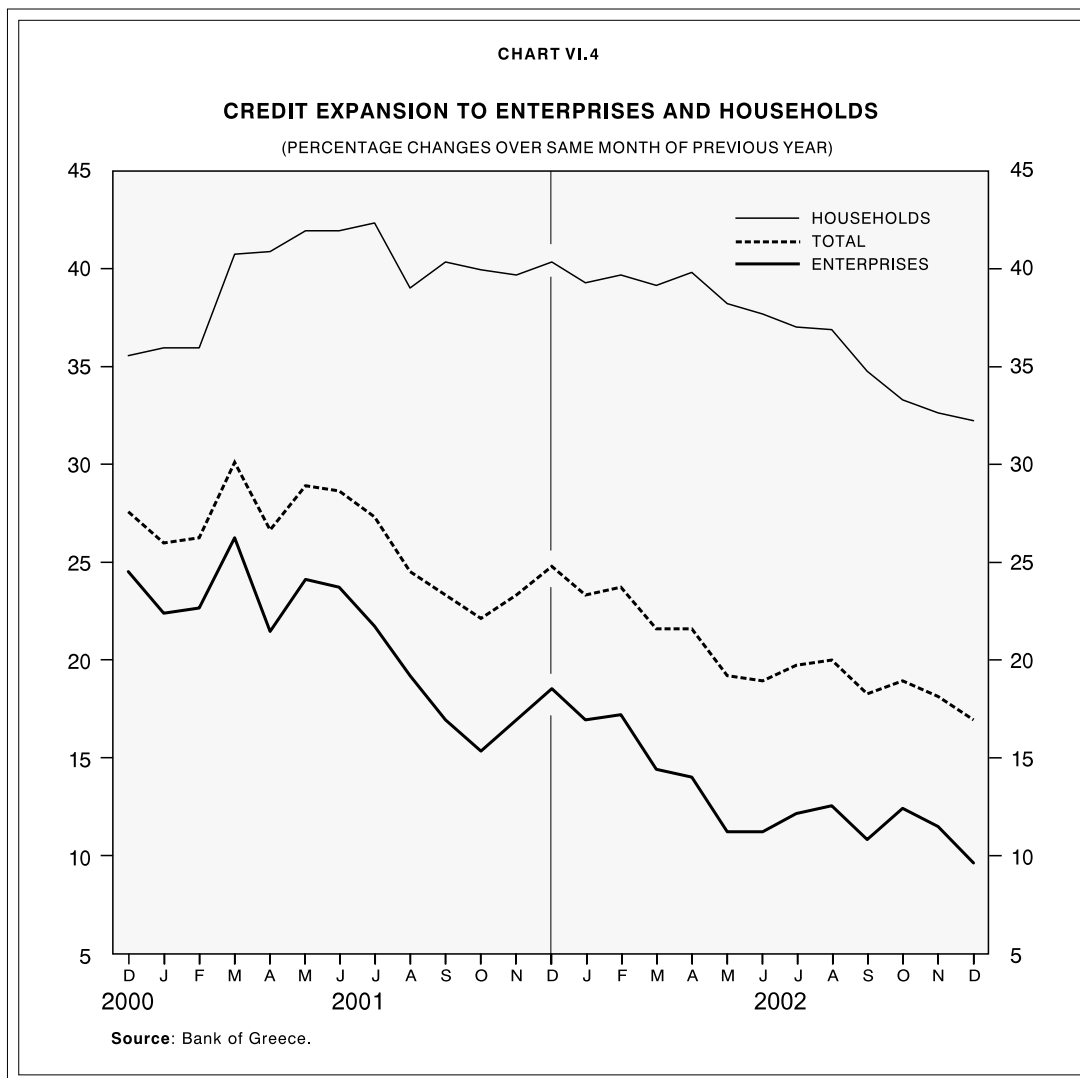
Credit expansion to enterprises and households fell to 16.9% in 2002 from 24.8% in 2001 (see Table VI.2). Credit expansion gradually slowed down from the beginning of the year (see Chart VI.4), mostly because of the limited expansion of credit to business. The expansion of credit to households (consumer loans in particular, which continued to rise at a fast pace) also decelerated. As noted elsewhere,¹ the very high growth rates of consumer loans in recent years have been due to: (i) the fact that the total amount of these loans is still relatively low as a percentage of national income, (ii) the significant cuts in interest rates² and (iii) heavy competition between banks in the promotion of consumer credit products. At any rate, insofar as consumer credit is concerned, after an initial phase

¹ See Bank of Greece, *Monetary Policy, Interim Report 2002*, November 2002, Chapter V.3.

² The interest rate on personal loans fell from 20.8% in December 1999 to 11.6% in December 2002.

of accelerated adjustment, it has entered a period of slower approach to equilibrium levels between demand and supply. A gradual decline in the growth rate of consumer loans is therefore expected.

The increase in bank credit during 2002 was mostly due to the rise in medium- and long-term loans, i.e. loans with an initial maturity longer than one year. Specifically, these



loans increased by 28.3% in 2002, compared with 29.4% in 2001, while short-term loans grew by a mere 6.6% in 2002, against 21% in 2001. The increase in medium- and long-term loans mainly reflects the fast growth of housing loans (2002: 35.6%, 2001: 38.9%), most of which are loans with an initial maturity longer than five years. The average maturity of bank credit to enterprises is also becoming longer in recent years. At the end of 2002, short-term loans to business accounted for 64.1% of all outstanding loans, compared with

68.1% at end-2001. In the euro area, the corresponding percentage was just 33.2% at end-2002. The rather large share of short-term loans in Greece reflects business firms' widespread practice of borrowing through open accounts, instead of through loan contracts with a specific maturity date. Credit through open accounts is classified as a short-term loan and accounts for almost half of the outstanding balance of all short-term loans,¹ thereby artificially inflating this particular category of loans.

TABLE VI.3
BREAKDOWN OF CREDIT SUPPLIED BY DOMESTIC MFIs TO DOMESTIC ENTERPRISES
AND HOUSEHOLDS

	Outstanding balances on 31.12.02 (million euro)	Changes in balances					
		Million euro			Percentages		
		2000	2001	2002	2000	2001	2002
A. Enterprises	55,012	8,370	7,838	4,813	24.6	18.5	9.6
1. Agriculture	3,225	270	-161	-500	7.5	-4.1	-13.4
2. Manufacturing ¹	14,364	1,342	791	1,749	12.8	6.7	13.9
3. Trade	15,671	3,156	3,150	147	34.2	25.5	0.9
4. Tourism	2,903	207	357	732	12.9	19.7	33.7
5. Shipping	4,147	714	489	43	24.6	13.5	1.1
6. Other (non-MFI) financial institutions	2,869	427	1,018	1,169	167.7	149.3	68.8
7. Other	11,833	2,254	2,194	1,473	38.1	26.9	14.2
B. Households	31,499	4,446	6,859	7,670	35.5	40.4	32.2
1. Housing loans	21,225	2,679	4,380	5,573	31.2	38.9	35.6
2. Consumer loans	9,755	1,650	2,341	1,903	42.7	42.5	24.2
– Credit cards	4,957	762	1,436	1,231	49.8	62.7	33.1
– Against supporting documents	1,768	459	508	-188	46.4	35.1	-9.6
– Personal loans	3,030	429	397	860	31.9	22.4	39.6
3. Other	519	117	138	194	169.9	74.0	59.7
TOTAL	86,511	12,816	14,697	12,483	27.6	24.8	16.9
– In euro	80,100	13,511	16,657	13,377	37.0	33.3	20.0
– In other currencies	6,411	-695	-1,960	-894	-7.0	-21.2	-12.2

¹ Including mining and small-scale industry.

Source: Bank of Greece.

As happened during the previous two years, credit expansion to enterprises in 2002 was almost all due to euro-denominated loans, which rose by 20%, compared with 33.3% in 2001. Loans in other currencies decreased by 12.2%, compared with a drop of 21.1% 2001. The reduction of the outstanding balance of loans in other currencies reflects to some extent the significant appreciation (19%) of the euro against the dollar between the end of 2002 and the end of 2001, which leads to a reduction in the outstanding balance of

¹ At the end of 2002, the outstanding balance of these loans to non-financial corporations made up 49.8% of their total short-term borrowing.

loans in dollars, when these are expressed in euro. It is worth noting that loans in currencies other than the euro are contracted mostly in dollars and yen. At the end of 2002, the composition of non-euro loans was: dollars 59% (55% in 2001), yen 23% (28%) and other foreign currencies 18% (17%). In 2002, there was a decrease in yen-denominated loans, whereas loans in dollars showed a small increase.

Bank credit to business grew by 9.6% in 2002, compared with 18.5% in 2001. As a result, its share in total credit expansion to enterprises and households was limited to 6.5% in 2002, from 13.2% in 2001 (see Chart VI.5). Despite this significant slowdown, the growth rate for 2002 was higher than nominal GDP growth (7.1%) and more than double the rate of growth of similar loans in the euro area (3.5%). An analysis of business financing by sector of economic activity (see Table VI.3) shows that the decline in credit expansion to enterprises in 2002 reflects the significant drop in the outstanding balance of loans to farmers by the Agricultural Bank,¹ even though a smaller slowdown was recorded in credit expansion to other sectors, except manufacturing and tourism, where credit growth accelerated. Safe conclusions about credit expansion by sector cannot be drawn, because, since September 2002, banks provide statistical information using a new form,² which allows for a more detailed classification of loans. Some banks used this as an occasion to reclassify loans. As a result, the outstanding balances of loans to commercial firms dropped significantly, while those to industrial and tourist enterprises increased.

As mentioned above, credit expansion to households decelerated, although it is still high. Specifically, the total amount of loans to households increased by 32.2% in 2002, compared with 40.4% in 2001. Their contribution to total credit expansion to enterprises and households fell to 10.4%, from 11.6% in 2001. This slowdown was due to a steep drop in the growth rate of consumer loans (2002: 24.2%, 2001: 42.5%), while the growth rate of housing loans fell only slightly (2002: 35.6%, 2001: 38.9%). Besides, a high rate of growth was recorded in other loans to households (2002: 59.7%, 2001: 74.0%). These include the debit balances of current account deposits, loans to settle tax and insurance obligations, loans for share acquisition, as well as loans to private non-profit institutions. However, the outstanding balance in other loans to households remains low (December 2002: €518 million or 1.6% of total household financing, December 2001: €325 million or 1.4% of total household financing), which accounts for the very high growth rates.

The large increase in housing loans is linked not only to the rather steep rise in real estate prices, which increases buyers' financing needs, but also to changes in the tax treatment of interest on loans concluded from the beginning of 2003 for the acquisition of a first dwelling. Indeed, many borrowers took out loans in 2002 to avoid the effects of the

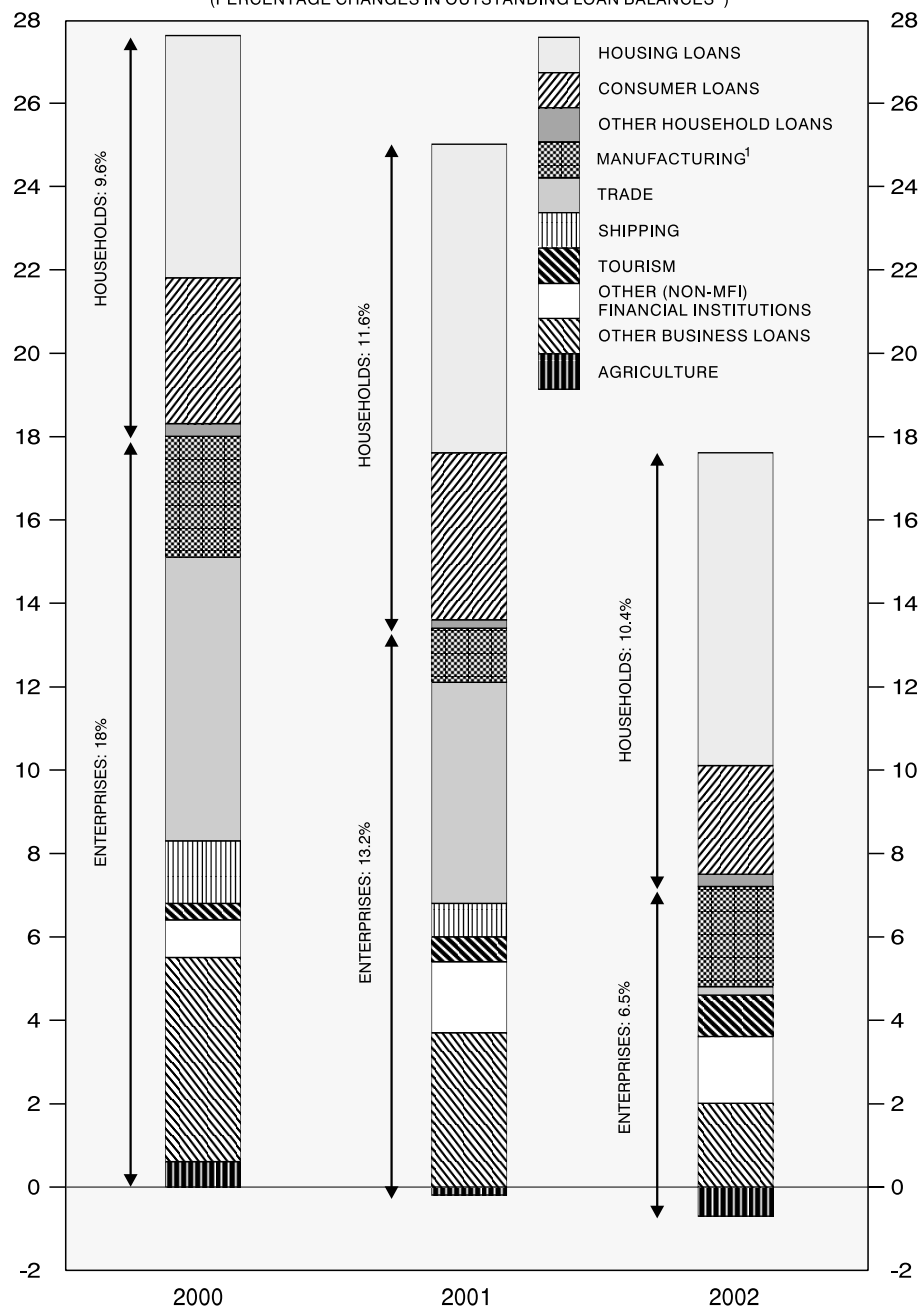
1 Owing to the settlement of loans to stock-farmers during 2002 and, generally, because of the Agricultural Bank's policy aimed at consolidating its portfolio, loans to farmers were reduced in 2002 by €500 million or 13.4%, compared with a reduction of €161 million or 4.1% in 2001.

2 This form was adopted in May 2002, under an ECB regulation.

CHART VI.5

BREAKDOWN OF CREDIT EXPANSION TO ENTERPRISES AND HOUSEHOLDS

(PERCENTAGE CHANGES IN OUTSTANDING LOAN BALANCES*)



¹ Including mining and small-scale industry.

* Compared with the end of the previous year.

Source: Bank of Greece.

tax restrictions in force since the start of 2003. The increase in housing loans is also linked to very strong competition between banks and the low interest rates in this loan category. Housing loan rates fell in 2002 (e.g. the average rate for fixed-rate housing loans with a maturity of over five years was cut to 4.9% in December 2002 from 5.4% in December 2001) and, at the end of the year, were lower than the euro area average.

At the end of 2002, housing loans accounted for 67.4% of total bank loans to Greek households, about the same as in the euro area (66.4%). As for the initial maturity of loans to households, their composition at the end of 2002 was as follows (euro area figures in brackets): loans maturing in up to one year, 20.6% (8.4%), between one and five years 13.0% (10.4%), over five years 66.4% (81.2%). Therefore, while there is no considerable difference between Greece and the euro area as to the kind of loans to households, there is a significant discrepancy as to the maturity structure of these loans, with short-term loans relatively increased in Greece. This is due to the importance of short-term loans in consumer credit in Greece, while in the euro area the bulk of consumer loans is made of loans maturing in over five years. Consumer loans in Greece are mainly short-term because consumers borrow mainly through credit cards.

The total outstanding balance of bank loans to households in Greece at the end of 2002 amounted to 22.3% of GDP, compared with a euro area average of 47%. Consequently, it cannot be said that Greek households are deeply in debt, even though it is likely that some of them have borrowed beyond their means, as determined by the size of their income and the value of their assets. The rather low level of Greek households' indebtedness was corroborated by a recent sample survey commissioned by the Bank of Greece. This survey shows that borrowing is concentrated in households with higher incomes and asset value and that, on average, the total outstanding balance of all types of loans does not exceed households' annual income, even in the lower income brackets. Repayment of these loans appears to be within households' means.¹ However, the high growth rates of both consumer and housing loans suggest the growing indebtedness of households and the need to monitor further developments closely.

Monitoring household debt will be greatly facilitated by the creation of the "Credit Bureau" by "Bank Information Systems – Teiresias S.A.". This effort is underway. For the time being, the system has been tried out on a pilot basis using data on 20% of banks' personal loan and credit card customers. Given that legal issues concerning the protection of personal data have been resolved, it is estimated that the system will soon be fully operational. Taking into account the risks arising from the high growth rate of bank loans, especially consumer loans, the Bank of Greece raised by 10 percentage points the ratios for the provisions banks must make on loans overdue for more than a year and on loans in permanent delay. Also, it set special rules concerning the formation of provisions for housing and consumer loans.²

1 See Bank of Greece, *Monetary Policy 2002-2003*, March 2003, Annex to Chapter VI.

2 See Chapter X.

Regarding individual consumer loan categories, it should be pointed out that loans through credit cards rose by a high 33.1% in 2002 (62.7% in 2001), because of keen competition between banks and the preference of businesses and consumers for this type of bank credit. The sum total of loans requiring supporting documents and personal loans rose at a lower rate (2002: 16.3%, 2001: 28.1%). As a result, the structure of consumer loans changed, with loans through credit cards gaining a bigger share (2002: 50.8%, 2001: 47.4%). Although these loans carry relatively high interest rates, they offer the advantage of easier access to bank credit.

3. BANK RATES

Competition between credit institutions and the setting of interest rates in the money market (directly related to the monetary policy actually being followed) are the main factors affecting the course of bank deposit and lending rates. On 5 December 2002, the ECB cut its key rates by 0.50 percentage point; this reduction passed on, after a brief delay, into the banking market and, as expected, affected bank deposit and lending rates in Greece and the other euro area countries.

The overnight deposit rate was cut by half a percentage point to 0.7% in December. While the reduction of the average rate on savings deposits until the end of November was modest (0.2 percentage point), following the ECB rate cuts the above rate dropped further (by 0.4 percentage point) to 1.1% in December 2002, where it remained for the first couple of months of this year. However, the persistence of inflation at a much higher level throughout 2002 led to a negative real rate¹ on these deposits (–2.0% on average).² It should be noted that the low rate on savings deposits reflects, in part, the cost of bank services offered through deposit accounts. Specifically, savings deposits, besides their high liquidity, offer the facility of automatic payments (standing payment orders), withdrawal and transfer of funds through cards and through the Internet etc. Repo yields fell further by 0.5 percentage point, to 2.9% in December 2002. In contrast, the average rate on twelve-month deposits rose by 0.4 percentage point to 2.8% in December, but fell by 0.1 percentage point in the first two months of 2003 (see Chart VI.6).

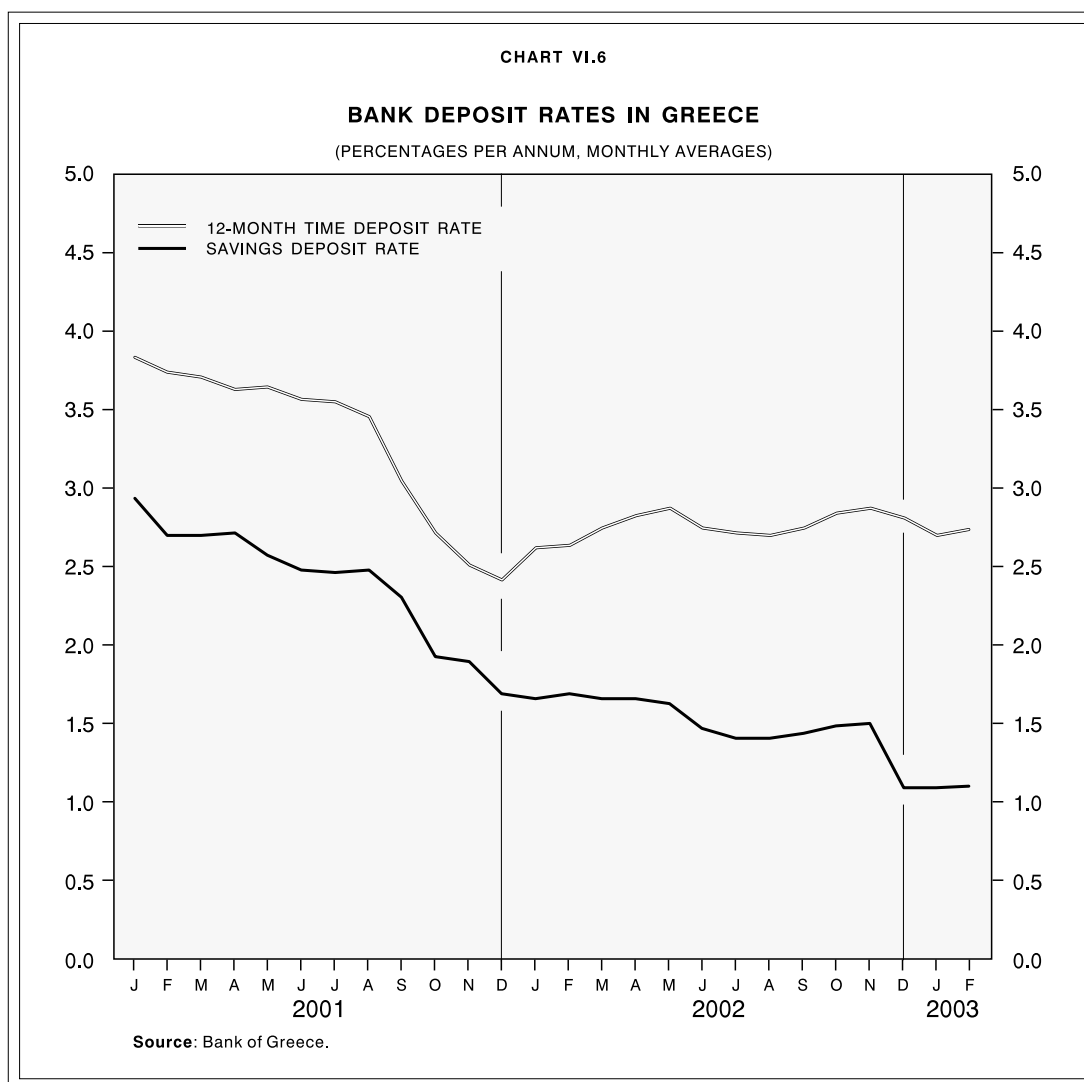
Developments in interest rates in Greece, combined with a smaller decrease in average rates in the euro area³ in 2002, resulted in a significant narrowing of the spread between Greek and euro-area rates in the case of sight deposits, while in the case of time deposits up to 12 months, the spread switched from negative at the beginning of 2002 to positive (0.3 percentage point) at the end of the year (that is, at the end of 2002 these rates

¹ Contrary to what is required by theory, the real rate was computed on the basis of past, not expected, inflation, since the latter is not directly observable.

² After the deduction of the tax on interest, the real interest rate becomes –2.2%.

³ The rates best suited for a comparison between Greece and the other euro area countries are those of sight deposits and time deposits up to 12 months.

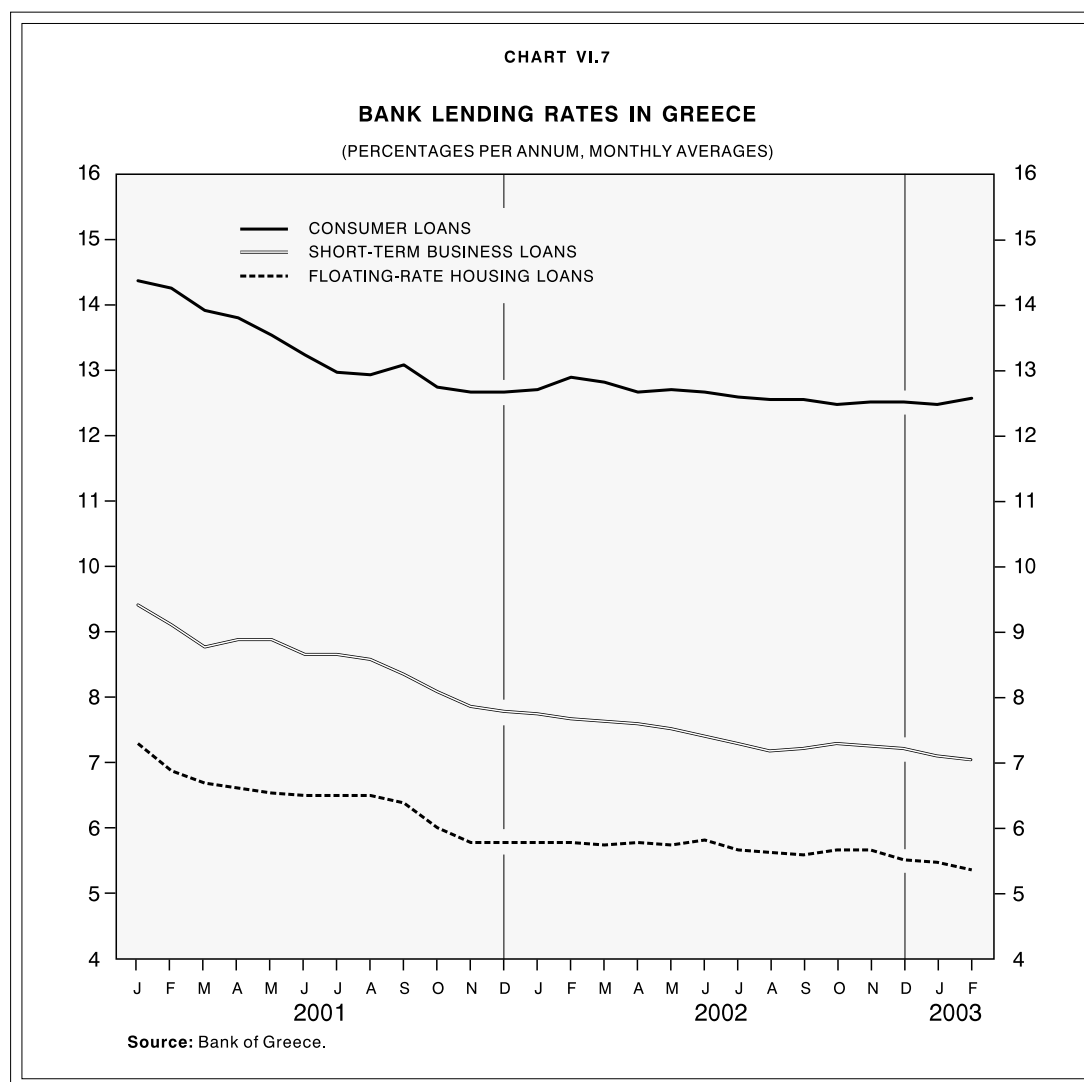
were higher on average in Greece compared with the euro area as a whole). In February 2003, the spread widened to 0.4 percentage point. It should be noted, however, that differences in competitive conditions, in the services offered by banks and in the tax treatment of interest affect the level of interest rates and partly account for the deviations between individual euro area countries.



Bank lending rates also fell last year in Greece (see Chart VI.7), converging further towards the euro area's generally lower rates. Special studies for the euro area have estimated that changes in money market rates affect bank lending rates gradually.¹ The percentage of a change in money market rates "passing through" to lending rates within

¹ De Bondt, G. (2002), *Retail bank interest rate pass-through: new evidence at the euro area level*, ECB Working Paper No. 136.

one month is less than 50%. In the long run, however, the change is fully absorbed into lending rates. Moreover, the pace at which lending rates in the euro area are adjusted has increased with the introduction of the single currency, since it is now easier for bank customers to compare offered rates. It should be noted, however, that this rather swift adjustment is not observed in consumer loans; their rates are adjusted after a longer time lag



and to a lesser extent to changes in money market rates. In Greece, the average short-term rate on loans to business was reduced by 0.6 percentage point in 2002, to 7.2% in December. As a result, the spread between this rate and the euro area rate was reduced to 1.3 percentage points from 1.5 percentage points at the end of 2001 (See Table VI.4 and Chart VI.8). In February this year, the spread was further reduced to 1.2 percentage points. Some businesses with a high credit standing borrow funds at lower rates, tied to the

EURIBOR. The drop in the average long-term lending rate to enterprises was steeper (0.8 percentage point). Since the reduction in the corresponding lending rate in the euro area during the same period was smaller (0.3 percentage point), the spread between these rates was reduced to 1.5 percentage points in December 2002, from 2 percentage points in December 2001, and was further reduced to 1.4 percentage points in February 2003.

Interest rates on consumer loans showed mixed trends during 2002. Specifically, the credit card lending rate was raised by 0.3 percentage point during January-November 2002, dropped in December 2002 by 0.3 percentage point back to December 2001 levels (15.4%) and did not change significantly during the first two months of 2003. Credit card rates are globally higher than other consumer loan rates, owing to the higher risk they

TABLE VI.4
LENDING RATES IN THE EURO AREA AND GREECE
(Percentages per annum)

	December 2001	December 2002	Change Dec. 2002/ Dec. 2001
Short-term business loans			
Average weighted interest rate in the euro area	6.25	5.97	-0.28
Maximum interest rate	8.89	8.70	-0.19
Minimum interest rate	4.45	4.20	-0.25
Interest rate in Greece	7.79	7.23	-0.56
Housing loans (fixed interest rate)			
Average weighted interest rate in the euro area	5.52	5.09	-0.43
Maximum interest rate	6.29	5.95	-0.34
Minimum interest rate	4.52	4.00	-0.52
Interest rate in Greece ¹	5.40	4.91	-0.49
Consumer loans (personal loans)			
Average weighted interest rate in the euro area	9.83	9.58	-0.25
Maximum interest rate	11.62	11.64	0.02
Minimum interest rate	5.45	5.09	-0.36
Interest rate in Greece	11.62	11.64	0.02

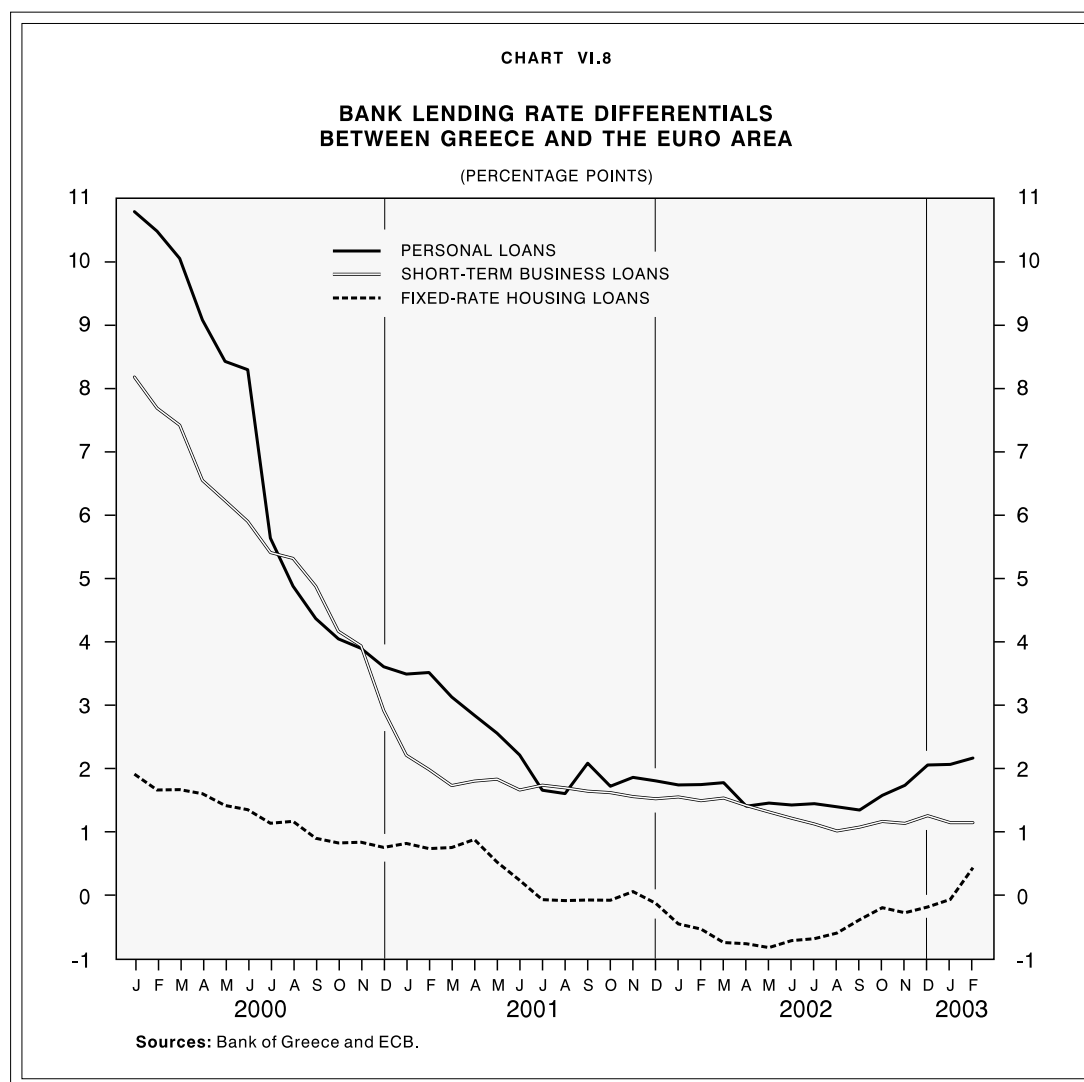
1 Average interest rate on loans with a maturity of over five years.

Sources: ECB and Bank of Greece.

incorporate. Rates on loans against supporting documents dropped by 0.5 percentage point in 2002 to 10.5% in December, but rose slightly, to 10.6%, in February 2003. Personal loan rates remained unchanged at 11.6% in 2002. Since the rate on personal loans was reduced by 0.2 percentage point in 2002 in the euro area, the spread between the two rates increased from 1.8 percentage points in December 2001 to 2.1 percentage points in December 2002.¹ This spread increased further to 2.2 percentage points in February 2003.

1 The personal loan rate in Greece is the most comparable with the consumer loan rate published in the ECB's *Monthly Bulletin*.

Interest rates on housing loans also decreased. The rate on the fixed-rate loan with a maturity over 5 years was cut by 0.5 percentage point to 4.9% in December 2002, 0.2 percentage point lower than the euro area average. In January 2003, the spread was reduced to 0.1 percentage point. Subsequently, however, lending rates in this category were raised in Greece. As a result, in February, they were 0.4 percentage point higher than in the euro



area. The interest rate on floating-rate housing loans dropped by 0.3 percentage point during 2002 (5.5% in December 2002, 5.8% in December 2001). In February 2003, this rate was further reduced, to 5.4%.

The spread between the average weighted rate banks apply to their new loans and the corresponding deposit rate has been narrowing in recent years. In 2002, it fell further, by 0.4 percentage point, since the average lending rate decreased more than the average

deposit rate. This spread declined by about 3 percentage points between December 1998 and December 2002. The decrease in the spread between lending and deposit rates is linked to the abolition or reduction of certain taxes and levies,¹ as well as to the harmonisation, during the second half of 2000, of the reserve requirement system applied by the Bank of Greece with the corresponding system in the euro area. This had considerable, direct and indirect, effects on the cost of money. However, the reduction in the spread was mainly the result of increased competition between banks, especially in the area of loans to households; it was also linked to the reduction in banks' operating costs, which, as a proportion of employed funds, were reduced to 2.3% in 2002 from 2.8% in 1997. The differentiation of operating costs by bank and the different size of risk assumed by each bank explain to a large extent any differences in interest rates (despite strong competition) between individual banks.

1 The Special Tax on Banking Transactions (EFTE) was reduced from 4% to 3% on 1 September 1997 and was abolished on 1 January 2001. Moreover, the charge under Law 128/75 was reduced from 1.2% to 0.6% on 1 April 2000.

VII. THE CAPITAL MARKETS

1. THE MARKET FOR GOVERNMENT PAPER

1.1 The primary market

In 2002 the primary market for government paper was marked by an increase in securities issues and a fall in interest rates. Factors such as the substantial increase in the public sector's gross borrowing requirement and the upgrading of the country's credit rating¹ contributed to these developments. Another important factor was the favourable conditions prevailing in international bond markets throughout 2002.

The nominal value of all types of government paper issued in 2002² rose to €32.1 billion, from €24.2 billion in 2001 and €26.8 billion in 2000 (see Table VII.1). Fund raising took place both through new issues and through re-issues. New issues mostly concerned syndicated loans³ and, to a lesser extent, issues through auctions⁴ in the domestic market. The government also reopened older issues through auction procedures. In addition, issues of syndicated loans made up 87% of the total value of new government paper issued in 2002 and concerned the new 5-year, 10-year and 20-year benchmark bonds. Moreover, the reopening of past issues increased the depth of the primary market by making the best out of the favourable conditions in the secondary market.

The liquidity of the primary market increased further in 2002 compared with 2001. In particular, in 2002 the amount of capital supplied by the investors taking part in the auctions for Treasury bills and government bonds was more than triple the demand, while in 2001 it was double. Specifically, the coverage ratio of the demanded capital amounted to 3.6 in 2002. This development underlines the increased interest of both domestic and, mainly, foreign investors.

The government securities issued in 2002 were mostly bonds with a maturity of 3 to 20 years (no 15-year bonds were issued) and, to a much lesser extent, Treasury bills with a maturity of 3, 6 and 12 months. Treasury bill issues amounted to €1.5 billion in 2002, compared with €1.2 billion in 2001, and constituted a mere 4.7% of total issues in 2002, i.e. about the same level as in 2001 (5%), compared with 12% in 2000 (see Table VII.1). As in previous years, 12-month Treasury bills prevailed, with a share of about 43% in the total value of Treasury bills issued. The limited issue of Treasury bills reflects the policy

1 On 4 November 2002, Moody's revised the rating of Greece's long-term credit standing from A2 to A1.

2 Including government bond securities for the payment of part of the government debt to the Social Security Fund (IKA) in application of article 51 of Law 2972/2001.

3 Banks (among Primary Dealers), operating as head arrangers, are selected each time for the issue of these loans. The interest rate of the issues is determined by the State according to the terms (interest rates) of the euro area bond market for respective maturities. This process improves the competitiveness of Greek government paper in international markets and expands its investment basis.

4 Conducted on a pre-announced quarterly basis.

followed over the past two years of substituting them with bonds and thus prolonging the average maturity of public debt.

The nominal value of government bonds offered in 2002 stood at €30.6 billion, from €23 billion in 2001 and €23.6 billion in 2000. Table VII.1 shows, first, that no 2-year and 15-year bonds were issued in 2002; second, that the share of long-term bonds (10 years and over) declined in 2002 (48%) compared with 2001 (55%); third, that there was

TABLE VII.1
BREAKDOWN OF GREEK GOVERNMENT PAPER ISSUES

Type	2000		2001		2002	
Treasury bills	12.0		5.0		4.7	
Bonds	88.0		95.0		95.3	
2-year		0.5		0.0		0.0
3-year		21.5		0.0		22.7
5-year		22.3		22.9		24.1
7-year		6.5		22.2		5.0
10-year		27.7		35.4		29.1
15-year		1.6		2.9		0.0
20-year		19.9		16.6		19.1
Total	100.0	100.0	100.0	100.0	100.0	100.0
Total value (million euro)	26,800		24,194		32,069	

Note: Breakdown by initial (not residual) maturity. Securities value is expressed in settlement prices.

Source: Bank of Greece.

a substantial shift from 7-year bonds to 3-year and 5-year bonds, which is in line with the path of yields and transactions in these maturities in the secondary market for government paper. On the basis of these developments, the weighted average maturity of all government paper was 8.5 years in 2002, i.e. unchanged from 2001 (2000: 8.4 years, 1999: 6.1 years).

The weighted average interest rates of bonds, attained in auctions held in 2002, followed the downward trend of secondary market bond yields. A decline was also recorded in the weighted average interest rates of Treasury bills.

1.2 The secondary market

The key features of the secondary market for government bonds in 2002 were the impressive rise in transactions and the fall in yields. The favourable conditions in the international bond markets owing to the drop in stock prices in international stock markets, the upgrading of Greece's credit rating, as well as certain institutional and organisational

changes that improved the functioning of the market¹ contributed to these developments. In addition, continuing uncertainty about the recovery of the world economy, as well as the geopolitical tensions in the last few months of 2002 owing to the then probable military intervention in Iraq, contributed to the shift of investors from shares to government bonds which, being fixed-income investment, run smaller investment risks.

The average daily value of transactions in the Book-Entry Securities Clearing System of the Bank of Greece increased by 33% in December 2002, compared with December 2001, while it recorded a further increase in the first quarter of 2003 (see Chart VII.1A). The average daily value of transactions through the Electronic Secondary Securities Market (HDAT) amounted to €2.3 billion in 2002, against €1.3 billion in 2001 and €0.3 billion in 2000, a fact that reflects the heightened attractiveness of this market both for domestic and — mainly — for foreign investors. According to balance of payments statistics, the net inflow of foreign capital for investment² in Greek government bonds in 2002 amounted to €11.9 billion. Transactions in the HDAT grew at a particularly fast pace in the first ten months of the year, but in the last two months they fell to levels lower than in October 2002. However, in the first quarter of 2003, transactions in the HDAT recovered noticeably (see Table VII.2 and Chart VII.1B). Transactions in long-term bonds (10 years and over) accounted for 59% of the total HDAT traffic in 2002, compared with 66% in 2001 (see Table VII.2). Ten-year bonds continued to attract comparatively more investors in the secondary market in 2002. The value of transactions in 10-year bonds represented 38% of the total value of transactions in 2002 (2001: 40%). It should be noted, however, that there was a substantial shift towards 5-year bonds and, to a lesser extent, 3-year bonds. Specifically, the share of the value of transactions in 5-year bonds in total transactions rose to 24% in 2002, from 13% in 2001, while the respective share of 3-year bonds also increased (2002: 5%, 2001: 2%), in line with the path of yields at respective maturities.

Reflecting similar developments in government bond yields in the euro area, respective Greek government bond yields fell in 2002, more markedly at medium maturities (3 and 5 years). In particular, the Greek 10-year government bond yield dropped to 4.44% at end-December 2002, from 5.28% at end-December 2001, i.e. by 84 basis points, while it recorded marked fluctuations during the year (see Chart VII.2). Specifically, in 2002 the spread between the maximum and the minimum yield (5.60% on 15 May and 4.44% on 31 December) stood at 116 basis points. The yield spread between the Greek

1 The system for the automatic price listing in the Electronic Secondary Securities Market (HDAT), put in operation in 2002, substantially improved access to the market. In addition, preparations were made during 2002 for the introduction — as from end-March 2003 — of the New (upgraded) Central HDAT System, offering a very increased potential for qualitative and quantitative improvements in the functioning of the market. In particular, the architecture and operational structure of the new system is in line with that of other systems (e.g. Euro-MTS), thus facilitating the trading and management of Greek government paper. In addition, it theoretically enables an unlimited number of price quotations, offers user-friendly information display and provides additional functions for market expansion into new products.

2 These investments concern both the primary and the secondary bond market.

T A B L E VII.2
VALUE AND STRUCTURE OF TRANSACTIONS IN GOVERNMENT SECURITIES IN HDAT

Period	Average daily value of total transactions (million euro)	Percentage share in the total value of transactions ¹						
		Treasury bills	Government bonds				15-year	20-year
			3-year	5-year	7-year	10-year		
2002								
Jan.	1,915.3	–	1.9	12.0	18.2	46.4	11.0	10.5
Feb.	1,825.7	– ²	1.5	17.1	20.0	41.7	11.0	8.7
March	2,073.4	–	5.7	21.5	11.6	39.3	10.3	11.6
Apr.	1,727.5	– ²	3.7	23.6	14.5	38.7	9.9	9.6
May	2,712.1	0.1	2.9	37.8	11.2	31.3	6.8	9.9
June	2,176.7	0.2	5.7	26.1	14.3	34.5	7.5	11.7
July	2,010.5	0.2	3.7	20.4	11.6	40.4	8.8	14.9
Aug.	2,725.3	– ²	4.1	27.4	10.4	38.3	7.9	11.9
Sept.	3,161.9	0.2	6.3	27.7	9.5	35.4	8.0	12.9
Oct.	3,149.8	0.1	5.4	21.0	12.9	38.6	8.7	13.3
Nov.	2,232.7	0.1	5.4	20.5	9.3	41.0	11.5	12.2
Dec.	1,629.6	– ²	10.2	21.6	9.7	35.6	10.2	12.7
Jan. - Dec.	2,278.4	–	4.7	23.8	12.5	38.1	9.1	11.8
2003								
Jan.	2,842.6	0.1	4.8	14.0	8.3	41.5	14.3	17.0
Feb.	2,351.8	–	3.9	16.8	5.4	44.8	10.4	18.7
March	2,691.8	– ²	5.4	17.5	5.7	44.3	10.3	16.8

¹ As per initial maturity.

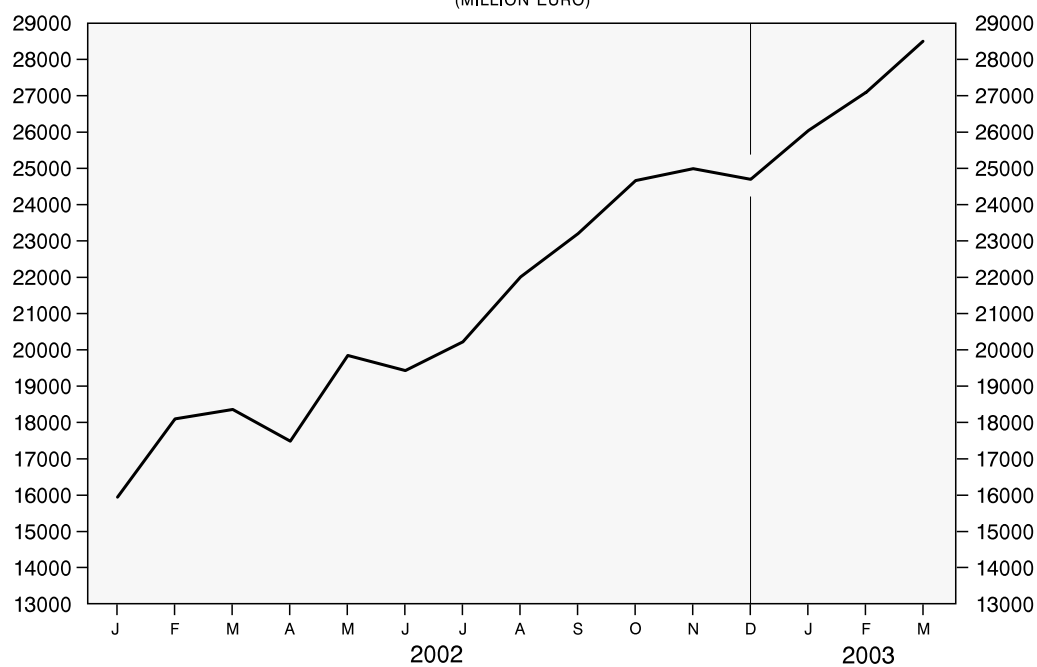
² The average daily value of transactions in Treasury bills amounted to €0.5 million in February 2002, €0.7 million in August 2002, €0.7 million in December 2002, €1.25 million in February 2003 and €0.8 million in March 2003.

Source: Bank of Greece.

CHART VII.1

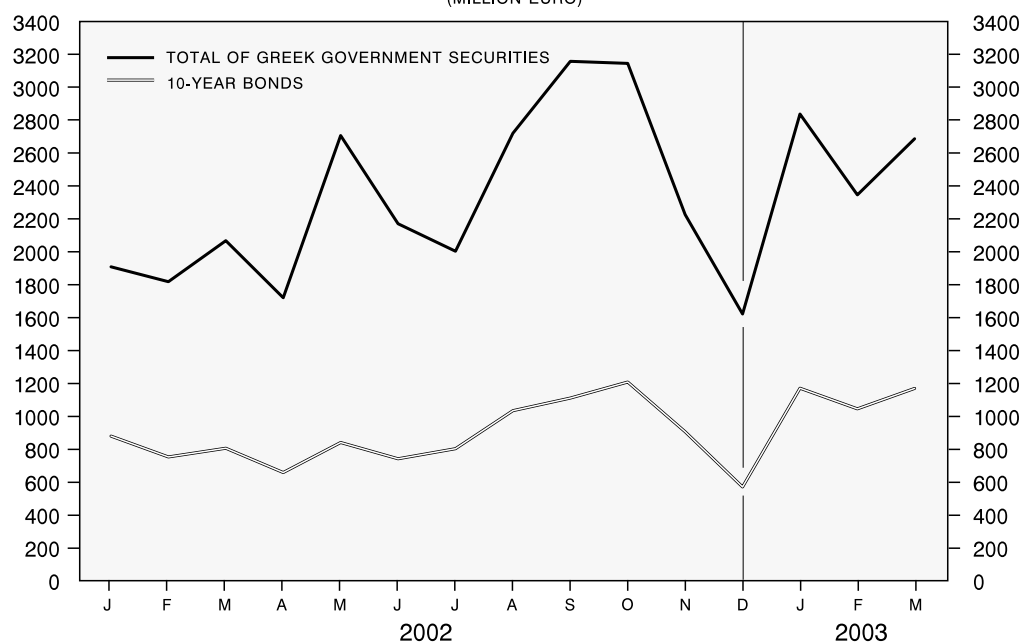
A. AVERAGE DAILY VALUE OF TRANSACTIONS IN GREEK GOVERNMENT SECURITIES IN THE BOOK-ENTRY SECURITIES SYSTEM

(MILLION EURO)



B. AVERAGE DAILY VALUE OF TRANSACTIONS IN HDAT

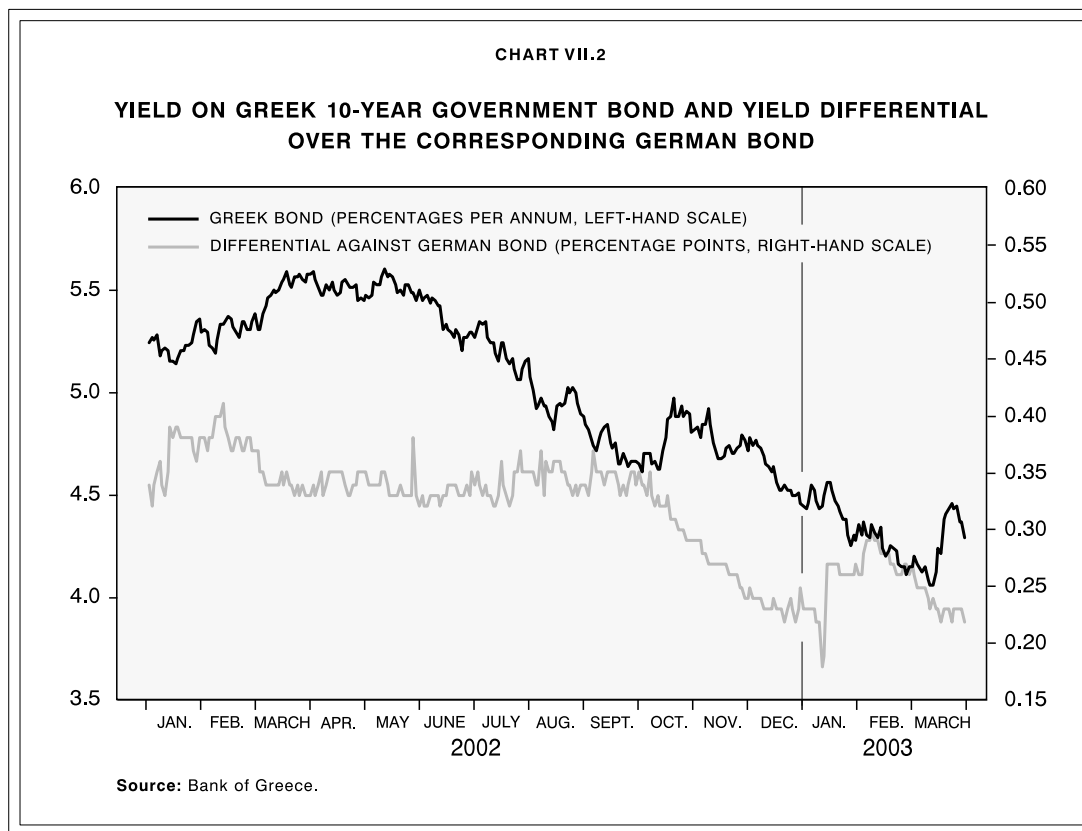
(MILLION EURO)



Source: Bank of Greece.

and the German 10-year bond remained at an average of 35 basis points in the first ten months of 2002, while, following the upgrading of Greece's credit rating,¹ it fell substantially and stood at the very low level of 23 basis points at end-December 2002 (from 34 basis points at end-December 2001 – see Chart VII.2). At end-March 2003, this spread remained roughly at the same low level (22 basis points). The drop in yields at all maturities continued in the first quarter of 2003.

Between the end of December 2002 and the end of December 2001, the government paper yield curve shifted downwards, taking on a less positive slope for maturities



from 12 months to 10 years. Specifically, the slope of the yield curve, as measured by the yield differential between the 10-year bond and the 12-month Treasury bill, narrowed to 0.70 percentage point at the end of December 2002, from 1.95 percentage points at the end of December 2001. However, from 3 to 10 years, the slope of the yield curve rose, reflecting optimistic estimates about the medium- to long-term economic activity outlook. In fact, between the end of December 2002 and the end of December 2001, the yield spread between 10-year and 3-year bonds increased by 40 basis points.

¹ See footnote 1 on the first page of this chapter.

Increased transactions in the secondary market for bonds imply an improvement in the already high liquidity¹ of this market, which led to a further slight narrowing of the spread between offered and asked prices for securities with a maturity of over 3 years, despite the already substantial decrease in this spread in the last three years, and, therefore, to the improvement in market efficiency. Specifically, this spread narrowed from 9.8 basis points in December 2001 to 9.4 basis points in December 2002. It should be noted that this spread shrank by approximately 18 basis points between December 1999 and December 2002.

These developments confirm the increased confidence of investors in the Greek economy, particularly after entry into the euro area.

2. THE STOCK MARKET

The negative conditions prevailing in the stock market during 2000-2001 continued in 2002. All stock-market-related indicators, such as stock prices, stock transactions and fund raising through the stock exchange, stood at levels lower than those of 2001.

These unfavourable developments were influenced by similar changes in the euro area and US stock markets, where stock prices recorded a substantial fall and high volatility in 2002. The negative performance of international stock markets was caused by limited corporate profits, mainly in high technology sectors, e.g. telecommunications,² by concerns about the reliability of management and accounting statements of a number of major US companies, the downward revision of assessments about the international economic outlook and, more recently, by tensions associated with the events in Iraq.

In addition to the aforesaid factors, the Greek stock market was adversely affected by the drop, for the third consecutive year, in the profits of many companies with shares listed on the Athens Stock Exchange (ASE). In particular, the pre-tax earnings of listed companies fell by approximately 17% in 2002,³ compared with -19% in 2001 and -13% in 2000. Approximately 20% of these companies recorded a loss in 2002, against about 7% in 2001.

The composite share price index fell by 32.5% between the end of December 2001 and the end of December 2002. The index peaked at 2,646.4 points on 4 January and reached its lowest value (1,727.1 points) on 9 October. The drop in stock prices was relatively stronger in the last four months of 2002, while it continued in the first quarter of 2003 (see Chart VII.3A). The rate of fall of the composite stock price index of the ASE

1 The establishment, as from May 2001, of new pier-like price ceilings in HDAT for the purchase and sale of securities also contributed to the increased liquidity of the secondary market.

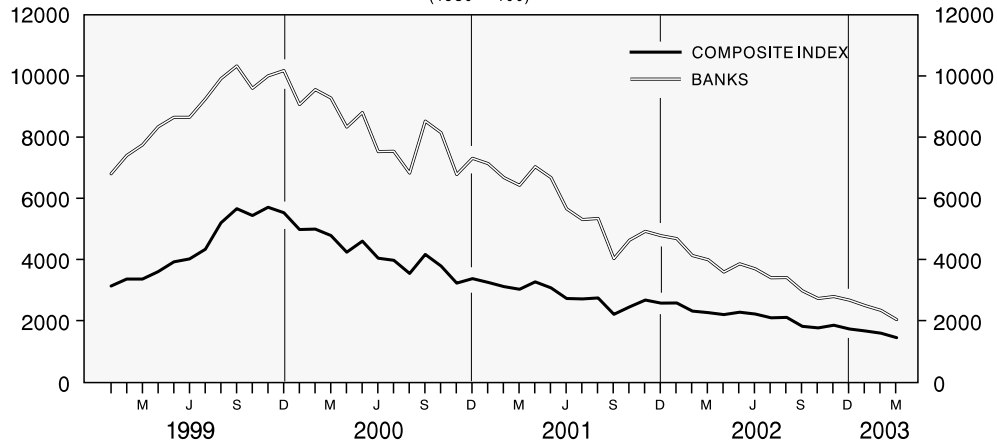
2 The drop in stock prices of these companies, mainly in the USA as well as the euro area, reflects, *inter alia*, high indebtedness combined with uncertainty about the yield of their investment in UMTS licences.

3 After deducting the profits of DEH S.A. (owing to the 24-month accounting year), total profits fell by 25% approximately. For the profits of a broader sample (that does not include the financial sector), see Chapter IV.3.

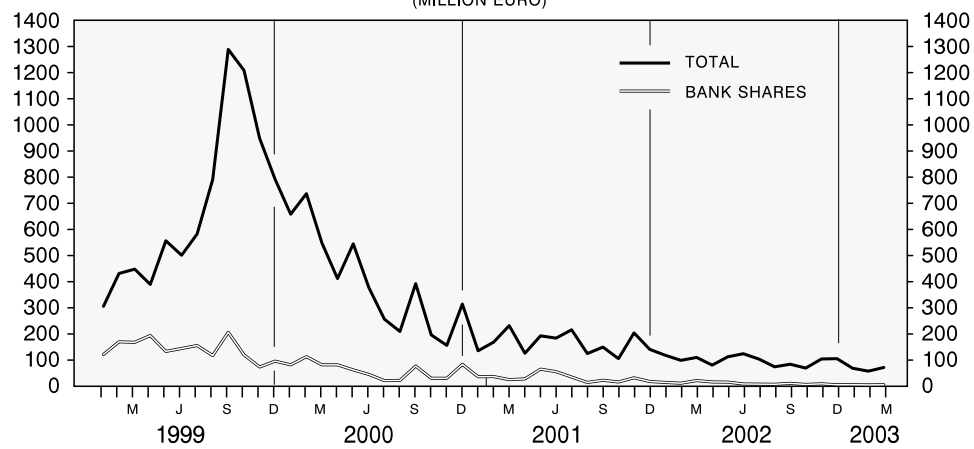
CHART VII.3

A. SHARE PRICE INDICES OF THE ATHENS STOCK EXCHANGE

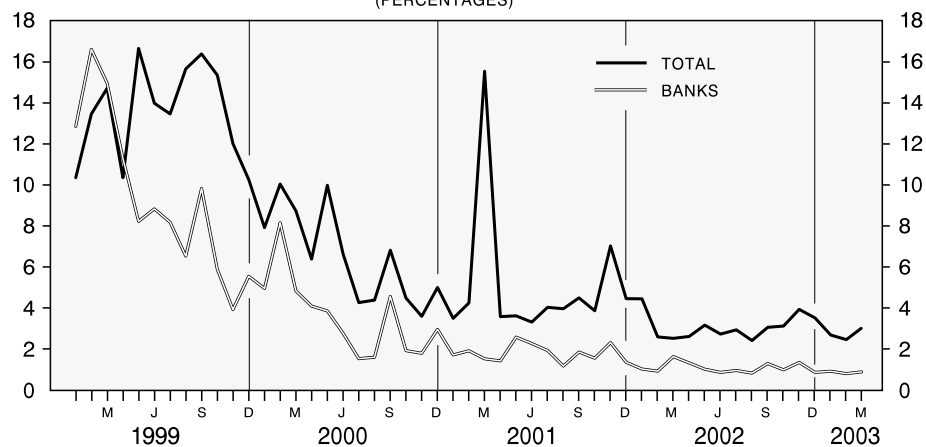
(1980 = 100)

**B. AVERAGE DAILY VALUE OF TRANSACTIONS**

(MILLION EURO)

**C. MONTHLY MARKETABILITY OF SHARES**

(PERCENTAGES)



Sources: Athens Stock Exchange (ASE) and Bank of Greece.

during 2002 was higher than that of the Standard and Poor's index in the USA (–23.4%), but lower than that of the Dow Jones EURO STOXX index for the euro area (–34.5%).

On the basis of these developments, the P/E ratio for all ASE-listed shares fell to 14 at the end of December 2002, from 18 at the end of December 2001. Thus, the Greek stock market at the end of 2002 recorded one of the most attractive valuations among all European Union stock markets. In addition, the dividend yield of all ASE-listed shares, on the basis of stock prices at the end of 2002 and available information concerning the dividends distributed for 2002, remained at a relatively satisfactory level, despite the slight decrease relative to 2001.

The value of trading in shares on the stock market reached €24,759 million in 2002, compared with €41,525 million in 2001 (see Chart VII.4). The daily value of transactions recorded a small fluctuation during 2002 (see Chart VII.3B) and was limited to €100 million, from €166 million in 2001. Share marketability,¹ which fell to 3.5% in December 2002, from 4.4% in December 2001 (see Chart VII.3C) followed a similar path. During the first quarter of 2003, both the daily value of transactions and share marketability recorded a further slight fall. Among the individual business sectors, a substantial fall in transactions was recorded in the financial sector (banks, leasing, insurance and investment companies), as well as by commercial-industrial and construction companies; as a result, trading in these industries' stocks declined as a proportion of total trading, while the share of the remaining industries increased (see Table VII.4).

The market capitalisation of ASE-listed shares fell to €65,760 million or 47% of GDP at the end of 2002, from €96,950 million or 74% of GDP at the end of 2001 (see Table VII.3). A drop was recorded in the market capitalisation of all shares of the primary and the parallel market. This development reflects the substantial decline in stock prices, which more than offset the small expansionary influence exerted on market capitalisation in 2002 by the limited listing of new companies and the capital stock increases of ASE-listed companies.

The investment behaviour of both savers and institutional investors was adversely affected by the steep drop in share prices and their increased volatility. In more detail, the fact that investors increasingly liquidated equity-type mutual fund units and mutual fund managers partly replaced their investments in ASE-listed shares with foreign bonds resulted in a decrease of approximately €340 million in mutual funds' and portfolio investment companies' holdings in shares (at constant prices) at the end of 2002 compared with the end of 2001, while in 2001 the corresponding decrease was €684 million.

The adverse conditions prevailing in the stock market in 2002 severely constrained fund raising by both newly-listed companies and – mainly – companies with already listed shares. Total funds raised by means of capital stock increases dropped by 58% and stood at €353 million in 2002,² from €836 million in 2001 and €8,787 million in 2000 (see Table

1 The number of shares traded to the total number of listed shares.

2 By public subscription or private investment.

TABLE VII.3
STOCK MARKET AGGREGATES

Year	Share price indices ¹ (1980 = 100)		Average daily value of transactions ² (million euro)	Market capitalisation ¹ (million euro)			Market capitalisation (percentage of GDP)			Funds raised through the Athens Stock Exchange ⁴ (million euro)		
	Composite	Banks		Shares	Bonds ³	Total	Shares	Bonds	Total	Listed companies	New companies	Total
1999	5,535.1	10,165.4	690.2	197,537	76,860	274,397	175	68	243	8,587	1,124	9,711
2000	3,388.9	7,307.0	400.0	117,956	76,942	194,898	97	63	160	6,967	1,820	8,787
2001	2,591.6	4,788.1	166.1	96,950	81,180	178,130	74	62	136	367	470	836
2002	1,748.4	2,688.2	100.2	65,760	114,570	180,330	47*	81*	128*	267*	86*	353*

1 At year-end.

2 In shares. Excluding transactions in existing shares.

3 Consisting of Greek Treasury bills and government bonds (drachma-denominated and with a foreign currency clause), bank bonds and corporate bonds.

4 Through capital increase and issue of new shares. Subscriptions to new capital are entered on the last day of the subscription period.

* Provisional data.

Sources: ASE, Bank of Greece and (for GDP) Ministry of Economy and Finance.

TABLE VII.4
VALUE AND STRUCTURE OF STOCK MARKET TRANSACTIONS
(Million euro)

	1 9 9 9		2 0 0 0		2 0 0 1		2 0 0 2	
	Value of trans- actions	Percentage of total	Value of trans- actions	Percentage of total	Value of trans- actions	Percentage of total	Value of trans- actions	Percentage of total
Shares	172,548.8	100.0	100,786.7	99.8	41,525.3	100.0	24,759.1	99.9
Main market	153,373.1	88.9	83,962.0	83.1	34,706.4	83.6	19,674.5	79.4
–Banks	35,658.3	20.6	15,662.8	15.5	8,485.7	20.4	3,274.1	13.2
–Leasing	1,184.0	0.7	399.9	0.3	82.3	0.2	22.6	0.1
–Insurance	3,262.2	1.9	2,519.7	2.5	2,276.9	5.5	119.6	0.5
–Investment	5,302.6	3.1	2,698.6	2.7	630.5	1.5	268.2	1.1
–Construction	14,252.2	8.3	6,145.2	6.1	2,775.4	6.7	1,449.6	5.8
–Commercial/industrial	61,362.8	35.6	31,801.1	31.5	7,666.6	18.5	3,503.8	14.1
–Telecommunications	9,546.5	5.5	9,286.4	9.2	4,684.7	11.3	4,330.6	17.5
–Holdings	6,190.9	3.6	4,480.1	4.4	3,035.6	7.3	1,903.5	7.7
–Other	16,613.6	9.6	10,968.2	10.9	5,068.8	12.2	4,802.5	19.4
Parallel market	19,175.7	11.1	16,824.7	16.7	6,818.9	16.4	5,084.6	20.5
Bonds¹	13.0	0.0	251.9	0.2	18.6	0.0	13.0	0.1
Total	172,561.8	100.0	101,038.6	100.0	41,543.9	100.0	24,772.1	100.0

¹ Comprising Greek government bonds (drachma-denominated, in foreign currency, and with a foreign currency clause) and corporate bonds.
Source: ASE.

VII.3). These funds were raised by 37 companies (2001: 40 companies), out of which 14 listed their shares for the first time and raised €86 million, compared with 21 new companies in 2001 which raised €470 million. In particular, approximately 40% of total funds was raised by 4 holding companies.

Between end-December 2001 and end-December 2002, the index of bank share prices fell by 43.9% and continued to drop in the first few months of 2003 (see Table VII.3 and Chart VII.3A). The average daily value of transactions in bank shares fell by 62% and stood at €13 million in 2002, from €34 million in 2001. Similarly, the average monthly marketability of bank shares dropped to 0.8% in December 2002, from 1.3% in December 2001 (see Chart VII.3C). The P/E ratio of bank shares¹ rose to 13 at the end of December 2002, from 12 at the end of December 2001, while the dividend yield of banks² fell slightly to 3.6% in 2002, from 3.9% in 2001. In general, the stock-market-related indicators of banks were more unfavourable in 2002 than those of the market as a whole, as in 2001. This development is largely associated with the aforementioned general reasons, but also with the decline in the profitability of banks in 2002 for the third consecutive year. In greater detail, the total pre-tax earnings of banks with ASE-listed shares, which had already fallen by 16% in 2000 and 11% in 2001, were further reduced by 47% in 2002.³ The substantial acceleration in the rate of decline of commercial banks' profitability in 2002 was due to the significant decrease in revenue from financial operations and commission fees. By contrast, net interest revenue grew at a rate higher than that of operating expenses. It should be noted, however, that, despite these adverse developments, Greek commercial banks achieved a comparatively better performance in 2002 than their counterparts in other EU countries (for details, see Chapter X.2.1).

The share prices of portfolio investment companies fell by 28.8%, which is associated with the drop of the ASE composite share price index, since a considerable part of the portfolio of these companies consists of ASE-listed shares. Moreover, share prices of insurance companies at the end of 2002 were 71.4% lower than at the end of 2001, reflecting the serious difficulties facing these companies around the world after the terrorist attack in the USA on 11 September 2001.

The share prices of construction companies fell by 17.4%, despite an impressive rise in profitability (76%) and turnover (130%), owing to the favourable conditions the industry has been enjoying in recent years following the application of the 2nd and the 3rd Community Support Framework and the preparations for the Athens 2004 Olympic Games. It is worth noting that several of these companies engaged in acquisitions and mergers in 2002 on the basis of the incentives offered by Law 2940/2001, in order to increase their size and enhance their competitiveness in the domestic and international markets (also see Box III.4).

1 Excluding the Bank of Greece.

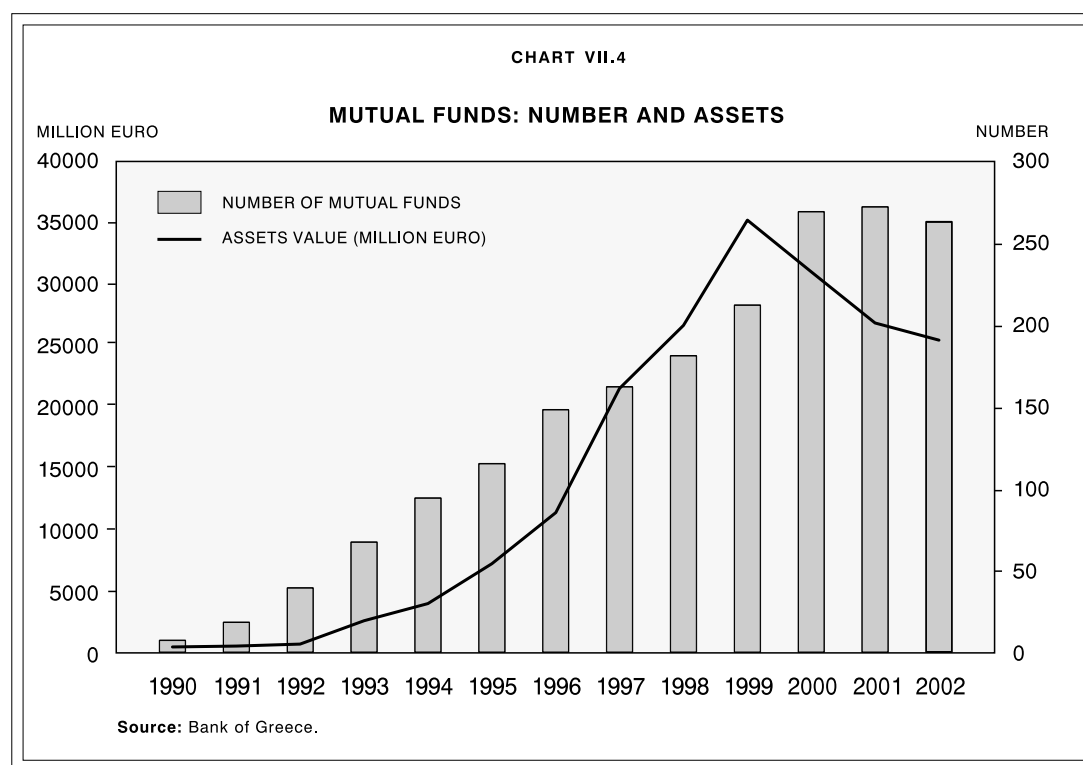
2 The five major Greek commercial banks.

3 The profits of Greek commercial banks as a whole (banks with shares listed on the ASE) fell by 45% in 2002, compared with a decrease of 14% in 2001 and 24% in 2000.

Finally, the index of industrial share prices fell by 33.9% at the end of 2002, compared with the end of 2001. The above-mentioned factors, as well as the small drop (2%) in the profitability of industrial companies with ASE-listed shares account for this outcome. Among individual manufacturing industries, those of food, oil, non-metallic minerals and tobacco saw their profits increase.

3. THE MUTUAL FUNDS MARKET

The activity of mutual funds in 2002 declined for the third consecutive year (see Chart VII.4). The rate of decrease in mutual funds' assets was higher in the first ten months of 2002, but substantially lower in the last two months of the year, mainly owing



to the launch of new mutual funds. Then, in the first quarter of 2003, mutual funds' assets increased. Specifically, the value of mutual funds' assets dropped by €1.4 billion or 5.2% to €25.4 billion at the end of 2002, from €26.8 billion in 2001 (see Table VII.5). This was mainly due to the fall in prices, as well as the number of units in circulation. A significant decrease was recorded in the prices of equity-type mutual fund units, while an increase was recorded in the prices of bond-type and money-market-type mutual fund units and, to a lesser extent, of balanced-type mutual funds. The number of units in circulation was

reduced in 2002 for bond-type and equity-type mutual funds (by 12% and 8% respectively), while it was substantially increased for money-market-type and, to a lesser extent, for balanced-type mutual funds¹ (by 24% and 4% respectively). It should be noted that the increase in mutual fund units of the balanced type was due to the sale of units of a new mutual fund of this category, launched in November 2002.

Demand for mutual fund units in 2002 was met primarily by the sale of units already on the market at the end of 2001 and, to a lesser extent, by the launch of new mutual funds in 2002. In greater detail, 12 mutual funds were established in 2002 (5 of the money-mar-

TABLE VII.5
MUTUAL FUNDS: NUMBER AND ASSETS¹
(Million euro)

Type of mutual fund	2001		2002		Percentage of total assets	
	Number	Assets value	Number	Assets value	2001	2002
Money-market type	43	9,693	41	10,747	36.1	42.3
Domestic	37	9,643	36	10,714	35.9	42.2
Foreign	2	9	1	0	0.0	0.0
International	4	41	4	33	0.2	0.1
Bond type	63	5,586	63	5,120	20.8	20.1
Domestic	33	4,901	32	4,275	18.3	16.8
Foreign	13	387	14	525	1.4	2.1
International	17	298	17	320	1.1	1.3
Equity type	130	5,506	123	3,761	20.5	14.8
Domestic	77	5,101	77	3,437	19.0	13.5
Foreign	31	299	30	270	1.1	1.1
International	22	106	16	54	0.4	0.2
Balanced type	36	6,040	36	5,801	22.5	22.8
Domestic	25	5,858	25	5,647	21.8	22.2
Foreign	2	3	2	2	0.0	0.0
International	9	179	9	152	0.7	0.6
Total	272	26,825	263	25,429	100.0	100.0

1 At year-end.

Source: Bank of Greece.

ket type, 5 of the equity type, 1 of the balanced type and 1 of the bond type), with total assets valued at €1.1 billion at the end of 2002, representing approximately 4.5% of the total value of mutual funds' assets. Moreover, 21 mutual funds (12 of the equity type, 6 of the money-market type, 2 of the bond type and 1 of the balanced type) withdrew² from the

1 Among the subcategories of mutual funds, increased sales of units were recorded in 2002 mainly by foreign equity-type, foreign bond-type and domestic money-market-type funds and, to a lesser extent, by international bond-type, international balanced-type and domestic balanced-type funds.

2 Out of these, 10 mutual funds (6 equity-type, 3 money-market-type and 1 bond-type) merged with 8 mutual funds of corresponding MFMCs.

market in 2002, while one mutual fund changed its investment purpose and is now classified as a bond-type mutual fund. Following these developments, the number of mutual funds decreased to 263 at the end of 2002, from 272 in 2001 and 269 in 2000 (see Table VII.5 and Chart VII.4). Three new Mutual Fund Management Companies (MFMC) started operating in 2002 and one MFMC ceased operating. Thus, at the end of 2002 the total number of MFMCs was 28, compared with 26 in 2001.

The fall in the value of mutual funds' total assets reflects corresponding developments in the value of the assets of mutual funds mainly of the equity type (–31.7%) and, to a lesser extent, of the bond type (–8.3%) and the balanced type (–4.0%). By contrast, the assets of the money-market type increased by 10.9%, largely owing to the launch of a new mutual fund of this category in December 2002 (see Table VII.5). Owing to the increased demand for money-market-type mutual fund units, their share in the total value of mutual funds' assets increased to 42.3% at the end of 2002, from 36.1% at the end of 2001, while the respective share of balanced-type mutual funds was virtually unchanged (2002: 22.8%, 2001: 22.5%). By contrast, the share of equity-type mutual funds showed a steep fall (2002: 14.8%, 2001: 20.5%), while the share of bond-type mutual funds decreased slightly (2002: 20.1%, 2001: 20.8% – see Table VII.5).

The further decrease in the assets of mutual funds in 2002 was mainly due to the drop in the prices of shares in the Greek and international stock markets, as well as the shift of investors to money-market-type and bond-type mutual funds (foreign and international), which, during the year, combined higher yields with lower risks, compared with alternative forms of investment.

Similar developments occurred in the US and EU mutual fund markets regarding the decrease in the value of mutual funds' total assets,¹ owing to the continued drop in the prices of shares in international stock markets and the shift of investors towards money-market-type mutual funds (EU) and bond-type mutual funds (USA, EU). Nevertheless, holders of equity-type mutual fund units, both in Greece and, mainly, abroad, liquidated only limited quantities of units, emphasising, at the present juncture, the relatively long investment horizon of these products.

The investment behaviour of mutual funds in 2001 continued in 2002, favouring holdings in foreign bond markets and the Greek money market. Specifically, the decrease of €1.4 billion in mutual funds' assets between December 2001 and December 2002 was due to the decline of holdings in synthetic currency swaps (€–2,370 million), ASE-listed shares (€–1,828 million), repos (€–1,042 million) and Greek government paper (€–542 million) (see Table VII.6). By contrast, there was an increase in holdings in deposits and cash (of €2,704 million) as well as in foreign bonds (of €1,157 million), while there were holdings in foreign repos in this period (€366 million), unlike 2001. At the end of 2002, 18.6% (2001: 26.5%) of all mutual fund portfolios consisted of holdings in synthetic cur-

¹ Between the end of December 2001 and the end of December 2002, the value of mutual funds' assets decreased by 6.5% in the European Union and 12.6% in the USA.

rency swaps, 17.8% (2001: 18.9%) in Greek government paper, 15.6% (2001: 17.3%) in repos, 13.5% (2001: 8.5%) in foreign bonds and 12.5% (2001: 18.7%) in ASE-listed shares.

The organisational and institutional framework governing the mutual funds market was refined in 2002, aiming at protecting investors, upgrading the services offered and improving the functioning of this market. Among other things, holders of foreign mutual fund units were treated regarding taxation as holders of domestic mutual fund units in

TABLE VII.6
PORTFOLIO STRUCTURE OF MUTUAL FUNDS¹
(Million euro)

	2001	2002	Change
Domestic investment	22,911	19,833	-3,078
– Synthetic currency swaps	7,105	4,735	-2,370
– Greek government bonds and Treasury bills	5,068	4,526	-542
– Shares listed on the ASE	5,018	3,190	-1,828
– Repos	4,646	3,604	-1,042
– Bank deposits and cash	1,047	3,778	2,704
Foreign investment	2,706	4,492	1,786
<i>of which:</i>			
– Bonds	2,277	3,434	1,157
– Repos	0	366	366
Other investment	1,209	1,104	-105
T o t a l	26,826	25,429	-1,397

1 At year-end.

Source: Bank of Greece.

relation to capital profits, while the law on real estate mutual funds and real estate investment companies was passed. Finally, in February 2002 the European Commission issued two new Directives relating to undertakings for collective investment in transferable securities (UCITS) of the European Union (2001/107/EC and 2001/108/EC),¹ which are expected to produce significant institutional and organisational changes in the mutual funds market and, specifically, to expand the investment potential of MFMCs and enhance the protection of investors.

¹ These Directives should be transposed into national law by 13 August 2003.

VIII. PUBLIC FINANCE

1. THE PUBLIC SECTOR BORROWING REQUIREMENT AND ITS FINANCING

In 2002, for the second consecutive year, no progress was made towards fiscal consolidation in the EU, as most countries showed deficits considerably higher than the relevant forecasts. As a result, the average deficit in the EU-15 rose from 0.9% of GDP in 2001 to 1.9% in 2002. At the same time, Eurostat revised and supplemented the definitions and rules of the European System of Accounts (ESA 95) concerning the fiscal deficit and debt, which led to upward revisions of these aggregates in some countries,¹ including Greece. However, despite smaller progress towards fiscal consolidation and the revision

TABLE VIII.1
GENERAL GOVERNMENT BALANCE¹
(Percentages of GDP)

	1998	1999	2000	2001	2002*
General government					
National accounts data - <i>convergence criterion</i>	-2.5	-1.8	-1.9	-1.4	-1.2
On an accrual basis ²	-3.2	-2.5	-3.1	-2.9	-2.2
Borrowing requirement (on a cash basis) ³	-5.0	-3.7	-4.0	-4.4	-3.9

1 Deficit (-), surplus (+).

2 Ministry of Economy and Finance and Bank of Greece data.

3 Including expenditure for the acquisition of assets, which, however, according to established international practice, are deducted from the two indicators above. It should be noted that, following the revision of data by Eurostat, this expenditure was drastically reduced for the years 2000 to 2002, while for the two-year period 1998-1999 no revision was made and this expenditure is considerably larger.

* Provisional data.

Sources: Bank of Greece, Ministry of Economy and Finance and NSSG.

of data, the general government deficit in Greece continued its downward path and declined from 1.4% of GDP in 2001 to 1.2% in 2002 (see Table VIII.1).

Hence, Greece is about to meet the requirement of the Stability and Growth Pact for a “general government budget that is close to balance or in surplus”, as the deficit is expected to continue to decrease in 2003 and 2004, while in 2005 there should be a small surplus.

The declining trend of the deficit is also evident from the evolution of the general government deficit on an “accrual basis” (second item in Table VIII.1), which also fell from 2.9% of GDP in 2001 to 2.2% in 2002. This indicator is based on accrual data as regards central government, and on estimates as regards the financial results of all social security funds, local authorities and other public entities.

Finally, the general government borrowing requirement, as shown by cash flows between central government and other general government entities, on the one hand, and

1 E.g. Austria, France, Portugal, the United Kingdom etc.

the banking system, on the other hand, also fell from 4.4% of GDP in 2001 to 3.9% in 2002 (see Table VIII.1). The considerable difference between the national accounts- and the accrual-based result on the one hand and the borrowing requirement on the other is attributable to the fact that certain general government transactions, which are not taken into account in the national accounts- and the accrual-based result, are included in the borrowing requirement on a cash basis. Furthermore, on a national accounts and an accrual basis, revenue of the public investment budget collected in the “extension” of the fiscal year is registered in the year it accrues to but, on a cash basis, it is registered in the year it is collected. For this reason, not only does the borrowing requirement usually differ from the respective national accounts- or accrual-based result, but it may also move in the opposite direction.

The public sector borrowing requirement

According to available provisional data, the decline in the general government borrowing requirement¹ on a cash basis is mainly due to the fact that the central government cash deficit fell by one percentage point of GDP relative to 2001 (see Table VIII.2).

Specifically, the borrowing requirement of central government decreased from 6.0% of GDP in 2001 to 5.0% in 2002. This is attributable to the considerable decline in the ordinary budget cash deficit from €3,125 million or 2.4% of GDP in 2001 to €2,128 million or 1.5% of GDP in 2002 (see Table VIII.2). The cash deficit in the public investment budget also narrowed, from €4,784 million (3.7% of GDP) in 2001 to €4,546 million (3.2% of GDP) in 2002. This is associated with a substantial curtailment of investment expenditure, which exceeded considerably the corresponding shortfall in revenue. By contrast, the net borrowing requirement of the Organisation for the Payment and Control of Guidance and Guarantee Community Subsidies (OPEKEPE)² reached €428 million or 0.3% of GDP in 2002, after a small surplus in 2001, which was occasional and was attributable to the change in the way Community subsidies are paid to farmers.

Finally, the rise in the borrowing requirement of all public entities from €97 million in 2001 to €563 million in 2002 is partly associated with increased investment. At the same time, the reserves of social security funds grew by €2,123 million, almost as much as in 2001 (€2,194 million). Thus, the total cash surplus of public entities fell from 1.6% of GDP in 2001 to 1.1% in 2002.

1 Since 2001, the data obtained from the banking system are not suitable for monitoring developments (on a cash basis) in public enterprises, which are now included in the private sector of the economy. For this reason, analysis on a cash basis is now limited to general government.

2 The account of the Organisation for the Payment and Control of Guidance and Guarantee Community Subsidies (OPEKEPE) manages the Common Agricultural Policy subsidies to farmers and is virtually in balance. Any deficit (or surplus) is attributable to the time lag between the payment of subsidies to farmers and their collection from the European Union, as well as to payment of interest.

The general government net borrowing requirement was financed smoothly in the course of 2002, while interest rates on Greek government bonds continued to fall (albeit at a slower pace) and converge towards the corresponding German rates. For the sixth

TABLE VIII.2
PUBLIC SECTOR NET BORROWING REQUIREMENT
(Million euro)

	1997	1998	1999	2000	2001	2002*
1. Central government ¹	7,585	6,819	6,043	7,090	7,812	7,102
Percentage of GDP	7.8	6.4	5.4	5.8	6.0	5.0
– Government budget (Ordinary budget) ²	7,512 (4,882)	6,588 (3,459)	5,835 (1,907)	6,844 (1,888)	7,909 (3,125)	6,674 (2,128)
(Public investment budget)	(2,630)	(3,128)	(3,929)	(4,956)	(4,784)	(4,546)
– OPEKEPE ³	73	232	208	247	–97	428
2. Public entities ⁴	–1,013	–1,552	–1,866	–2,248	–2,097	–1,560
Percentage of GDP	–1.0	–1.5	–1.7	–1.8	–1.6	–1.1
– Financing of social security funds	6	–76	80	82	–144	45
– Financing of local authorities	17	23	11	232	103	123
– Financing of other entities	–68	–59	–106	73	138	395
– Reserves	–969	–1,441	–1,851	–2,635	–2,194	–2,123
General government (1+2)	6,572	5,267	4,178	4,843	5,715	5,542
Percentage of GDP	6.8	5.0	3.7	4.0	4.4	3.9
3. Public enterprises	–389	414	209	196	...	...
Percentage of GDP	–0.4	0.4	0.2	0.2	...	...
– Financing of public utilities	–339	191	253	214	...	...
– Financing of other enterprises	54	167	229	176	...	...
– Reserves	–104	56	–274	–194	...	...
Public sector (1+2+3)	6,183	5,681	4,386	5,039	...	...
Percentage of GDP	6.4	5.4	3.9	4.1	...	...
Public sector (including capitalised interest)	6,286	5,760	4,386	5,039	...	...
Percentage of GDP	6.5	5.4	3.9	4.1	...	...

1 Results from the respective accounts with the Bank of Greece, the Agricultural Bank and commercial banks.

2 Including, as of 1997, movements in public debt management accounts.

3 Payment and Control Agency for Guidance and Guarantee Community Aids. It replaced DIGAGEP (Agricultural Markets Management Service) as of 3 September 2001.

4 Estimates on the basis of their investment in securities and bank deposits and the change in their liabilities to the banking system.

* Provisional data and estimates.

Source: Bank of Greece.

consecutive year, the borrowing requirement was financed mainly by the issue of medium- and long-term fixed-rate bonds. As in the last three years, a sizeable part of these bonds was purchased by non-residents (see Table VIII.3). At the same time, domestic private

TABLE VIII.3
SOURCES OF FINANCING THE PUBLIC SECTOR BORROWING REQUIREMENT¹
(Million euro)

	1997		1998		1999		2000		2001		2002*	
	Amount	Percentage of total	Amount	Percentage of total	Amount	Percentage of total	Amount	Percentage of total	Amount	Percentage of total	Amount	Percentage of total
BORROWING IN EURO	2,838	45.9	240	3.6	-3,634	-82.9	-3,483	-69.1	-1,616	-28.3	-843	-15.2
– Treasury bills and bonds held by monetary financial institutions ²	1,834	29.7	-1,633	-28.7	1,543	35.2	5,379	106.8	1,325	23.2	-2,476	-44.7
– Treasury bills and bonds held by the domestic non-bank sector ²	350	5.7	180	3.2	-5,136	-117.1	-9,171	-182.0	-1,855	-32.5	1,038	18.7
– Loans and advances from monetary financial institutions ³	-12	-0.2	1,017	17.9	-396	-9.0	21	0.4	-191	-3.3	978	17.8
– Bank of Greece ³	665	10.8	640	11.3	354	8.1	288	5.7	-895	-15.7	-392	-7.1
BORROWING IN FOREIGN CURRENCY AND BORROWING FROM NON-RESIDENTS	3,345	54.1	5,476	96.4	8,020	182.9	8,522	169.1	7,331	128.3	6,385	115.2
TOTAL BORROWING	6,183	100.0	5,681	100.0	4,386	100.0	5,039	100.0	5,715	100.0	5,542	100.0

1 As of 2001, borrowing requirement concerns general government.

2 Including sales of securities in the secondary market.

3 As from 1 January 1994, the respective figure no longer concerns financing by the Bank of Greece but changes in the credit balance of the government's cash account with the Bank.

* Provisional data.

Source: Bank of Greece.

investors, after the taxation of repos as from 1 January 2002, shifted from repos to government paper. Since the acquisition of euro-denominated government paper by non-residents is registered as borrowing in foreign currency, it appears, as in the last three years, that borrowing in foreign currency financed the entire borrowing requirement and that part of it was used to repay debt held by residents (see Table VIII.3).

Unlike domestic private investors, domestic credit institutions, in an effort to restructure their portfolios, reduced their government paper holdings substantially, while extending more loans and credit to the government. Overall, however, they did not contribute to financing the 2002 deficit.

In addition to meeting its borrowing requirement, the government also increased its deposits with the Bank of Greece by €392 million in the course of 2002.

By the end of 2001, the outstanding balance of Treasury bills and other short-term securities had fallen to 0.5% of the total consolidated debt. Thus, it was decided that it was not necessary to continue the policy of prolonging the average maturity of public debt. Hence, the outstanding balance of short-term liabilities rose to €982 million or 0.7% of the total consolidated debt in 2002, from €747 million in 2001 (see Table VIII.9). Nevertheless, the average maturity of new borrowing effected in 2002 remained at 9 years.

Finally, it should be mentioned that, following the revision and supplementation of Eurostat's definitions of public debt, the government did not use new types of financial products in 2002.

The revision of national accounts data

In June 2002, Eurostat revised and supplemented the definitions and rules of the European System of Accounts (ESA 95), because some fiscal transactions were not sufficiently covered and, as a result, it was necessary to reclassify certain fiscal aggregates. Accordingly, following consultation with Eurostat, the National Statistical Service of Greece (NSSG) revised the debt and deficit figures. On the basis of the figures before and after the revision (see Table VIII.4), the general government budget balance (columns 1 and 2) was revised from 2000 onwards and, as a result, the small surpluses of 2001 and 2002 turned into deficits, slightly over 1% of GDP. Public debt figures (columns 4 and 5) were subject to much larger revisions, starting from 1998, when privatisation certificates were first issued. The biggest revisions concerned the years 2000 (3.6 percentage points of GDP) and, most notably, 2001 (7.6 percentage points), owing to the issuance of new types of financial products (e.g. securitisation of future revenue, issuance of privatisation certificates etc.), which, according to Eurostat's regulations then in force, were not included in debt.¹

¹ See Bank of Greece, Annual Report 2001, Athens 2002.

The revision of the deficit figures mostly reflects the inclusion in expenditure of the bulk of equity injections to public enterprises¹ and of guarantees called in relating to loans to public enterprises. The revision of debt figures mainly reflects the inclusion of certain new financial transactions (such as securitisation of future revenue, privatisation certificates, convertible bonds etc.) which had not been recorded previously under public debt according to the definitions of the European System of Accounts (ESA 95) then in force.

Finally, it should be noted that in February 2003 there was a further revision of data (columns 3 and 6 of Table VIII.4), which were sent to Eurostat in the context of the excessive deficit procedure.

TABLE VIII.4
REVISED GENERAL GOVERNMENT DEFICIT AND DEBT DATA

Year	Deficit before revision (percentage of GDP) (1)	Revised deficit (Eurostat) (percentage of GDP) (2)	Revised deficit (EDP) ¹ (percentage of GDP) (3)	Debt before revision (percentage of GDP) (4)	Revised debt (Eurostat) (percentage of GDP) (5)	Revised debt (EDP) ¹ (percentage of GDP) (6)
1997	-4.0	-4.0	-	108.2	108.2	-
1998	-2.5	-2.5	-	105.0	105.8	-
1999	-1.9	-1.9	-1.8	103.8	105.1	105.1
2000	-0.8	-1.8	-1.9	102.6	106.2	106.2
2001	0.1	-1.2	-1.4	99.4	107.0	107.0
2002	0.4	-1.1	-1.2	98.7	105.3	104.9
2003	0.4	-0.9	-0.9	95.1	100.2	100.2
2004	0.8	-0.4	-	-	96.1	-

1 Excessive Deficit Procedure.

Sources: Ministry of Economy and Finance, Macroeconomic Aggregates 1995-2001, Ministry announcement on 31 October 2002, Stability and Growth Programme 2002-2006 (December 2002) and Eurostat, News Release (30/2003 - 17 March 2003).

2. FISCAL AGGREGATES

2.1 The government budget

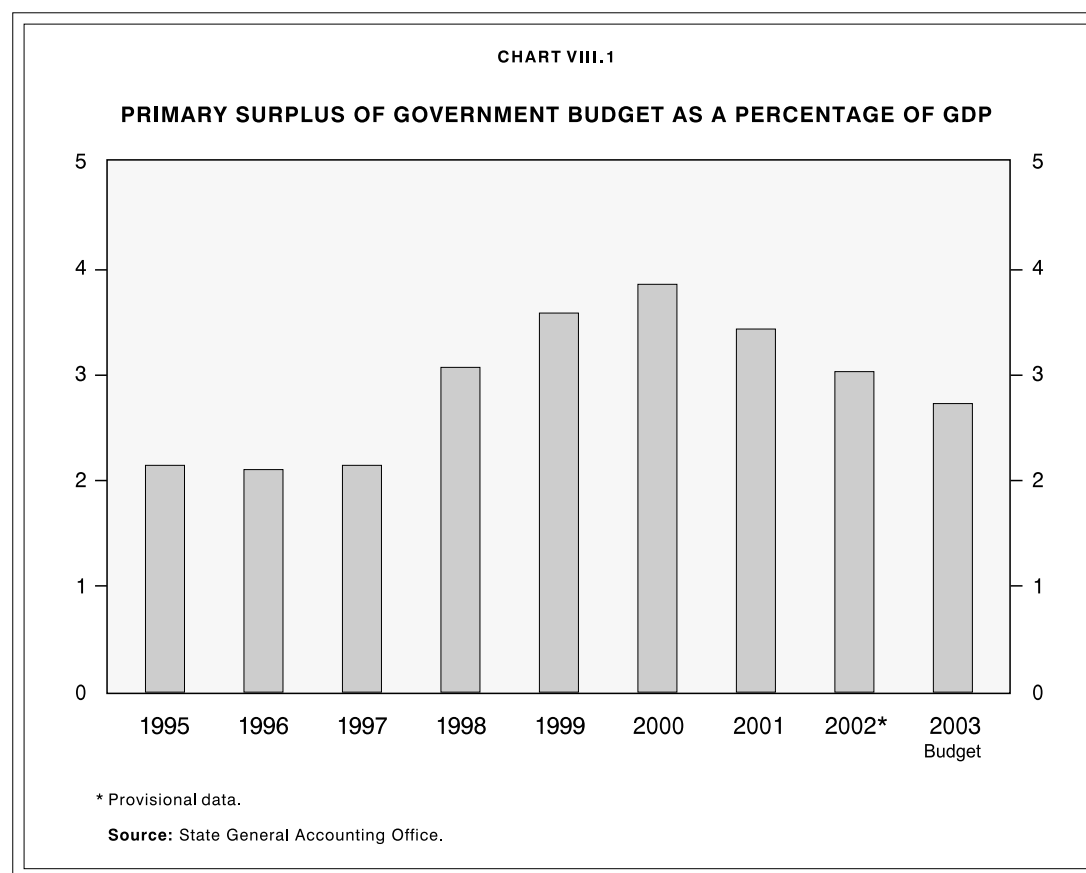
As in most EU countries, 2002 saw a deterioration of public finances in Greece, which led to an overrun in the government budget deficit, as well as to considerable revisions of the public investment budget.

The government budget deficit overshoot the budgeted amount by €797 million or 0.5% of GDP, reaching 3.4% of GDP (see Table VIII.11). Fiscal developments in 2002

1 Before the revision, equity injections, which were made concurrently with capital increases and the transfer of new shares to the government, were considered as financial transactions and recorded directly under public debt, but not in the deficit.

were characterised on the one hand by a large overrun (of €1,112 million) in ordinary budget primary expenditure and, on the other hand, by a substantial shortfall of -36.1% in public investment budget revenue. In response, public investment expenditure was substantially curtailed by 20.4%. In fact, the public investment budget was extensively revised and, as a result, both revenue and expenditure showed a decline of 6.6% and 9.2% respectively in comparison with 2001.

These developments also had a negative effect on the 2002 primary surplus, which fell short of the budgeted amount and decreased for the second consecutive year to 3.0%



of GDP (see Chart VIII.1). According to the 2003 budget, the primary surplus should decline further in 2003.

Revenue

In 2002, ordinary budget revenue showed a small overrun in comparison with budget forecasts, owing to the collection of €1,061 million of extraordinary revenue from the implementation of two tax amnesties which were announced in April 2002 for the

settlement of pending tax cases. But for these receipts, the shortfall in revenue would have been substantial (€916 million). Although non-tax revenue fell short of the budgeted amount, its share in ordinary budget revenue remained high (8.4%), owing to the introduction of euro coins.¹

Specifically, ordinary budget revenue grew by 6.8% (2001: 6.8%, 2000: 10.2%) to €39,065 million, overshooting the budget forecast by €145 million (see Table VIII.5). If revenue from the settlement of pending tax cases (€1,061 million) is deducted, the rate of increase is limited to 3.9%, against a forecast of 6.4% in the 2002 budget. As in 2001, the shortfall mainly concerns taxation of corporate income, non-tax revenue, taxation of stock exchange transactions and real estate transfers and VAT on imports from non-EU countries. By contrast, as regards personal income tax, revenue from income tax withholdings, mainly on the income of wage-earners and pensioners, showed once again a considerable overrun, despite the tax reliefs that took effect as from 1 January 2002. An overrun (in addition to the receipts from the two tax amnesties) was also recorded in revenue from VAT on domestic products, road duties and tobacco tax.

After falling by 0.7% in 2001, direct tax receipts rose by 9.0% to €14,805 million in 2002 (see Table VIII.5), reflecting increased receipts from the settlement of pending tax cases (91.7%) and from personal income tax (7.3%). By contrast, receipts from all other categories of direct taxes showed either a decline relative to 2001 or a minor increase (see Table VIII.5).

Revenue from personal income tax rose by 7.3% in comparison with 2001 and reached €6,606 million, despite relevant tax cuts in both 2001 and 2002. This revenue also exceeded the budget forecast by €141 million exclusively owing to the overrun in income tax withholding at the source (€312 million), despite the fact that the raising of the tax-free amount for 2002 had a negative impact on revenue from income tax withholding only. By contrast, there was a shortfall in all other components of personal income tax (e.g. “advance payment”, “main tax” etc.).

Receipts from corporate income tax rose marginally by 0.5% in comparison with 2001 and reached €4,191 million, reflecting reduced business profitability in 2001, as well as tax relief measures applicable only under certain conditions that took effect from 1 January 2002.

Although a 7% tax on repo yields was re-introduced (as from 1 January 2002), revenue from the taxation of interest income (on bank deposits, bonds etc.) showed a further small decline of –5.3% for the third consecutive year in 2002. This is associated with considerable interest rate cuts, as well as with the fact that a growing percentage of government paper is held by non-residents, who are exempt from this tax.

Revenue from taxes on inheritances, gifts and parental donations grew by 6.9% to €370 million. This is attributable to a rebound in relevant transactions in 2002 after

1 Seigniorage is included in the ordinary budget revenue and thus affects the deficit on an accrual basis, but is not taken into account in the calculation of the deficit on a national accounts basis.

TABLE VIII.5
ORDINARY BUDGET REVENUE¹
(Million euro)

	Annual aggregates				Percentage changes		
	1999	2000	2001	2002*	2000/99	2001/00	2002*/01
I. DIRECT TAXES	11,866	13,682	14,805	14,805	15.3	-0.7	9.0
1. Income tax	10,114	11,613	11,326	11,697	14.8	-2.5	3.3
– Personal	5,357	5,411	6,156	6,606	1.0	13.8	7.3
– Corporate	3,336	5,034	4,172	4,191	50.9	-17.1	0.5
– Special categories of income tax (tax on shipping)	1,422 (20)	1,168 (21)	998 (21)	900 (16)	-17.8 (1.4)	-14.6 (2.2)	-9.8 (-23.8)
(tax on interest income from bonds, deposits etc.)	(1,052)	(665)	(549)	(520)	(-36.8)	(-17.5)	(-5.3)
2. Wealth taxes	372	462	507	542	24.4	9.7	6.9
3. Direct taxes collected on behalf of third parties	8	5	2	1	-39.3	-59.9	-50.0
4. Tax arrears	604	752	840	1,610	24.6	11.7	91.7
5. Extraordinary and other direct taxes	769	850	910	955	10.5	7.1	4.9
II. INDIRECT TAXES	17,179	18,621	19,498	20,990	8.4	4.7	7.7
1. Customs duties and special contributions on imports-exports	204	222	205	203	8.6	-7.6	-1.0
2. Consumption taxes on imports	1,816	1,968	1,965	2,049	8.4	-0.1	4.3
– VAT (non-EU imports)	1,053	1,311	1,322	1,348	24.5	0.9	2.0
– Cars	716	620	603	659	-13.4	-2.7	9.3
– Special consumption tax	47	37	40	42	-20.6	7.3	5.0
– Other taxes on imports	1	0	0	0	–	–	–
3. Consumption taxes on domestic products	12,554	13,611	15,089	16,440	8.4	10.9	9.0
– Turnover tax	107	158	207	220	47.5	30.6	6.3
– VAT	7,715	8,759	9,410	10,638	13.5	7.4	13.0
– Fuel	2,335	2,199	2,278	2,314	-5.8	3.6	1.6
– Tobacco	1,637	1,758	1,941	2,125	7.4	10.4	9.5
– Road duties	372	329	753	630	-11.7	128.9	-16.3
– Special levies and contributions on cars	51	53	125	128	5.2	134.0	2.4
– Other ¹	337	354	375	385	5.1	6.0	2.7
4. Transaction taxes	2,322	2,458	1,849	1,443	5.9	-24.8	-22.0
– Capital transfers	1,240	1,417	850	735	14.3	-40.0	-13.5
– Stamp duties	848	817	877	619	-3.6	7.3	-29.4
– Banking transactions	184	161	32	0	-12.4	-80.2	-100.0
– Licence fees for gambling	50	62	90	89	24.1	45.3	-1.1
5. Other indirect taxes ²	283	363	390	855	28.0	7.4	119.2
III. TOTAL TAX REVENUE	29,046	32,303	33,083	35,795	11.2	2.4	8.2
Non-tax revenue	2,041	1,954	3,490	3,270	-4.3	78.6	-6.3
IV. TOTAL ORDINARY BUDGET REVENUE	31,087	34,257	36,573	39,065	10.2	6.8	6.8

¹ To ensure comparability, tax refunds have not been deducted from revenue.

² Including the special consumption tax on domestic products.

* Provisional data.

Source: State General Accounting Office.

the decline observed since March 2001, when the “objective prices” of real estate were raised. Revenue from real property tax (which appears cumulatively with the previous category in Table VIII.5) also showed an increase (of about 6.8%) and reached €172 million.

Receipts from “direct tax arrears” grew by 91.7%, compared with an increase of 11.7% in 2001, and reached €1,610 million. This large increase is attributable to the introduction (in April 2002) of the two new tax amnesties already mentioned, which had not been included in the budget and concerned unaudited tax cases of the six-year period 1993-1998 and the three-year period 1999-2001 (in the second case, VAT payments were “adjusted” upwards on the basis of imputed gross turnover). Pending tax cases were settled on very favourable terms for taxpayers.

Revenue from indirect taxes rose by 7.7% in 2002, compared with 4.7% in 2001, and reached €20,990 million, overshooting the budgeted amount by €324 million, mainly reflecting increased receipts (€449 million over the budgeted amount) from “direct tax arrears”, which stemmed from the second tax amnesty mentioned earlier. But for these receipts, revenue from indirect taxes would have fallen short of budget forecasts.

In greater detail, revenue from VAT on imports from non-EU countries grew by 2.0% and reached €1,348 million, falling short of budget forecasts by €119 million.

Revenue from car registration fees (actually the previously applying special consumption tax on cars) increased by 9.3% in comparison with 2001, but fell short of the budgeted amount by €37 million owing to a 4.2% decline in car sales.

Revenue from VAT on domestic goods and services (including imports from EU countries) grew by 13.0% in comparison with 2001 and reached €10,638 million. The €323 million overrun relative to the budget forecast is associated with the sizeable growth of retail sales in 2002 (8.9%).

Receipts from the special consumption tax on liquid fuel increased by 1.6% in comparison with 2001 and reached €2,314 million, falling short of the budget forecast by €70 million, partly because of the reduction of the tax rate on heavy fuel oil used in industry.

Receipts from road duties fell by 16.3% in comparison with 2001, when duties for two years (2001 and 2002) had been collected, but recorded a €166 million overrun relative to the budget forecast. This is associated with the raising of duties for 2003 in September 2002 (by Law 3052/2002), which had not been forecast in the budget.¹

Revenue from tobacco tax overshot once again the budget forecast, rising by 9.5% in comparison with 2001, to reach €2,125 million. This is related to the increase in the retail price of cigarettes in March 2002.

Revenue from the tax on stock exchange transactions declined to €86 million from €161 million in 2001, falling short of the budgeted amount of €235 million. This was mainly due to the reduced volume of transactions on the Athens Stock Exchange.

¹ Since 2001, each year's road duties are collected by the end of December of the previous year.

Revenue from stamp duties decreased by 29.4% in comparison with 2001, falling to €619 million, following the abolition as from 1 January 2002 of the stamp duty on wages, bills of exchange, statutory declarations and a number of other documents.

Finally, non-tax revenue decreased by 6.3% in comparison with 2001, also falling short of the budget forecast by €366 million. Almost half of this shortfall is attributable to the fact that the amount of euro coins put into circulation was smaller than the budgeted amount, while revenue from public enterprises' dividends also fell short of the relevant forecast.

Expenditure

Fiscal developments in 2002 were largely determined by a considerable overrun in ordinary budget expenditure and substantial cuts in public investment expenditure.

Specifically, government budget expenditure grew by 4.4% in 2002, compared with 4.3% in 2001, and reached €46,519 million¹ (see Table VIII.6), falling short of the budget forecast by €533 million. This was achieved by reducing public investment expenditure by €1,828 million relative to the initial capital budget forecast. By contrast, ordinary budget expenditure overshot the budgeted amount by €1,295 million.

Regarding ordinary budget expenditure, 86% of the overrun was recorded in primary expenditure, which as a percentage of GDP grew to 21.4% in 2002 (2001: 20.6%, 2000: 20.9%). A small overrun of €183 million was also recorded in interest payments, although they continued to decrease both as a percentage of GDP (from 8.2% in 2000 to 7.4% in 2001 and 6.5% in 2002) and in absolute terms. As a result, the share of interest payments in total ordinary budget expenditure narrowed further to 23.2% in 2002, from 26.4% in 2001 (see Chart VIII.2).

Personnel outlays, which are the single largest category in recent years, grew by 10.7% in 2002, compared with 5.7% in 2001 and a budgeted 3.7%. Hence, personnel outlays reached €15,354 million, overshooting the budget forecast by €592 million (see Chart VIII.3). As a result, the share of personnel outlays in total ordinary budget expenditure² rose further to 39.0% in 2002, from 37.7% in 2001 and 37.1% in 2000. This substantial rise is attributable to the recruitment of school teachers, nurses, policemen, coast guards and local authority staff, as well as to the payment of an additional monthly allowance to a large number of civil servants and the payment (in 2002, but retroactively as from 1 January 2001) of an adjustment allowance to pensioners. Additional expenditures were also incurred due to the payment of arrears to MPs and judges, as well as of compensation to policemen, coast guards and other civil servants for their participation in the conduct of the October 2002 municipal elections. Finally, civil servants' medical care costs showed an overrun of €148 million.

¹ Ordinary budget expenditure includes tax refunds.

² In the last four years, personnel outlays exceeded on average 51% of primary expenditure under the ordinary budget.

TABLE VIII.6
OUTLAYS UNDER THE ORDINARY BUDGET AND THE PUBLIC INVESTMENT BUDGET
(Million euro)

	Annual aggregates				Percentage changes		
	1999	2000	2001	2002*	2000/99	2001/00	2002*/01
I. OUTLAYS UNDER THE ORDINARY BUDGET ¹	33,093	35,313	36,736	39,399	6.7	4.0	7.2
1. Personnel outlays	12,070	13,115	13,866	15,354	8.7	5.7	10.7
2. Interest payments ²	9,694	9,914	9,711	9,134	2.3	-2.0	-5.9
(of which: related to the national defence debt) ³	(301)	(355)	(382)	(381)	(17.9)	(7.7)	(-0.3)
3. Payments to the European Union	1,277	1,401	1,395	1,426	9.7	-0.5	2.2
4. Payment of revenue collected on behalf of third parties ⁴	2,437	2,649	2,970	3,089	8.7	12.1	4.0
5. Tax refunds	879	866	949	1,967	-1.5	9.6	107.3
6. Interest rate subsidies	1	1	5	2	10.4	398.7	-68.8
7. Subsidies to farmers	284	338	390	454	18.7	15.5	16.4
8. Grants ⁵	4,426	4,854	5,342	5,619	9.7	10.1	5.2
9. Guarantees and foreign exchange valuation differences	4	4	7	5	2.9	83.2	-34.3
10. Other ⁶	2,020	2,172	2,101	2,350	7.5	-3.2	11.8
II. OUTLAYS UNDER THE PUBLIC INVESTMENT BUDGET ⁷	6,603	7,421	7,842	7,120	12.4	5.7	-9.2
1. Project implementation	2,334	2,264	2,408	...	-3.0	6.4	...
2. Grants	4,249	5,105	5,390	...	20.2	5.6	...
3. Administration	21	52	45	...	151.5	-14.6	...
III. TOTAL I + II	39,696	42,734	44,578	46,519	7.7	4.3	4.4
Primary expenditure under the government budget	30,002	32,820	34,867	37,385	9.4	6.2	7.2
Primary expenditure under the ordinary budget	23,399	25,399	27,025	30,265	8.6	6.4	12.0
Amortisation payments (amortisation payments related to the national defence debt) ³	9,996	13,859	12,777	21,021	38.6	-7.8	64.5
	(631)	(666)	(935)	(587)	(5.6)	(40.4)	(-37.2)

1 Excluding amortisation payments.

2 Including "other expenditure" related to public debt servicing.

3 This category includes only interest and amortisation payments effected by the Ministry of National Defence. Interest and amortisation payments related to the national defence debt and taken over by the Ministry of Finance are included in the main categories of the corresponding items.

4 The figure for 1999 also includes a €176 million grant to the Farmers' Insurance Fund (OGA).

5 Including social security subsidies.

6 Including expenditure incurred in 2000 (€71 million) for persons hit by the September 1999 earthquake, as well as expenditure under allocation incurred in 2000 (€29 million).

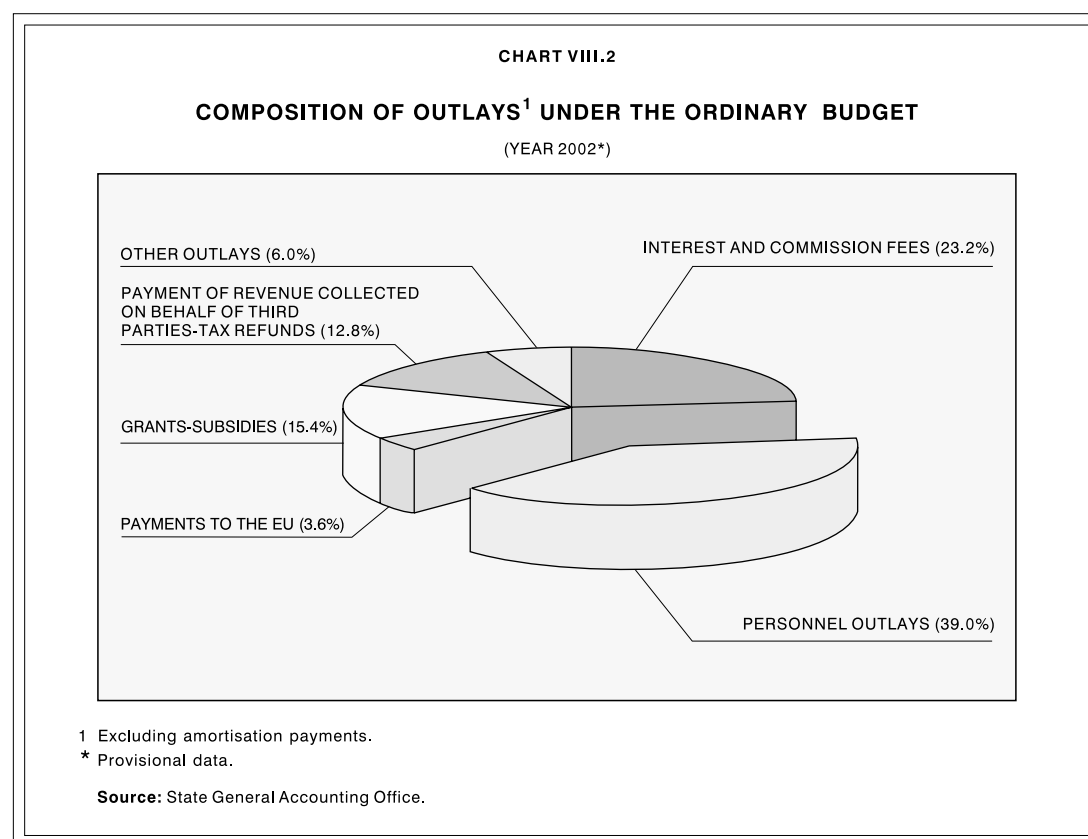
7 Including expenditure for persons hit by the September 1999 earthquake, amounting to €88 million in 1999 and €258 million in 2000.

* Provisional data.

Source: State General Accounting Office.

Interest payments decreased for the second consecutive year in absolute terms and stood at €9,134 million. Nevertheless, they overshoot the budgeted amount by €183 million. As a percentage of GDP they dropped from 7.4% in 2001 to 6.5% in 2002 (see Chart VIII.4). This downward trend is attributable to a further decrease in interest rates on government loans.

Payments to the EU showed a small increase of 2.2% in 2002, compared with a marginal drop of 0.5% in 2001, falling short of the budgeted amount by €153 million. The



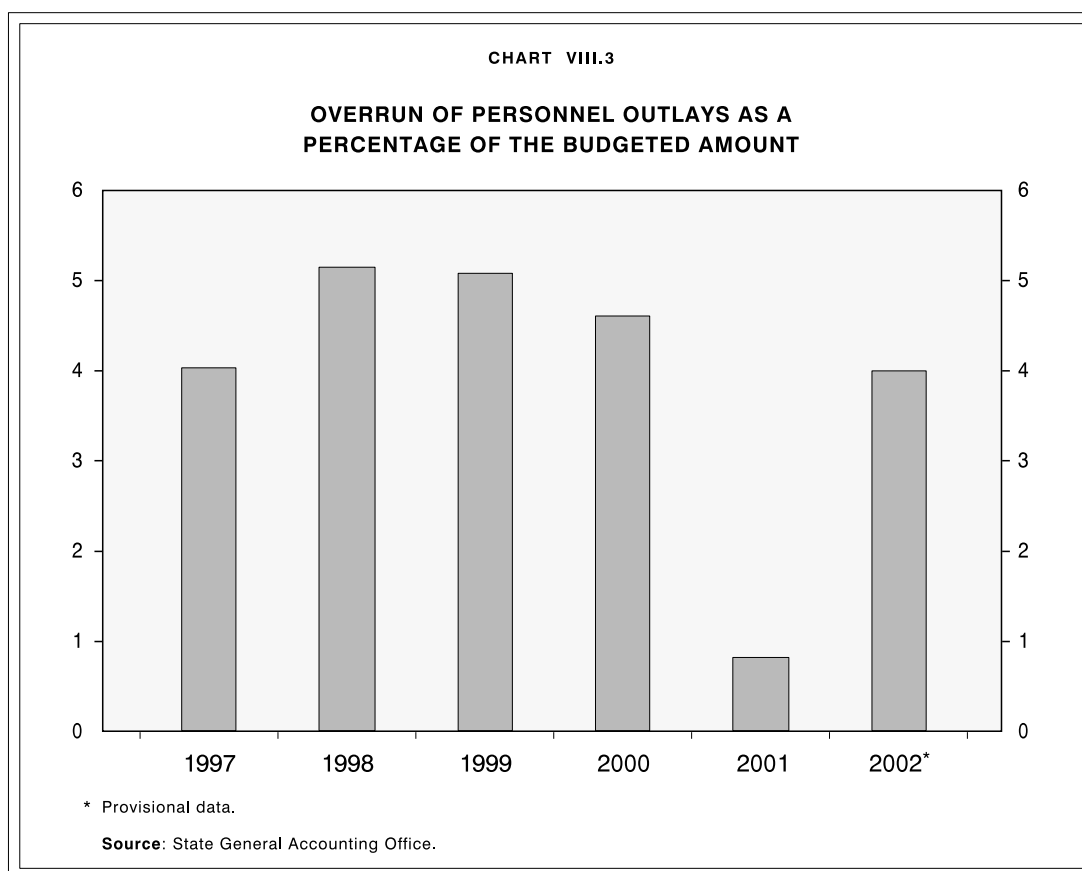
containment of these outlays is attributable to the reduced GDP- and VAT- based contributions to the EU.

Restitution of revenue collected on behalf of third parties grew weaker than in previous years (2002: 4.0%, 2001: 12.1%, 2000: 8.7%), although it overshoot the respective budget forecast. This overrun is attributable to increased payments of revenue to local authorities and to the restitution of additional funds to EPTA¹ to cover the 2001 deficit.

¹ Special Programme for Local Authorities.

Tax refunds more than doubled in relation to 2001 and reached €1,967 million, also showing a substantial overrun of €500 million relative to the budget forecast. This development is associated with the acceleration of the formal recording of tax refunds actually paid in previous years.

Outlays for grants grew by 5.2% in 2002 (2001: 10.1%) and reached €5,619 million, showing a small overrun of €156 million relative to the budgeted amount. This increase resulted from the payment of an additional grant to ELGA¹ to cover unexpected

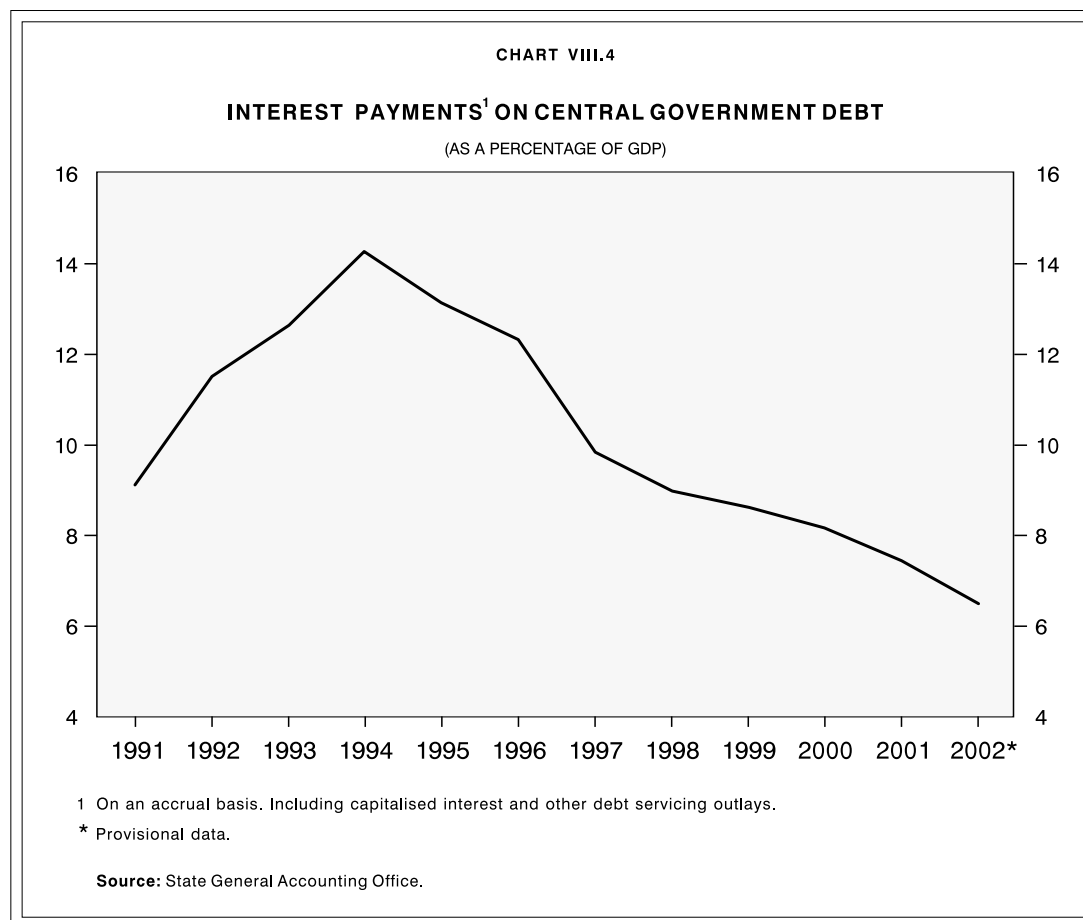


damages caused to agricultural production by bad weather in January 2002, as well as to a rise in the unemployment benefit, the granting of an allowance to the long-term unemployed and the payment of a subsidy to low-income households in mountainous and disadvantaged areas.

“Other outlays” showed a substantial rise of 11.8%, which, nevertheless, had been forecast in the budget, compared with a 3.2% decline in 2001. This was mainly due to

¹ Hellenic Agricultural Insurance Organisation.

increased expenses to prepare for the 2004 Olympic Games, as well as to the costs of participation of the armed forces in peace missions outside Greece.



The public investment budget

During 2002, the public investment budget data were revised substantially. Specifically, investment revenue showed a shortfall of 36.1% (€1,475 million) relative to the budgeted amount and fell to €2,610 million,¹ while expenditure was reduced by 20.4% (€1,828 million) and stood at €7,120 million. As a result, both investment revenue and expenditure figures showed a decline, of 6.6% and 9.2% respectively, in comparison with 2001 (see Table VIII.11).

This adjustment is attributable to both the delay observed in recent years in the collection of the relevant amounts from various EU funds and to the overrun in ordinary budget

¹ Exact data on public investment budget revenue will be available at the end of April 2003.

expenditure. It should be noted, however, that Greece has one of the highest public investment growth rates in the EU.

2.2 Social security and welfare funds

The total revenue of social security and welfare funds grew by 8.7% in 2002, compared with 14.5% in 2001, and reached €11,311 million. Substantial increases were recorded in the Social Security Fund (IKA), Manpower Employment Organisation (OAED) and Seamen's Insurance Fund (NAT) revenue (9.4%, 12% and 8.7% respectively).

Total expenditure (on both the operating and the capital account) of the seven major social security and welfare funds increased by 9.1%, compared with 14.5% in 2001, and reached €15,853 million. The deceleration of the growth rate of total expenditure was entirely due to a sizeable decrease in working capital expenditure (–55.4%). By contrast, investment expenditure grew substantially (by 73.4%) and operating expenditure (under the operating account) expanded considerably, by 12.4% in 2002, compared with 8.0% in 2001.

As a result, the consolidated deficit of the operating and capital accounts of the seven funds widened further by 13.2%, from to €3,779 million in 2001 to €4,277 million in 2002. As a percentage of GDP, the total deficit recorded a marginal increase from 2.9% in 2001 to 3.0% in 2002.

Most of the 2002 deficit (93.8%) was financed by grants out of the government budget. Specifically, ordinary budget grants amounted to €3,033 million and covered 71% of the deficit, while the remainder was covered by grants out of the investment budget and from the EU. Of the ordinary budget grants, 96.5% was absorbed by three social security funds, i.e. the Farmers' Insurance Fund (OGA) (€1,705 million or 56.2%), IKA (€754 million or 24.8%) and NAT (€470 million or 15.5%).

Grants from the European Union also grew substantially to €232 million in 2002, from €13 million in 2001, contributing to the financing of the total deficit of social insurance and welfare funds. The bulk of EU grants was absorbed by OAED (€220.1 million or 94.9%) and the rest by the Workers' Fund (EE) (€11.8 million or 5.1%).

The substantial increase in total grants in 2002 (17.0%) led to a decrease in the net borrowing requirement of the major social security funds to €264 million in 2002, compared with €350 million in 2001.

According to accrual data from the Introductory Report on the Budget for 2003, the financial results of the seven major social security and welfare funds have gradually deteriorated in the last three years, as the deficit widened from 2.8% of GDP in 2000 to 2.9% in 2001 and 3.0% in 2002. This trend is continuing in 2003, when the deficit is expected to rise to 3.2% of GDP (see Table VIII.7).

TABLE VIII.7
FINANCIAL RESULTS OF SOCIAL SECURITY FUNDS ¹
AND THEIR FINANCING
(Million euro)

	2000	2001	2002*	Budget for 2003	Percentage changes		
					2001/00	2002*/01	2003/02*
A' Operating account							
1. Revenue	9,085	10,403	11,311	12,846	14.5	8.7	13.6
2. Expenditure	12,332	13,318	14,966	16,388	8.0	12.4	9.5
3. Result (1 – 2)	<u>–3,247</u>	<u>–2,915</u>	<u>–3,655</u>	<u>–3,542</u>	<u>–10.2</u>	<u>25.4</u>	<u>–3.1</u>
B' Capital account							
4. Revenue	0	0	0	0	–	–	–
5. Expenditure	359	1,219	887	1,692	239.8	–27.2	90.8
(Investment)	(265)	(248)	(430)	(562)	(–6.4)	(73.4)	(30.7)
(Working capital)	(40)	(919)	(410)	(1,000)	(2,209.0)	(–55.4)	(143.9)
(Other)	(54)	(52)	(47)	(130)	(–3.7)	(–9.6)	(176.6)
6. Result (4 – 5)	<u>–359</u>	<u>–1,219</u>	<u>–887</u>	<u>–1,692</u>	<u>239.8</u>	<u>–27.2</u>	<u>90.8</u>
7. Special resources	<u>256</u>	<u>355</u>	<u>265</u>	<u>388</u>	<u>38.7</u>	<u>–25.4</u>	<u>46.4</u>
TOTAL RESULT (3+6+7)	<u>–3,350</u>	<u>–3,779</u>	<u>–4,277</u>	<u>–4,846</u>	<u>12.8</u>	<u>13.2</u>	<u>13.3</u>
Percentage of GDP	<u>2.8</u>	<u>2.9</u>	<u>3.0</u>	<u>3.2</u>			
FINANCING							
8. Grants	<u>3,150</u>	<u>3,429</u>	<u>4,013</u>	<u>4,474</u>	<u>8.9</u>	<u>17.0</u>	<u>11.5</u>
(Ordinary budget)	(2,467)	(2,673)	(3,033)	(3,812)	(8.4)	(13.5)	(25.7)
(Public investment budget)	(35)	(743)	(748)	(430)	(2,004.8)	(0.7)	(–42.5)
(European Union etc.)	(648)	(13)	(232)	(232)	(–98.0)	(1,684.6)	(0.0)
9. Depreciation	<u>1</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>–100.0</u>	<u>–</u>	<u>–</u>
10. Net borrowing requirement	<u>199</u>	<u>350</u>	<u>264</u>	<u>372</u>	<u>76.0</u>	<u>–24.6</u>	<u>40.9</u>
TOTAL FINANCING	<u>3,350</u>	<u>3,779</u>	<u>4,277</u>	<u>4,846</u>	<u>12.8</u>	<u>13.2</u>	<u>13.3</u>
11. Amortisation payments	279	205	220	15	–26.5	7.3	–93.2
12. New suppliers' credit		205				–100.0	
13. Gross borrowing requirement (10+11–12)	478	350	484	387	–26.8	38.3	–20.0

¹ Including 7 social security funds [Social Insurance Fund (IKA), Seamen's Insurance Fund (NAT), Farmers' Insurance Fund (OGA), Manpower Employment Organisation (OAED), Workers' Housing Organisation (OEK), Workers' Fund (EE) and National Welfare Organisation (EOP)].

* Estimates.

Source: Ministry of Economy and Finance.

2.3 Public enterprises

Data from the Introductory Report on the Budget for 2003, as well as from the Ministry of Economy and Finance, show that public enterprises recorded an operating surplus of €122 million in 2002 (compared with a surplus of €84 million in 2001), but the consolidated deficit in the operating and capital accounts rose to €2,049 million, from €1,652 million in 2001. As a percentage of GDP, this deficit grew from 1.3% in 2001 to 1.5% in 2002 (see Table VIII.8).

Total revenue of public enterprises declined by 1.4% to €13,446 million in 2002, after rising by 0.4% in 2001. Considerably increased revenue was recorded by the Water Supply and Sewerage Company of Thessaloniki (EYATH) (23.2%), the Hellenic Arms Industry (EBO) (50.8%), the Soccer Pools Organisation (OPAP) (13.0%), the Hellenic Aerospace Industry (EAB) (8.0%), the Hellenic Post Office (ELTA) (14.0%) and the Public Power Corporation (DEH) (5.6%). By contrast, a significant drop in revenue was recorded in Hellenic Petroleum (ELPE) (13.2%), the Public Gas Corporation (DEPA) (15.4%), Athens-Piraeus Electric Railway (HSAP) (15.6%), the Trolley-bus Company of Athens & Piraeus (HLPAP) (21.8%), the Athens Urban Transport Organisation (OASA) (3.3%), Olympic Airways (5.1%), the Hellenic Railways Organisation (OSE) (24.9%), the Greek National Tourism Organisation (EOT) (54.2%) and the Hellenic Aspropyrgos Oil Refineries (EKO-ELDA) (9.2%).

Total expenditure under the operating account also decreased by 1.7% in 2002, after falling by 3.2% in 2001, and stood at €13,324 million. As a result of the decline in both revenue and expenditure, the operating surplus rose from €84 million in 2001 to €122 million in 2002.

Total expenditure under the capital account remained virtually unchanged in 2002, after dropping by 31.9% in 2001, and stood at €3,331 million. The containment of this expenditure is mainly attributable to an 8.7% increase in investment and to the fact that the working capital borrowing requirement (€104 million in 2001) turned into a €312 million surplus in 2002. Receipts from special resources also declined by 26.8%. Thus, the consolidated deficit of public enterprises rose from €1,652 million in 2001 to €2,049 million in 2002.

This deficit was financed to the extent of 21.6% by grants out of the ordinary budget (13.3%) and the public investment budget (8.3%) and, to the extent of 53.5%, by depreciation allowances. The remaining 24.9% was covered by net borrowing, which increased by 275.7% in 2002 relative to 2001.

The increase in the borrowing requirement of public enterprises has contributed to the accumulation of outstanding loan balances carrying a State guarantee, forfeitures of which increase public debt directly and partly explain the difference between the annual deficit and the change in the amount of general government debt for the same year (stock-flow adjustment).

According to data from the Balance Sheet of the State for 2001, the outstanding balances of loans to public enterprises guaranteed by the State amounted to €6,833 (or

TABLE VIII.8
FINANCIAL RESULTS OF PUBLIC ENTERPRISES¹ AND THEIR FINANCING
(Million euro)

	2000	2001	2002*	Budget for 2003	Percentage changes		
					2001/00	2002*/01	2003/02*
A' Operating account							
1. Revenue	13,585	13,637	13,446	14,108	0.4	-1.4	4.9
2. Expenditure	13,998	13,553	13,324	13,915	-3.2	-1.7	4.4
3. Result (1 - 2)	<u>-413</u>	<u>84</u>	<u>122</u>	<u>193</u>	<u>120.3</u>	<u>45.2</u>	<u>58.2</u>
B' Capital account							
4. Revenue	0.0	0.0	0.0	0.0	-	-	-
5. Expenditure	4,874	3,321	3,331	4,476	-31.9	0.3	34.4
(Investment)	(4,236)	(2,533)	(2,754)	(3,379)	(-40.2)	(8.7)	(22.7)
(Working capital)	(342)	(104)	(-312)	(134)	(-69.6)	(-400.0)	(142.9)
(Other)	(296)	(684)	(889)	(963)	(131.2)	(30.0)	(8.3)
6. Result (4 - 5)	<u>-4,874</u>	<u>-3,321</u>	<u>-3,331</u>	<u>-4,476</u>	<u>-31.9</u>	<u>0.3</u>	<u>34.4</u>
7. Special resources ²	<u>1,404</u>	<u>1,585</u>	<u>1,160</u>	<u>1,226</u>	<u>12.9</u>	<u>-26.8</u>	<u>5.7</u>
TOTAL RESULT (3+6+7)	<u><u>-3,883</u></u>	<u><u>-1,652</u></u>	<u><u>-2,049</u></u>	<u><u>-3,057</u></u>	<u><u>-57.5</u></u>	<u><u>24.0</u></u>	<u><u>49.2</u></u>
Percentage of GDP	<u>3.2</u>	<u>1.3</u>	<u>1.5</u>	<u>2.0</u>			
FINANCING							
8. Grants	<u>2,206</u>	<u>687</u>	<u>442</u>	<u>484</u>	<u>-68.9</u>	<u>-35.7</u>	<u>9.5</u>
(Ordinary budget) ³	<u>(303)</u>	<u>(391)</u>	<u>(273)</u>	<u>(274)</u>	<u>29.0</u>	<u>-30.2</u>	<u>0.4</u>
(Public investment budget- European Union etc.)	<u>(1,903)</u>	<u>(296)</u>	<u>(169)</u>	<u>(210)</u>	<u>(-84.4)</u>	<u>(-42.9)</u>	<u>(24.3)</u>
9. Depreciation	<u>779</u>	<u>830</u>	<u>1,096</u>	<u>1,131</u>	<u>6.6</u>	<u>32.0</u>	<u>3.2</u>
10. Net borrowing requirement	<u>898</u>	<u>136</u>	<u>511</u>	<u>1,442</u>	<u>-84.9</u>	<u>275.7</u>	<u>182.2</u>
TOTAL FINANCING	<u><u>3,883</u></u>	<u><u>1,653</u></u>	<u><u>2,049</u></u>	<u><u>3,057</u></u>	<u><u>-57.4</u></u>	<u><u>24.0</u></u>	<u><u>49.2</u></u>
11. Amortisation payments ⁴	905	1,227	962	1,260	35.6	-21.6	31.0
12. Repayment of credit ⁴	35	46	37	49	31.4	-19.6	32.4
13. New suppliers' credit	92	128	53	2	39.1	-58.6	-96.2
14. Gross borrowing requirement (10+11+12-13)	<u>1,746</u>	<u>1,281</u>	<u>1,457</u>	<u>2,749</u>	<u>-26.6</u>	<u>13.7</u>	<u>88.7</u>

1 Comprising those public enterprises mentioned in the Introductory Report on the 2003 Budget.

2 Comprising advances and participations by Public Power Corporation consumers, lump-sum payments by Hellenic Telecommunications Organisation subscribers, participation of individuals in Water Supply and Sewerage Company projects, and own assets (from surpluses) of certain public enterprises.

3 Grants from the ordinary budget to those public enterprises which ran a deficit, minus collection of the surpluses of certain public enterprises (Soccer Pools Organisation, Duty Free Shops and Greek Horse Races Organisation).

4 Owing to lack of data, the breakdown of the sum of amortisation payments and repayment of credit is an estimate.

* Estimates.

Source: Ministry of Economy and Finance.

5.2% of GDP), compared with €5,955 million (or 4.9%) in 2000. The largest percentage increases in the outstanding balances of such loans were recorded in EBO, OASA, the Greek Powder and Cartridge Company (PYRKAL), DEH, OSE and the Greek Public Real Estate Corporation (KED).

2.4 Public debt

Following the revision of the general government debt figures in summer 2002, the debt-to-GDP ratio at end-2002 was 104.9%, compared with 107.0% at end-2001. Thus, the general government consolidated debt, despite the revision, continued its downward path and fell by 2.1 percentage points during 2002 (see Table VIII.9).

Overall, the debt-to-GDP ratio dropped by 6.4 percentage points over the last six years (1997-2002) (see Table VIII.10). This decrease is attributable both to the continuous improvement in the main determinants of this ratio (interest rate cuts, stronger economic growth and increasing primary surpluses¹) and to considerable privatisation receipts,² which were used to reduce public debt. Nevertheless, the fall in public debt was slow and out of step with the downward path of general government deficits. Indicatively, with annual primary surpluses of approximately 5% of GDP during the above mentioned period, public debt should have narrowed by at least 6% of GDP per year. As discussed in the *Annual Report 2001*,³ the slow decline observed in public debt is attributable to the high annual “stock-flow adjustment”. This adjustment is an estimate of the difference between, on the one hand, the debt-reducing contribution of the primary surplus and the interest-growth differential and, on the other hand, the debt-increasing contribution of other factors, e.g. assumption of debts of public enterprises by the government⁴ and incurrence of expenses outside the budget, which, although not affecting the deficit, cause a direct increase in debt.⁵ It is estimated that, over the 1997-2002 period, the assumption of such liabilities raised the debt-to-GDP ratio by 5.2 percentage points per year (see Table VIII.10).

Following the introduction of the euro, the government liabilities denominated in euro area currencies (German marks, Italian liras etc.) were converted into euro, drastically reducing the outstanding foreign-currency-denominated debt. At the same time, since summer 2001 swap operations were carried out and, as a result, the debt denominated in non-euro area currencies (e.g. US dollars and Japanese yen) was further reduced. Hence, the “foreign” debt decreased from €33.6 billion in 2000 to €8.5 billion in 2001 and €4.7 billion at end-2002 (see Table VIII.9). Thus, only 3.2% of the general

1 Up to (and including) 1999.

2 Overall, it is estimated that these receipts amounted to 10% of GDP over the 1997-2001 period.

3 See p. 198.

4 E.g. forfeiture of guarantees up to (and including) 1999.

5 This upward effect has been reduced by the amounts of privatisation receipts that were used for reducing public debt.

government consolidated debt was denominated in non-euro area currencies at the end of 2002. This virtually eliminated the foreign exchange risk of debt, i.e. the “automatic” appreciation of the outstanding euro-denominated foreign debt owing to the depreciation (or devaluation) of the euro. In the past, exchange rate fluctuations had been strongly conducive to increases in debt (in drachma terms) and had raised the stock-flow adjustment component.

According to the State General Accounting Office, advance debt retirement in 2002 amounted to €1,932 million and was mainly financed by privatisation proceeds.

By the end of 2001, the outstanding balance of Treasury bills and other short-term securities had fallen to 0.5% of the total general government consolidated debt. Thus, it

TABLE VIII.9
CONSOLIDATED DEBT OF GENERAL GOVERNMENT*
(Million euro)

	1998	1999	2000	2001	2002**
Treasury bills and short-term bonds	10,465	4,531	1,767	747	982
Medium-term and long-term bonds	83,889	91,999	100,476	106,925	116,018
Other medium-term and long-term loans	17,570	22,053	26,938	32,375	31,023
Total	111,924	118,583	129,181	140,047	148,023
Percentage of GDP	105.8	105.1	106.2	107.0	104.9
– domestic debt ¹	85,074	88,667	95,558	131,503	143,290
(of which: debt to the Bank of Greece)	(12,129)	(12,290)	(12,472)	(10,985)	(9,561)
– external debt	26,850	29,916	33,623	8,544	4,733

1 For the years 1998-2000, domestic debt includes euro-denominated securities held by non-residents, as well as Bank of Greece loans with a foreign currency clause. As of 2001, domestic debt includes all euro-denominated liabilities and external debt includes all non-euro denominated liabilities.

* According to the definition in the Maastricht Treaty.

** Provisional data.

Sources: State General Accounting Office and Bank of Greece.

was no longer necessary to continue the policy of substituting long-term bonds for Treasury bills. Hence, the outstanding balance of short-term liabilities rose to €982 million or 0.7% of debt in 2002, from €747 million in 2001 (see Table VIII.9). However, the average weighted maturity of new domestic debt in 2002 remained 9 years.

Following these developments at the end of 2002, 0.7% of the debt represented short-term liabilities (maturing in up to one year), 78.4% medium- and long-term liabilities from bond issues and the remaining 20.9% medium- and long-term loans and other liabilities.

Finally, as regards debt negotiability, it is estimated that at the end of 2002 about 86% of the debt consisted of negotiable government securities (mostly medium- and long-

TABLE VIII.10
BREAKDOWN OF CHANGES IN THE GOVERNMENT DEBT RATIO¹
(Percentage of GDP)

	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003*	2004*	2005*	2006*
Government debt ratio	79.6	82.2	87.8	110.1	107.6	108.7	111.3	108.3	105.8	105.1	106.2	107.0	104.9	100.2	96.1	92.1	87.9
Changes in the debt ratio	9.7	2.6	5.6	22.3	-2.5	1.1	2.6	-3.0	-2.4	-0.7	1.1	0.8	-2.1	-4.7	-4.1	-4.0	-4.2
– Effect of primary surplus	6.5	3.0	2.1	2.2	-2.7	-1.0	-3.1	-4.2	-5.3	-5.4	-5.1	-4.9	-4.3	-4.4	-4.6	-5.0	-5.2
– Effect of GDP changes																	
and interest rate changes	-4.9	-7.8	-1.7	-0.4	-1.1	-1.2	0.1	-2.8	-1.2	0.4	-0.8	-1.5	-2.4	-1.6	-1.9	-1.4	-1.2
– Stock-flow adjustment ²	8.1	7.4	5.2	20.5	1.3	3.3	5.6	3.9	4.1	4.3	7.0	7.2	4.6	1.3	2.4	2.4	2.2

¹ The equation used in the analysis of changes in the debt-to-GDP ratio is:

$$\left[\frac{D_t}{Y_t} - \frac{D_{t-1}}{Y_{t-1}} \right] = \frac{PB_t}{Y_t} + \left[\frac{D_{t-1}}{Y_{t-1}} \cdot \frac{i - g_t}{1 + g_t} \right] + \frac{SF_t}{Y_t}$$

where, D_t = general government debt

PB_t = primary balance (deficit or surplus)

Y_t = GDP at market prices

g_t = nominal rate of change in GDP

i = average nominal lending rate to the public sector

SF_t = stock-flow adjustment

² The "stock-flow adjustment" includes expenditure or liabilities which do not affect the deficit, but *increase* the debt, as well as receipts (e.g. from privatisation proceeds) which do not affect the deficit, but *decrease* the debt.

* According to data included in the updated 2002-2006 Stability and Growth Programme.

Source: Bank of Greece estimates.

term bonds), while the remainder was made up of loans which are not directly negotiable on the secondary bond market.

3. THE BUDGET FOR 2003

3.1 The central government budget

An analysis of the 2003 budget does not reveal any change in the stance of fiscal policy, which will continue to be neutral or slightly expansionary (see Chart II.10), as in the last two or three years, unless new measures are taken. Indicatively, the government budget deficit will remain virtually unchanged (2003: 3.5% of GDP, 2002: 3.4%), while the primary surplus is forecast to fall to 2.7% of GDP in 2003, from 3.0% in 2002 (see Table VIII.11 and Chart VIII.1).

However, the general government deficit on a national accounts basis is expected to fall from 1.2% of GDP in 2002 to 0.9% in 2003.

Nevertheless, the government seems determined to control the ordinary budget primary expenditure, whose growth is falling to 6.2%, from 12.0% in 2002. At the same time, tax revenue is forecast to increase only slightly. This is a very important change in relation to recent years, when fiscal consolidation was based on the growth of revenue and the reduction of interest payments. To this end, a bill aiming at the control of government expenditure has been drafted and will soon be brought to Parliament. Nevertheless, the considerable overrun in primary expenditure in 2002, as well as the expenses required to cover the damages caused by bad weather in the first two months of 2003, will hamper the containment of primary expenditure in 2003.

As regards individual items, the ordinary budget deficit is expected to be €485 million in 2003, compared with €334 million in 2002, while the public investment budget deficit will reach €4,818 million. Underlying the widening of the ordinary budget deficit is the decrease in revenue as a result of the recent tax reform (enacted by Law 3091/2002), which will affect revenue adversely in 2003 and 2004. Thus, the annual growth rate of revenue will be lower (5.1%, compared with 6.8% in the previous two years). The largest increase is expected in non-tax revenue (7.2%). By contrast, the growth of direct and indirect taxes should not exceed 5%.

Ordinary budget expenditure is forecast to grow by 5.4%, compared with 7.2% in 2002. Primary expenditure will rise slightly (by 6.2%, compared with 12.0% in 2002). Interest payments, after declining for two consecutive years, will show an increase of 2.9%.

The stronger growth of ordinary budget expenditure than of revenue (5.4% and 5.1% respectively) will widen the deficit. At the same time, stronger growth of primary expenditure than of revenue will result in a reduced primary surplus for 2003.

As regards the public investment budget, expenditure is expected to increase by 25.3%, after decreasing by 9.2% in 2002. At the same time, revenue is also expected to rise substantially (by 57.1%), after falling by 6.6% in 2002.

T A B L E V I I I . 1 1
R E V E N U E , E X P E N D I T U R E A N D D E F I C I T U N D E R T H E O V E R A L L G O V E R N M E N T B U D G E T
(Million euro)

	1999	2000	2001	2002*	Budget for 2003	Percentage changes			Budget for 2003/02*
						2000/99	2001/00	2002*/01	
R e v e n u e ¹	34,051	37,522	39,368	41,675	45,150	10.2	4.9	5.9	8.3
1. Ordinary budget	31,087	34,257	36,573	39,065	41,050	10.2	6.8	6.8	5.1
— Direct taxes	(11,866)	(13,682)	(13,585)	(14,805)	(15,510)	(15.3)	(-0.7)	(9.0)	(4.8)
— Indirect taxes	(17,179)	(18,620)	(19,498)	(20,990)	(22,035)	(8.4)	(4.7)	(7.7)	(5.0)
— Other revenue	(2,041)	(1,954)	(3,490)	(3,270)	(3,505)	(-4.3)	(78.6)	(-6.3)	(7.2)
2. Public investment budget	2,964	3,265	2,795	2,610	4,100	10.1	-14.4	-6.6	57.1
E x p e n d i t u r e ¹	39,696	42,734	44,578	46,519	50,453	7.7	4.3	4.4	8.5
1.1 Ordinary budget ²	33,093	35,313 ³	36,736 ³	39,399	41,535	6.7	4.0	7.2	5.4
Interest payments ⁴	(9,694)	(9,914)	(9,711)	(9,134)	(9,400)	(2.3)	(-2.0)	(-5.9)	(2.9)
1.2 Primary ordinary budget expenditure	23,398	25,399 ³	27,025 ³	30,265	32,135	8.6	6.4	12.0	6.2
2. Public investment budget	6,603 ³	7,421 ⁵	7,842	7,120	8,918	12.4	5.7	-9.2	25.3
N e t d e f i c i t (-)/surplus (+)	-5,645	-5,212	-5,210	-4,844	-5,303	-7.7	0.0	-7.0	9.5
P e r c e n t a g e o f G D P	-5.0	-4.3	-4.0	-3.4	-3.5				
1. Ordinary budget	-2,006	-1,056	-163	-334	-485				
2. Public investment budget	-3,639	-4,156	-5,047	-4,510	-4,818				
P r i m a r y d e f i c i t (-)/surplus (+)	4,050	4,702	4,501	4,290	4,097				
P e r c e n t a g e o f G D P	3.6	3.9	3.4	3.0	2.7				
ELEGEF (Revenue=Expenditure)	2,366	2,401	2,523	2,210	2,823	1.5	5.1	-12.4	27.7
Amortisation payments ⁴	9,996	13,859	12,777	21,021	21,626	38.6	-7.8	64.5	2.9

1 To ensure comparability, tax refunds are included in expenditure and have not been deducted from revenue.

2 Excluding amortisation payments.

3 Including expenditure incurred in 2000 (€71 million) and in 2001 (€59 million) for persons hit by the September 1999 earthquake.

4 Including interest and amortisation payments related to the national defence debt.

5 Including expenditure for persons hit by the September 1999 earthquake, amounting to €88 million in 1999 and €258 million in 2000.

* Provisional data.

Source: State General Accounting Office.

TABLE VIII.12
FINANCIAL ACCOUNT OF GREECE WITH THE EUROPEAN UNION
(Million euro)

	Annual aggregates					Percentage changes			Budget for 2003/02*
	1999	2000	2001	2002*	Budget for 2003	2000/99	2001/00	2002*/01	
<i>A. Receipts from the European Union</i>	<i>5,816</i>	<i>6,004</i>	<i>5,420</i>	<i>5,210</i>	<i>7,153</i>	<i>3.2</i>	<i>-9.7</i>	<i>-3.9</i>	<i>37.3</i>
1. Refund to cover cost of collecting the Union's "own resources"	20	22	20	47	50	10.0	-9.1	135.0	6.4
2. Social Fund	620	679	248	...	790	9.5	-63.5	...	...
3. EAGGF - Guidance Section	321	391	170	...	351	21.8	-56.5	...	...
4. Regional Fund	1,917	1,936	1,778	...	2,570	1.0	-8.2	...	...
5. EAGGF - Guarantee Section	2,460	2,506	2,610	2,574	2,950	1.9	4.2	-1.4	14.6
6. Other receipts	11	12	9	3	2	9.1	-25.0	-66.7	-33.3
7. Cohesion Fund	421	407	575	...	420	-3.3	41.3	...	...
8. Receipts from EFTA countries	10	12	7	0	0	20.0	-	-	-
9. Fisheries Fund	36	39	3	10	20	8.3	-92.3	233.3	100.0
<i>B. Payments to the European Union</i>	<i>1,275</i>	<i>1,402</i>	<i>1,395</i>	<i>1,457</i>	<i>1,500</i>	<i>10.0</i>	<i>-0.5</i>	<i>4.4</i>	<i>3.0</i>
1. Agricultural levies and duties	10	9	10	8	11	-10.0	11.1	-20.0	37.5
2. Sugar levies	11	11	14	7	12	0.0	27.3	-50.0	71.4
3. Customs duties under the Common External Tariffs provision	178	202	178	167	154	13.5	-11.9	-6.2	-7.8
4. Contribution on the basis of revenue from VAT	563	569	611	500	507	1.1	7.4	-18.2	1.4
5. Contribution on the basis of GDP	509	543	537	691	756	6.7	-1.1	28.7	9.4
6. Other contributions	4	26	31	21	17	550.0	19.2	-32.3	-19.0
7. Contribution to the European Development Fund	-	39	10	22	22	-	-74.4	120.0	0.0
8. Payments due to unrealised projects	-	-	0	35	15	-	-	-	-
9. Contribution to the food aid programme	-	3	4	6	6	-	100.0	50.0	0.0
<i>Net receipts from the European Union (A-B)</i>	<i>4,541</i>	<i>4,602</i>	<i>4,025</i>	<i>3,753</i>	<i>5,653</i>	<i>1.3</i>	<i>-12.5</i>	<i>-6.8</i>	<i>50.6</i>

* Provisional data

Source: State General Accounting Office.

Following a sizeable growth of 64.5% last year, amortisation payments will remain in 2003 at the high level of 2002. Despite the considerable prolongation of the average maturity of debt, amortisation payments are close to 15% of GDP both in 2002 and 2003 (compared with 9.8% in 2001).

Finally, after a shortfall in investment revenue in 2002, net receipts from the EU are expected to increase substantially in 2003 (by 50.6%) and reach €5,653 million, compared with €3,753 million in 2002 (see Table VIII.12). Receipts from the EU are forecast to increase by 37.3%, while Greece's payments to the EU should rise only slightly (by 3.0%).

3.2 The budget of public enterprises and social security and welfare funds

According to the Introductory Report on the Budget for 2003, the financial results of the seven major social security and welfare funds, as reflected in the consolidated deficit of the operating and capital accounts, are expected to deteriorate further in 2003 (see Table VIII.7), as their total deficit is forecast to increase by €569 million and reach 3.2% of GDP.

This deficit is expected to be financed mainly by increased grants out of the ordinary budget (25.7%), while a considerable reduction in grants out of the public investment budget is planned. This will lead to a rise in the net borrowing requirement, which will reach €372 million.

Revenue under the operating account is expected to grow by 13.6%, while operating expenditure should rise by 9.5%. The operating deficit will therefore fall by 3.1%. However, the consolidated deficit of the operating and capital accounts is forecast to widen because of a significant increase in investment, as well as a further large rise in working capital, which has shown unusually wide fluctuations in recent years.

The consolidated deficit of the operating and capital accounts of public enterprises is also expected to grow considerably (by 49.2%) and reach €3,057 million, from €2,049 in 2002. As a percentage of GDP, the deficit is expected to rise from 1.5% in 2002 to 2.0% in 2003 (see Table VIII.8).

The operating revenue of public enterprises is forecast to record a 4.9% increase in comparison with 2002. Combined with a 4.4% growth of operating expenditure, this will lead to a primary operating surplus of €193 million in 2003, compared with €122 million in 2002. By contrast, total capital expenditure is expected to rise by 34.4% and reach €4,476, mainly because of increased investment. This rise in capital expenditure, in conjunction with a forecasted 5.7% growth of special resources, will raise the total deficit of public enterprises to €3,057 million.

This larger deficit will be financed to the extent of 15.8% by grants out of the ordinary budget and the public investment budget and, to the extent of 37.0%, by depreciation allowances, while the remaining 47.2% will be covered by net borrowing, which is expected to almost triple in 2003 and reach €1,442 million (or about 1.0% of GDP).

APPENDIX TO CHAPTER VIII

TAX POLICY MEASURES

On 31 March 2002, the Committee on Tax Reform completed its task and submitted its recommendations, which were then debated by the social partners. On the basis of the findings of the Committee and the conclusions of the dialogue, Law 3091/2002 “Simplification and improvement of income and capital taxation, and other provisions” was drafted and passed in December 2002. Tax reform is expected to continue during 2003.

Law 3091/2002, taken together with Law 3052/2002, which had been passed earlier in 2002, introduced fundamental changes aimed at simplifying the tax system both in terms of tax structure and in terms of administration and enforcement mechanisms, assisting families with many children, distributing the tax burden more evenly, restricting the

INCOME TAX SCALE FOR NATURAL PERSONS¹
(In euro)

Income bracket	Tax rate (%)	Income bracket tax	Total income	Total tax
8,400	0	0	7,400	0
5,000	15	750	13,400	750
10,000	30	3,000	23,400	3,750
Excess	40			

¹ For incomes to be acquired in 2003.

activity of offshore companies in Greece and capturing their tax capacity and, finally, containing tax evasion.

Specifically, Law 3091/2002 brought about significant changes in the personal income tax scale for the year 2004, i.e. for incomes to be earned in 2003. Accordingly, the first bracket (with a marginal rate of 5%) was abolished and the tax-free amount was raised to €8,400. Especially for wage-earners and pensioners, the tax-free amount was raised to €10,000 and the income corresponding to the second bracket was reduced commensurately (from €5,000 to €3,400). The tax-free amount of the first bracket increases by €1,000 if the taxpayer has one child, by €2,000 if he has two children and by €10,000 if he has three children, while for each further child the tax-free amount rises by €1,000.

The threshold for submission of a tax return was increased by 150% (to €3,000), or to €6,000 for wage-earners without any other source of income. Thus, the number of persons required to submit a tax return is reduced substantially, curtailing drastically the administrative cost of the tax system and the taxpayers' compliance cost.

At the same time, the law revised the system of deductions from taxable income of interest on mortgages for the purchase of a first house; medical and hospital expenses;

rent for the family's house and for lodgings held by children who are students, as well as costs of coaching schools or private lessons. These expenses are no longer deducted from taxable income, but part of them is deducted as a tax credit, while in certain cases there is a tax credit ceiling. In the case of medical and hospital expenses, e.g., 15% of them is deducted from the tax assessed according to the tax scale, but the total tax credit may not exceed €6,000. Moreover, the deduction from taxable income of family expenses up to a certain amount is replaced by a tax credit, with a ceiling of €75, and applies only to wage-earners and pensioners.

By contrast, insurance premiums for life, accident and health insurance continue to be deducted from taxable income, with a ceiling of €1,000. At the same time, another provision of the said law abolished the 3.6% stamp duty on insurance compensation.

Significant changes were made in the criteria for determining imputed income on the basis of the taxpayer's living expenses. Specifically, the amounts of almost all income imputation criteria were doubled (e.g. possession of cars, pleasure boats, aircraft, swimming-pools etc.). At the same time, however, ownership of one or two vehicles (with engine capacity of up to 2,000 cc) and a boat (10 metres length overall-LOA) per taxpayer (or family) is no longer taken into account for the purpose of imputation. Furthermore, a new criterion of income imputation was added for big dwellings (main house of over 200 square metres floor area), replacing the tax on owner-occupied dwellings, which was abolished.

Similar changes were introduced with respect to income imputation on the basis of acquisition of assets, as many criteria were abolished, such as the criterion of income imputation on the basis of purchase of firms of any legal form, company holdings, securities in general, capital injections to, or establishment of, single proprietorships, general partnerships, limited liability companies, limited partnerships etc.

As regards corporate income taxation, the law abolished the imputation of net income of enterprises (other than construction firms) that keep accounting books of category B and C under the Accounting Books, Receipts and Invoices Code. These enterprises are now taxed on the basis of their profits, as determined by respective entries in their accounting books. The categories of deductible expenses are set forth in the said article. Banking and insurance sociétés anonymes are enabled to adjust the undepreciated value of owner-used real estate to its objective value. It should be noted that the revaluation surplus is not added to the firm's gross income, but is taxed independently at 2%.

Another provision of the said law introduced a change in the taxation of sales of entire enterprises, company holdings, unquoted shares etc. to first- and second-degree relatives,¹ which are now taxed at 1.2% and 2.4% respectively of the real purchase value. Similar arrangements were enacted with respect to the taxation of inheritances, gifts and parental donations of enterprises, which are taxed independently at the aforementioned rates. In this context, the tax on transfers of quoted shares is calculated at a fixed rate of

1 As defined for the purposes of taxation of inheritances, gifts and parental donations.

0.6% for first-degree relatives and is doubled for second-degree relatives. Thus, uniform independent taxation of transfer of securities and enterprises to relatives is introduced, regardless of the type of transfer (sale, inheritance, gift or parental donation), and business activity and succession are considerably facilitated. Another provision of the said law established an additional tax-free amount of €300,000 where the heir is a spouse or a minor.

The same law levied a new 3% special annual tax on the value of real estate held by offshore (other than shipping) companies in full, naked or beneficial ownership. Moreover, incentives were given for the conditional transfer to third parties of real estate that belongs to offshore companies. Finally, the law provides that expenses for purchase of goods and services from an offshore company or depreciation of fixed assets purchased from an offshore company are not deducted from the gross income of domestic companies.

As regards capital taxation, Law 3091/2002 includes important provisions that ensure equal treatment of taxpayers who acquire a first house, regardless of the way of acquisition (by inheritance, parental donation or purchase), and reduce the burden on transfers between close relatives. They also equalise and increase tax-free amounts, as well as the floor area that is considered sufficient to meet the housing needs of the taxpayer and his family. At the same time, exemption from tax on inheritance or parental donation for the purchase of a first house is now granted more than once in a lifetime, provided that the beneficiary pays the tax on the real estate for which he has already been granted exemption.

Other provisions of the said law amended the VAT Code in order to harmonise it with EU legislation, e.g. by establishing a special exemption regime for recyclable waste, exemption of default interest from VAT etc.

The said law also includes additional tax arrangements on transactions associated with the organisation of the Olympic Games. Specifically, gifts in kind to “Athens 2004” Organisation are deducted from the gross income of enterprises. Moreover, rents of dwellings that are leased in the course of, and in connection with, the Olympic Games are taxed independently at a 10% rate.

Law 3052/2002 “Simplification of the Accounting Books, Receipts and Invoices Code and of the way of submitting VAT, and other provisions” introduces important changes, as from 1 January 2003, in the way firms keep accounting books and submit VAT, with a view to simplifying the relevant provisions. In this respect, the categories of receipts and invoices that are subject to certification by internal revenue offices are substantially reduced, as computerised receipts and invoices are no longer required to be certified and punched and firms are no longer obliged to keep physical records, the time periods for submitting VAT are increased for firms that keep books of category A or B and an optional special VAT return submission regime is introduced for firms that keep books of category A. As a result, many transactions with internal revenue offices can now be carried out without the physical presence of the taxpayer, which reduces both the administrative costs of the tax system and the taxpayers’ compliance cost.

Another provision of the said law raised annual road duties by 10% on average, for

all categories of passenger cars.

Finally, Law 3049/2002 “Privatisation of public enterprises and other provisions” broadens the scope and procedures of privatisation of public enterprises. Specifically, the law provides that contracts concluded within the context of privatisation procedures (e.g. transfers of real estate, movables, shares) are exempt from any tax, such as income tax on surplus value, stamp duties etc.

IX. BALANCE OF PAYMENTS

1. CURRENT ACCOUNT

1.1 Introduction

According to revised¹ data, the current account deficit grew by €466 million to €8,635 million in 2002 (see Table IX.1), mainly reflecting a narrowing of the transfers sur-

TABLE IX.1
BALANCE OF PAYMENTS
(Million euro)

	January – December			Percentage changes	
	2000	2001	2002*	2001/00	2002/01
I. Current account balance (I.A+I.B+I.C+I.D)	-8,372.4	-8,169.3	-8,635.4		
I.A Trade balance (I.A.1 – I.A.2)	-21,927.5	-21,610.9	-22,708.7		
Non-oil trade balance	-18,940.8	-18,614.3	-19,203.7		
Oil trade balance	-2,986.7	-2,996.6	-3,505.0		
I.A.1 Exports of goods	11,098.6	11,545.4	10,433.6	4.0	-9.6
I.A.2 Imports of goods	33,026.1	33,156.3	33,142.3	0.4	0.0
I.B Services balance (I.B.1 – I.B.2)	8,711.1	9,150.0	10,755.4		
I.B.1 Credit	20,977.0	22,075.9	21,131.4	5.2	-4.3
I.B.2 Debit	12,266.0	12,925.8	10,376.1	5.4	-19.7
I.C Income balance (I.C.1 – I.C.2)	-955.3	-1,981.3	-2,073.4		
I.C.1 Credit	3,039.1	2,100.3	1,626.5	-30.9	-22.6
I.C.2 Debit	3,944.3	4,081.6	3,699.9	2.2	-9.4
I.D Transfers balance (I.D.1 – I.D.2)	5,799.3	6,272.9	5,391.3		
I.D.1 Credit	8,127.0	8,945.9	7,801.4	10.1	-12.8
I.D.2 Debit	2,327.7	2,673.0	2,410.1	14.8	-9.8
II. Financial account balance	8,906.3	6,934.8	10,310.4		
III. Errors and omissions	-533.9	1,234.5	-1,674.9		
Reserve assets (end of period)	13,208.0	7,031.0¹	9,014.0¹		

1 Since Greece's entry into the euro area in January 2001, reserve assets, as defined by the European Central Bank, include only monetary gold, the "reserve position" in the IMF, "Special Drawing Rights", and Bank of Greece's claims on non-euro area residents denominated in foreign currency; they do not include claims on non-euro area residents denominated in euro, claims on euro area residents denominated in euro or in foreign currency, and the Bank of Greece participation in the capital and the reserves of the ECB.

* Revised provisional data.

Source: Bank of Greece.

plus and a widening of the trade deficit, as well as a slight increase in the income account deficit. These developments were only partly offset by the apparent² considerable growth

1 The revision of the provisional data released on 14 February 2003 concerned travel receipts and payments. See Section 1.3 below.

2 In Section 1.3 of this chapter it is explained that the change in the methodology of compilation of the travel balance data affected the services balance figures.

of the services surplus. Both the value of exports and inflows under the income and transfers accounts declined in euro terms, *even* in cases of transactions carried out in US dollars or other currencies that depreciated against the euro. In 2002, once again, total net capital inflows exceeded the current account deficit.

The current account deficit fell to 6.1% of GDP in 2002, from 6.2% in 2001 and 6.8% in 2000. The large size of the deficit in recent years, which reflects the fact that domestic (private and public) savings finance only part of total domestic investment, is mainly accounted for by: (i) the stronger growth of the Greek economy in comparison with most of its trading partners; (ii) competitiveness losses owing to higher inflation and faster growth of unit labour costs in Greece vis-à-vis its major competitors; and (iii) structural weaknesses which hamper the export orientation of the Greek economy. Low competitiveness – as suggested not only by relative prices, but also by a number of quality indicators compiled by international organisations¹ – reflects, to a large extent, rigidities in the goods and input markets.

The widening of the trade deficit and the decrease in gross receipts from services in 2002 resulted from a slowdown in the growth of foreign demand, mainly from the other EU countries, as well as a partial reversal of the price competitiveness gains recorded in 1998-2001. This reversal was accounted for by (i) higher inflation and – to a smaller extent – stronger growth of unit labour costs in Greece in comparison with its partners, as already mentioned, and (ii) the appreciation of the euro.

Reduced overall competitiveness is the main development indicated by the widening of the deficit, since Greece's participation in the euro area has visibly reduced the importance of the financing of the current account deficit as a constraint on the conduct of economic policy. As the persistence of the high level of the deficit will have negative implications for growth and employment, both the Government and enterprises must implement policies aimed at improving competitiveness in terms of prices, quality and marketing, so that the Greek economy can take full advantage of a possible rebound in foreign demand and of the opportunities offered by the enlargement of the EU.

¹ According to the *Global Competitiveness Report 2002-2003* of the World Economic Forum (WEF), as evaluated by 4,600 business top executives, Greece ranks 38th and 43rd among 80 countries in terms of competitiveness, as measured by the Growth Competitiveness Index and the Microeconomic Competitiveness Index respectively. Besides, according to the *World Competitiveness Yearbook 2002* of the International Institute for Management Development (IMD), Greece fell from the 30th rank in 2001 to the 36th in 2002 (among 49 countries). However, it should be noted that the reliability of these "quality" indices has been recently questioned. In fact: (a) A paper by Stéphane Grégoir and Françoise Maurel (of the Institut National de la Statistique et des Etudes Economiques) entitled "Les indices de compétitivité des pays: interprétation des limites" (INSEE, Document de travail G2002/16, December 2002) focuses on the method of compilation of the WEF Growth Competitiveness Index for 2001 and constructs an alternative index (on the basis of the same initial data), according to which the ranking of various countries changes considerably (Greece's position improves by 15 ranks). The paper – which was commented upon by the French Minister of Finance on 14 December 2002 – argues that the rankings of countries based on the WEF index or the alternative index do not adequately reflect growth differentials across countries. (b) A paper entitled "The competitiveness of the Greek economy: truth and myth" (Alpha Bank, *Economic Bulletin*, December 2002) focuses on the choice of variables in the compilation of the WEF and IMD indices for 2002; it finds that wrong data may have been used and that certain criteria may not have been interpreted successfully, reaching the conclusion that the "explanatory potential" of the WEF and IMD models is not satisfactory.

It should be pointed out, in any case, that the substantially increased net inflow recorded under combined direct and portfolio investment, notably for the purchase of Greek bonds by non-residents despite the convergence of interest rates and the narrowing of the yield spread within the euro area, reflects confidence in the outlook of the Greek economy.

1.2 Trade balance

The trade deficit grew by €1,098 million relative to 2001, owing to increases in both the non-oil trade deficit and the net oil import bill. The latter increase largely reflects the apparent considerable decrease in oil export receipts, given that, since January 2002, oil export statistics no longer include bunkering at Greek ports or territorial waters. In 2002, the net oil import bill remained almost unchanged in comparison with 2001, at 14% of total import value and 15% of the trade deficit.

The widening of the non-oil trade deficit came solely from a considerable decrease of €584 million or 5.9% in the value of non-oil exports, as the value of non-oil imports remained unchanged.¹ Deflated by the corresponding wholesale price indices compiled by the NSSG, these figures point to a drop of 8% in the volume of non-oil exports and of less than 1% in the volume of non-oil imports.

Developments in Greek exports in 2002 broadly mirrored trends in foreign demand and in the price competitiveness of Greek products. Although the volume of world trade increased in 2002 (after being stagnant in 2001), foreign demand for Greek products seemed to weaken, in line with falling growth rates in the EU (2002: 1.0%, from 1.6% in 2001 and 3.4% in 2000), which is the destination of at least half of Greek exports. GDP growth also decelerated — albeit less — in the Balkan and Central and Eastern European countries, as well as in Mediterranean and Middle East countries, which, taken together, absorb an increasing share² of Greek exports. Besides, the price competitiveness of Greek products, after improving by 3%-5% in 2000 (mainly due to the drop in the effective exchange rate of the drachma) and remaining almost unchanged in 2001, declined by 1.8%-3.8% in 2002, depending on the index used.³

According to available Bank of Greece data on the breakdown of non-oil exports by product category (see Table IX.2A), exports of consumer non-durables increased substantially and represented a higher share of total exports relative to 2001. A considerable increase of 30% was recorded in exports of chemicals and, most notably, pharmaceuticals and plastics, but also in organic chemicals, fertilisers, tanning materials,

1 The NSSG trade statistics for 2002 show a 3.2% drop in the euro value of non-oil exports and a marginal rise of 0.6% in the euro value of non-oil imports relative to 2001.

2 2002: 19%, 2001: 15%.

3 Price competitiveness is measured in relation to 15 competitor countries on the basis of the effective exchange rate and alternative indices, i.e. unit labour costs in manufacturing, consumer prices and wholesale prices.

dyes and paints, cosmetics and cleaning products. The newsletter of the Panhellenic Exporters' Association (PSE)¹ reports that Greek exports of chemicals, based on NSSG data, almost tripled between 1990 and 2000, growing at an average annual rate of

TABLE IX.2
BREAKDOWN OF EXTERNAL TRADE BY PRODUCT CATEGORY
(EXCLUDING OIL)

A. Exports					
	Percentage share in total export receipts			Percentage changes	
	2000	2001	2002*	2001/2000	2002/2001
Food, beverages, tobacco	16.9	17.1	19.3	15.2	6.2
Consumer non-durables	21.7	20.1	24.3	5.8	13.8
Consumer durables	3.2	4.7	4.4	67.4	-10.4
Raw materials (excluding oil) and semi-manufactured products	17.0	14.8	14.0	-0.7	-11.3
Capital goods	2.1	1.5	2.1	-15.4	32.3
Other goods	0.3	0.1	0.1	-42.8	-31.3
Unclassified goods ¹	38.9	41.7	35.7	22.2	-19.3
Total	100.0	100.0	100.0	14.0	-5.9
B. Imports					
	Percentage share in total export receipts			Percentage changes	
	2000	2001	2002*	2001/2000	2002/2001
Food, beverages, tobacco	13.5	13.9	14.4	6.3	3.8
Consumer non-durables	24.8	27.8	29.4	15.7	5.8
Consumer durables	7.5	8.1	7.5	10.4	-6.9
Raw materials (excluding oil) and semi-manufactured products	12.5	12.9	13.2	6.4	2.1
Capital goods	13.4	13.6	14.0	4.8	2.8
Computers and accessories	2.7	3.0	2.3	14.0	-23.5
Fixed and mobile telephony	2.6	2.3	2.6	-8.9	12.3
Passenger cars	11.5	11.3	11.8	1.3	4.3
Other goods	0.6	1.0	0.8	87.3	-22.4
Unclassified goods ¹	10.8	6.1	4.0	-42.0	-33.4
Total	100.0	100.0	100.0	3.2	0.0

1 Goods for which no CN code is reported.

* Provisional data.

Source: Bank of Greece.

11.5%, i.e. faster than world exports (which grew by 7%), thus increasing their share in the chemicals world trade. According to 2002 Bank of Greece data, the share of chem-

¹ Episemanseis, February 2003.

icals in total Greek exports rose from 6.4% in 2001 to 8.1% in 2002. There was also a notable increase in the volume of traditional exports, i.e. agricultural products and textiles. According to PSE,¹ the Greek agricultural sector is one of the most export-oriented in the world. Specifically, both NSSG and Bank of Greece data suggest that the

TABLE IX.3
EFFECTIVE EXCHANGE RATE AND EXPORT PRICES
(Year-on-year percentage changes)

	Effective exchange rate ¹	Wholesale prices of exported goods			
		Total		Excluding oil	
		In domestic currency	In foreign currency	In domestic currency	In foreign currency
2001 Jan.	-3.1	5.3	2.1	5.0	1.8
Feb.	-2.5	3.3	0.7	3.4	0.8
March	-1.7	2.6	0.9	4.0	2.2
Apr.	-1.0	4.2	3.1	3.7	2.6
May	-0.7	3.1	2.4	2.9	2.2
June	-1.9	3.0	1.0	4.5	2.6
July	-1.5	2.1	0.6	3.8	2.3
Aug.	0.1	0.4	0.5	2.2	2.3
Sept.	1.1	-2.4	-1.3	0.9	2.1
Oct.	1.8	-5.2	-3.5	-0.3	1.5
Nov..	1.4	-5.1	-3.7	-0.3	1.1
Dec.	0.9	-1.7	-0.8	1.1	2.0
2002 Jan.	-0.3	2.4	2.1	3.9	3.7
Feb.	-0.2	1.9	1.7	4.1	3.8
March	-0.4	2.8	2.4	3.6	3.2
Apr.	0.0	2.8	2.8	3.7	3.8
May	1.0	1.2	2.2	3.0	4.0
June	1.9	-0.3	1.6	1.2	3.2
July	2.0	0.5	2.5	1.4	3.3
Aug.	1.1	1.6	2.7	2.2	3.3
Sept.	1.1	1.7	2.8	1.6	2.7
Oct.	1.2	3.2	4.5	2.0	3.2
Nov..	1.8	2.2	4.1	1.2	3.0
Dec.	1.8	2.7	4.5	1.0	2.8
2003 Jan.	2.4	1.4	3.7	-1.0	1.3
Feb.	3.0	1.9	4.9	-1.4	1.6

1 Weighted on the basis of Greece's external trade.

Source: Calculations based on NSSG and Bank of Greece data.

share of agricultural products in total Greek exports is 30%, while the corresponding figure in Western Europe – the biggest exporter of agricultural products in the world – is only 9.4%. Exports of capital goods also grew substantially, but their share in total

1 Episemanseis, October 2002.

Greek exports is very small. By contrast, exports of consumer durables, after increasing impressively in 2001, showed a considerable decline in 2002. Exports of raw materials, semi-manufactured products and “unclassified goods” (see footnote to Table IX.2) also fell.

Wholesale export prices in domestic and foreign currency (see Table IX.3) suggest that exporters adjusted their pricing policies to the fluctuations of the exchange rate

TABLE IX.4
COUNTRY BREAKDOWN OF GREEK EXTERNAL TRADE

A. Percentage shares in total export value			
	2000	2001	2002*
European Union (15)	51.5	49.1	53.8
Euro area	37.2	34.9	38.2
Accession countries	3.9	4.9	6.5
United States	26.2	27.3	16.3
Other OECD countries ¹	8.5	6.0	6.4
Balkan countries ²	3.3	5.2	7.4
Commonwealth of Independent States	0.8	1.2	1.0
Northern Africa & Middle East countries ³	3.3	3.7	4.0
Other countries	2.5	2.6	4.6
Total	100.0	100.0	100.0
B. Percentage shares in total import value			
	2000	2001	2002*
European Union	58.2	61.8	62.2
Euro area	47.4	51.4	51.9
Accession countries	1.5	1.9	1.9
United States	18.8	13.9	12.5
Other OECD countries ¹	8.4	7.5	7.7
Balkan countries ²	1.2	1.4	1.7
Commonwealth of Independent States	2.9	4.3	4.8
Northern Africa & Middle East countries ³	3.1	2.8	2.3
Other countries	5.9	6.3	6.9
Total	100.0	100.0	100.0

1 Excluding those coming under the other categories, as well as Mexico and South Korea.

2 Albania, Bulgaria, Romania and former Yugoslavia countries (Slovenia, Bosnia, Croatia, FYROM, New Yugoslavia/Serbia-Montenegro).

3 The major trading partners of Greece in Northern Africa and the Middle East.

* Provisional data.

Source: Bank of Greece.

of the euro (albeit not fully and often with lags), thus leading to a faster rise in export prices in foreign currency, at an average annual rate of 3.3% in 2002, up from 2.0% in 2001, or at a year-on-year rate of 2.8% in December 2002, compared with 2.0% in December 2001.

As regards the country composition of Greek exports (again based on available Bank of Greece data – see Table IX.4A), the share of exports to the euro area and the EU as well as to the markets of the Middle East, the Mediterranean, the Balkans and

the ten accession countries has grown,¹ whereas the share of exports to the United States has shrunk.²

Although exports of goods have decreased considerably, promising signals come from some dynamic Greek firms that in recent years have invested heavily in modernisation and have captured market shares abroad (mainly in the Balkans), *both* in traditional exports (e.g. dairy products, fruit juices) *and* in advanced technology products (e.g. telecommunications material). The growing number of firms that pursue technological and organisational streamlining policies, cut down production costs and improve the quality and range of their products to meet foreign market standards may lead to a rise in Greek exports. This potential, of course, hinges upon the conduct of macroeconomic policies that foster stability and growth and, on the part of exporters, upon pricing and wage policies that do not undermine competitiveness.

Despite strong GDP growth in 2002, the volume of non-oil imports remained broadly unchanged, as already mentioned. However, the *revised*³ detailed Bank of Greece data (see Table IX.2B) indicate an increase in the value of imports of consumer non-durables, raw materials, semi-manufactured products, *as well as capital goods* and, by contrast, a decrease in the value of imports of consumer durables and computers, as well as “unclassified goods”. The rise in imports of consumer non-durables was broadly in line with the strength of real disposable income and consumer credit expansion. The increase in the imports of capital goods (2.8% at current prices) was smaller than what would have been implied by the buoyant fixed capital formation. This may be associated with the fact that the largest rise in investment was recorded in the construction sector, which is less import-intensive. Finally, changes in the country breakdown were smaller in the case of imports than in the case of exports.

For 2003, the expected slow recovery in the economies of Greece’s major trading partners, in conjunction with a possible further deterioration of price competitiveness as a result of the sustained appreciation of the euro, may lead to a minor increase in goods exports. On the other hand, the forecasted relatively strong growth of consumer demand in Greece in 2003, combined with the stagnation of goods import volume in 2002, would

1 It should be pointed out that the predominant part of Greek exports to accession countries is directed to Cyprus.

2 This development can be partly attributed to the appreciation of the euro against the US dollar, in so far as it reflects not only the country breakdown of exports, but also, to a certain extent, the breakdown by currency of denomination. This is so because, when banks collect the initial information concerning each transaction, confusion is sometimes caused with regard to the transaction currency, on the one hand, and the destination country, on the other. As a result, the United States is reported as destination country for transactions that concern other countries, but have been settled in US dollars. On the basis of NSSG data for 2002, the share of exports directed to the EU was 44%, while the US share reached 5%. The share of exports to the Balkan, CIS, Middle East and Mediterranean countries was 37%. In any case, the general trends in the composition of exports by country of destination are confirmed by both sources of data.

3 The revised detailed data of the Bank of Greece imply a different breakdown of imports, owing to the more detailed classifications under “capital goods”, “consumer durables”, “computers and accessories” and “fixed and mobile telephony” based on four-digit Combined Nomenclature Codes (CN codes) rather than two-digit CN codes used in earlier data. The detailed data published by the Bank of Greece in March 2003 (*Monetary Policy 2002-2003*, Table XI.B) referred to rough estimates of the breakdown by four-digit CN code (which did not prove accurate).

imply a larger increase in imports than in exports (in volume terms). Given that export prices will probably rise more than import prices (mainly owing to the appreciation of the euro, as in 2002) and that the volume of imports is almost three times the volume of exports, the trade deficit *at current prices* is projected to widen in 2003, but to remain almost unchanged as a percentage of GDP.

1.3 Services balance

The services surplus grew by €1,605 million to €10,755 million in 2002 (see Table IX.5), financing 47.4% of the trade deficit (compared with 42.3% in 2001). This is attributable to a rise in net receipts from travel services, which more than offset a decrease in net receipts from transport services. Net payments for other services showed a small decline.

Specifically, according to revised final data, net travel receipts grew by €1,807 million to €7,736 million, which reflects a relatively small decrease in gross receipts and a steep drop in gross payments. It should be noted, however, that since May 2002 the travel balance is no longer compiled using data reported by commercial banks, but on the basis of a sample “border survey”, whose data are not fully comparable with those for 2001.¹ Moreover, the balance of payments for December 2002² included revised travel services data for earlier months of the year. Specifically, monthly figures for January to April 2002 were all adjusted downwards so as to ensure comparability across months for the *entire* 2002 and consistency with the seasonal pattern derived from the border survey. This revision took into account the *per capita* expenditure of travellers and the seasonality of arrivals-departures, as estimated on the basis of the survey used. For the period between May and October 2002, corrections were made for amounts that, on the basis of travellers’ days of stay, turned out to partly concern the preceding month as well. The data for the May-December 2002 period (especially those for August and September) were also revised in the light of more accurate information and finalised.³ *Despite the adjustments and revisions, the 2002 data are not comparable with those of 2001, owing to the change in the compilation methodology. It is therefore not possible to draw conclusions about changes in travel receipts and payments between 2001 and 2002.*

Information from various sources points to a decline in tourist activity in 2002. This is suggested by: (i) data on the number of arrivals and overnight hotel stays in certain tourist areas of Greece, such as Halkidiki and the greater Northern Greece region, the Cyclades Islands, Crete and the Dodecanese Islands; (ii) the number of passengers at the

1 A major difference between the two sets of data is that the sample survey data refer to travellers’ expenditure during the current month, while the previous methodology used data on flows through the banking system during the reporting month, thus including travellers’ expenditure incurred in previous months.

2 Published on 14 February 2003.

3 These final data are used in this Report.

airports of the Cyclades Islands, the Dodecanese Islands, Northern Greece and the sea-ports of Piraeus and Patras; (iii) assessments by the Greek National Tourism Organisation (EOT) and business associations of the tourist industry; (iv) responses by travel agencies, hotels and restaurants to IOBE's business survey in the services sector; and (v) data from the Civil Aviation Agency.¹ Arrivals were evenly distributed across regions, as available

TABLE IX.5
BALANCES ON SERVICES, INCOME AND TRANSFERS
(Million euro)

	2000	2001	2002*	2001/2000	2002/2001
Services balance	8,711.1	9,150.0	10,755.4	5.0	17.5
Credit	20,977.0	22,075.9	21,131.4	5.2	-4.3
Travel	10,061.2	10,579.9	10,284.7	5.2	-2.8
Transport	8,640.6	9,113.3	8,523.4	5.5	-6.5
Other services	2,275.2	2,382.7	2,323.3	4.7	-2.5
Debit	12,266.0	12,925.8	10,376.1	5.4	-19.7
Travel	4,948.9	4,650.8	2,548.7	-6.0	-45.2
Transport	4,458.3	5,351.0	5,029.7	20.0	-6.0
Other services	2,858.8	2,924.1	2,797.7	2.3	-4.3
Net credit	8,711.1	9,150.0	10,755.4	5.0	17.5
Travel	5,112.3	5,929.1	7,736.0	16.0	30.5
Transport	4,182.3	3,762.3	3,493.7	-10.0	-7.1
Other services	-583.6	-541.4	-474.4	-7.2	-12.4
Income balance	-955.1	-1,981.3	-2,073.4	107.4	4.6
Credit	3,039.1	2,100.3	1,626.5	-30.9	-22.6
Compensation of employees	631.0	606.3	509.6	-3.9	-15.9
Investment income	2,408.3	1,494.0	1,116.9	-38.0	-25.2
Debit	3,994.3	4,081.6	3,699.9	2.2	-9.4
Compensation of employees	272.0	280.9	240.4	3.3	-14.4
Investment income	3,722.4	3,800.8	3,459.5	2.1	-9.0
Transfers balance	5,799.3	6,272.9	5,391.3	8.2	-14.1
Credit	8,127.0	8,945.9	7,801.4	10.1	-12.8
General government (EU transfers)	5,331.8	5,921.7	5,486.3	11.1	-7.4
Other sectors (emigrants' remittances etc.)	2,795.2	3,024.2	2,315.1	8.2	-23.4
Debit	2,327.7	2,673.0	2,410.1	14.8	-9.8
General government (payments to the EU)	1,568.9	1,866.7	1,696.5	19.0	-9.1
Other sectors	758.8	806.3	713.6	6.3	-11.5

* Provisional data.

Source: Bank of Greece.

data show declines in almost all tourist areas. The fall in tourism relative to 2001 is associated with subdued private consumption in several European economies (notably Germany), but it also reflects lower price competitiveness.

¹ On the basis of Civil Aviation Agency provisional data, air passenger arrivals decreased by around 2% in 2002.

Net receipts from transport services dropped from €3,762 million in 2001 to €3,494 million in 2002, mainly reflecting the appreciation of the euro against the US dollar (given that transport receipts are denominated in US dollars). Freight rates, as measured by the BDIY index in US dollar terms, remained very low almost throughout 2002, but have risen considerably since September.¹

In 2003, the services balance will be affected by the slow economic recovery of Greece's major trading partners and the countries of origin of the tourists visiting Greece, as well as by a possible further decline in price competitiveness. Moreover, the services balance has already been influenced by the uncertainty associated with the war in Iraq. Obviously, the uncertainty about the economic conditions that will emerge after the end of the war does not allow any reliable forecasts regarding tourist activity. However, the following points can be made:

- As Greece lies closer to the area of the conflict than the other European countries, the negative impact on its tourist industry could be stronger until the situation comes back to normal.²
- The size of the impact on Greek tourism will also depend on the timing of the end of the crisis in relation to the peak of the tourist season.
- Uncertainty before and after the outbreak of the war in Iraq on 20 March have already had adverse effects on bookings for the next tourist season, as well as on the expectations of tourist enterprises, according to both IOBE's business survey and the special survey conducted between 13 and 19 March 2003 by the Bank of Greece on a large sample of tourist firms in the Dodecanese Islands, Crete, Corfu and Halkidiki (the results are summarised in Box IX.1). Of course, it is reasonable to expect that an early stabilisation of the situation would lead to a considerably improved outlook.

1 At the same time, however, it should be noted that (a) there was a pick-up in world trade volume and (b) the gross registered tonnage of the Greek merchant fleet rose by 9.2% in 2002.

2 As announced on 27 March 2003, the government decided to double advertising expenditure to promote Greek tourism this year.

BOX IX.1

The outlook of tourism for 2003: results of a special survey conducted in selected tourist areas of Greece

Between 13 and 19 March 2003, i.e. in the last week before the outbreak of war in Iraq, certain Bank of Greece branches¹ conducted a special survey on a broad sample of tourist enterprises, mainly hotels, in the Dodecanese Islands (Rhodes and Cos), Crete, Corfu and Halkidiki, in order to draw information on the (then) prevailing situation, as well as on the outlook and forecasts of the tourist industry. ➔

1 Specifically, the Rhodes, Heraklion, Rethymno, Chania, Thessaloniki and Corfu branches.

→ In the Dodecanese Islands and Crete, the survey covered a sample of hotels and hotel groups, as well as major tour operators, which represented 20% and 14% of the tourist industry in each area respectively. In Corfu, the sample (mainly big hotels) accounted for 37% of the island's hotel capacity. Finally, in Halkidiki, the sample included 35% of the *total* capacity of the prefecture, but 60% of big hotels. The large share of big hotels in the sample in *all four* areas enhances the reliability of the findings, since big hotels as a rule have the closest contacts with tour operators and the best organised booking procedures.

The main conclusions of the survey are as follows:

- Bookings until mid-March 2003 were reported to have declined in comparison with 2002, by 30%-40% in the Dodecanese Islands and Crete,¹ 20% in Halkidiki (where cancellations have been few so far) and only 13% in Corfu. (The rates of decrease seem at first sight to be inversely proportional to the distance from the war zone).

- Regarding prospects for bookings in the mid-March to end-May 2003 period, tourist firms expected declines of 35%-45% for the Dodecanese Islands and Crete and only 15% for Corfu relative to a year before. In Halkidiki, many respondents pointed to a tendency towards deferred bookings and arrivals for mid-May, which may lead to a shortening of the tourist season. Respondents from *both* the Dodecanese Islands *and* Crete which saw a risk of mass cancellations in the March-May period owing to the war also considered that any prolongation of the conflict would result in a shortened tourist season.

- Prospects for the period from June to December 2003 appeared *relatively* improved in comparison with one year earlier. Respondents still expected declines in bookings, but of only 15%-20% in the Dodecanese Islands and Crete and 12% in Corfu. According to the prevailing opinion in Halkidiki, if the conflict lasted for only a few weeks, the decline for the entire tourist season could be as low as 5%. In fact, certain respondents estimated, especially for June, that there could even be an *increase* of up to 10% in bookings, probably associated with the EU summit to be held in Halkidiki in the same month (in the context of the Greek Presidency of the European Union).

Other interesting conclusions that can be drawn from the survey are the following:

First, 50% of hotels in the Dodecanese Islands, 30% in Crete and 65% in Corfu reported that they had invested during the last 15-month period. One quarter of the hotels in the Dodecanese Islands, 35% in Crete and 40% in Corfu said that they had planned to invest within the remainder of 2003.²

Second, most respondents from the *Dodecanese Islands* and *Crete* (around 70%) quoted the tourist policy of Turkey (which largely relies on low labour costs and big infrastructure projects) as the major challenge to their competitiveness in the long run. At the same time, however, 65% took the view that that joint Greek-Turkish "holiday packages" could lead to increased bookings on both sides of the Aegean Sea. The joint advertising of hotels with tour operators is the most effective way to increase bookings. As regards prices, small hotels — *as opposed to big hotel groups* — consider that there was no margin for further cuts. →

1 In the Dodecanese Islands, the percentage of respondents that reported a decline in 2003 over 2002 reached 75%, compared with 67% in Crete.

2 The question on investment was not put to survey participants from Halkidiki.

→ Third, respondents from *Halkidiki* estimated that bookings from Central and Eastern European countries remained broadly unchanged and did not seem to be affected considerably by the current unfavourable international environment and some of them even expected increased arrivals from these countries. Furthermore, the assessment of many respondents was that the negative impact of the armed conflict could be mitigated by a conjunctural shift in bookings away from Turkey, which seemed to be more strongly affected by the prevailing instability, to Greece, a safer destination. Finally, the vast majority of respondents held the view that, depending on the duration of the conflict, the negative impact could be minimised by the end of the tourist season if proper policy measures were taken to promote Greek destinations and improve access there, and if actors in the tourist industry were better co-ordinated.

1.4 Income account

The income account deficit widened by €92 million in 2002 (see Table IX.5). Specifically, net inflows under *compensation of employees* decreased and net outflows of investment income (interest, dividends and profits) increased slightly. The latter development reflected declines in investment income inflows (due to lower interest rates and dividend yields in 2002) and, to a smaller extent, in the corresponding outflows.

1.5 Transfers balance

The transfers surplus fell by €882 million to €5,391.3 million in 2002 (see Table IX.5), as a result of decreases in both net transfers from the EU and net receipts of the other non-general government sectors (mainly emigrants' remittances).

Net transfers (receipts minus payments)¹ from the EU dropped by €265 million to €3,790 million in 2002.² Receipts from the Guarantees Section of the European Agricultural Guidance and Guarantees Fund (EAGGF) under the Common Agricultural Policy (CAP) remained almost unchanged relative to 2001, while the implementation of CSF III continued uneventfully.³ Inflows from the Structural Funds and the Cohesion Fund declined on a cash basis, partly because of the advance payments under CSF III

1 It should be noted that, as from September 2002, receipts from, and payments to, the EU are recorded separately. Data for earlier periods were adjusted accordingly to ensure comparability with the new data.

2 In 2002, net inflows financed 16.7% of the trade deficit and corresponded to 2.7% of Greek GDP. Gross receipts reached 3.9% of GDP. Any discrepancies between Ministry of Economy and Finance data and Bank of Greece data, as depicted in balance-of-payments statistics, are due to the fact that the former are expressed on an accrual basis, whereas the latter are on a cash basis.

3 Already over 50% of projects under CSF III have been approved for funding and are ready for implementation. According to provisional balance-of-payments statistics, on the basis of the inflows from the Structural Funds under CSF III recorded until May 2003, the rate of absorption of Community funds is around 17%.

effected during 2001 in accordance with EU legislation.¹ It should also be stressed that payments for projects under CSF II were not completed in 2002, as the deadline for the submission of payment applications to the Commission was 31 March 2003.

For 2003, transfers from the EU are forecast to rise, not only because of last payments for projects under CSF II, but also because the rate of absorption of funds from the Structural Funds and the Cohesion Fund for the implementation of projects under CSF III is expected to rise, while resources from EAGGF will continue to flow in.

The EU enlargement decided at the Copenhagen European Council of December 2002 will have a significant impact on net transfers to Greece from the Community Budget over the medium term. The same holds true for the European Commission's recent proposals on CAP reform, which are also associated with the prospect of EU enlargement. These important issues are discussed in Boxes IX.2 and III.5.

1 Advance payments under CSF III are governed by Council Regulation 1260/99 laying down general provisions on the Structural Funds. According to Article 32 of this regulation, when the first budget commitment is made, the Commission shall make a payment on account, amounting to 7% of the contribution of the Funds to the assistance in question. This amount may be subdivided over two budget years at most, depending on the availability of the budget funds.

BOX IX.2

The outlook of transfers from the EU after 2006

Financial flows between the EU and Greece are determined by EU policies taking into account the structure and specific features of the Greek economy.¹ Around 40%-45% of inflows comes from the Guarantees Section of the European Agricultural Guidance and Guarantees Fund (EAGGF) under the Common Agricultural Policy (CAP). The remainder comes mainly from the Structural Funds (European Regional Development Fund (ERDF), European Social Fund (ESF), EAGGF/Guidance Section) and from the Cohesion Fund under the 3rd Community Support Framework (CSF III) for Greece.² CSF III was established on the basis of the EU's financial perspective for the 2000-2006 period,³ which was decided at the Berlin European Council on 24-25 March 1999.

The financial framework adopted in Berlin was based on a scenario for an enlargement *in 2002 with six new Member States*. However, as decided at the European Councils of Brussels →

-
- 1 Net transfers to Greece from the EU budget correspond to a considerable percentage of GDP and the trade deficit (4.0% and 27% respectively on average for the 1991-2002 period, according to Bank of Greece balance-of-payments statistics).
 - 2 The total cost of Greek projects and programmes that are financed by CSF III for the entire seven-year period is €50.7 billion, including €6.4 billion from the Cohesion Fund. Greece covers €13.2 billion, the EU covers €26 billion and the private sector the remaining €11.5 billion. The average share of the Structural Funds in total (national and EU) public expenditure for the projects and programmes is 67%, whereas the Cohesion Fund has a share of 60% in total financing.
 - 3 The 1988 budgetary reform established a multi-annual framework called "financial perspective", which sets annual ceilings on expenditure and its allocation. This system effectively sets ceilings on the various appropriations under the Community budget headings.

→ (24-25 October 2002) and Copenhagen (12-13 December 2002), enlargement will take place in May 2004 and include ten new Member States, but this will not affect the current 15 Member States for the period up to 2006, mainly owing to transitional arrangements on the implementation of the CAP in respect of new members (see Box III.5). Therefore, as it had already become evident from the European Commission's January 2002 proposals,¹ transfers to Greece from both the Structural Funds and the EAGGF Guarantees Section are ensured up to 2006 under the current "financial perspective".

In order to assess the financial implications of the enlargement for Greece and the other Member States in terms of EU inflows after 2006, the following factors should be taken into account:

- First, owing to their development lag, the new Member States will be net recipients.
- Second, those of the current Member States that are net contributors to the Community budget (CB) will not readily accept any considerable further burden.
- Third, those of the current Member States that are net recipients will seek to maintain as far as possible their funding at today's level.
- Fourth, the increased financing requirements of an enlarged EU make the need to reform the agricultural and structural policies of the EU all the more pressing.

The European Commission has already started to prepare its proposals on the "financial perspective" for the 2007-2013 period, which will take into account the political and financial implications of enlargement.² The proposals themselves and the views expressed within the European Council and the European Parliament provide some clues as to the future path of EU transfers.³

This enlargement will no doubt be quite different from all previous EU enlargements. First, it will involve a far larger number of countries. Moreover, the *per capita* GDP of the accession countries, most of which are transition economies, is lower than the average of the current EU Member States. Therefore, an enlarged EU of 25 and eventually 27 Member States⁴ will see an unprecedented increase in economic and social disparities, which will take long and hard efforts to reduce and will require the strengthening of the redistributive function of the CB.

Despite the gradual reduction in farming subsidies, the CAP still makes up — also in the current 2000-2006 period — over 40% of total CB expenditure, while structural funds account for 30%.

Almost two thirds of resources from the Structural Funds are directed to the Objective 1 regions,⁵ which include the entire territory of Greece and certain regions of other Member States. To qualify under Objective 1, a region's *per capita* GDP should not exceed 75% of →

1 See European Commission: (i) *Common Financial Framework 2004-2006 for the Accession Negotiations*, SEC (2002) final, 30 January 2002, (ii) *First progress report on economic and social cohesion*, COM (2002) 46 final, 30 January 2002.

2 The European Commission's intention is to adopt a new financial framework by the end of 2005 at the latest, so that it can then engage in negotiations with Member States and the implementation of the new programmes can start in early 2007.

3 See European Commission, *Second progress report on economic and social cohesion*, COM (2003), 30 January 2003.

4 The Copenhagen European Council confirmed that Romania and Bulgaria could join the EU in 2007, subject to progress towards fulfilling the accession criteria.

5 The EU's financial support through the Structural Funds has been structured on three platforms called "Objectives", i.e. Objective 1 (to promote the development and structural adjustment of "regions whose development is lagging behind"); Objective 2 (to support the economic and social development of regions facing structural difficulties); and Objective 3 (to support the adaptation and modernisation of policies and systems of education, training and employment in regions outside Objective 1).

→ the EU average.¹ Obviously, average *per capita* GDP in the enlarged EU will fall considerably.² Hence, some regions of Greece — and of other current Member States — would become ineligible under Objective 1, owing to this “statistical” effect, although they have yet to complete the process of economic convergence.³ It is recognised that a fair arrangement needs to be made for these regions, possibly through transitional support schemes. The regions currently eligible under Objective 1 that would be above the 75% threshold *without enlargement* will continue to receive temporary support (phasing out) from the Structural Funds after 2007, as competitiveness, sustainable growth and economic and social restructuring are seen as issues of common concern for the EU as a whole, necessitating Community assistance.⁴ This assurance is particularly important to Greece, given that some of its regions (Attica, the Southern Aegean Islands, Central Greece and possibly Central Macedonia) are expected to become ineligible under Objective 1, as their *per capita* GDP will exceed 75% of the EU average.

It should be recalled that during the 2000-2006 period about one third of resources from the Structural Funds is being directed to regions ineligible under Objective 1. The amount, duration and terms of financing of ex-Objective 1 regions in the 2007-2013 period will be negotiated within the Council of Ministers, but the outcome will largely depend on the European Commission’s proposal.⁵ In terms of the future cohesion policy, the threshold of 0.45% of the Community GDP was broadly seen as a good reference point for the 2007-2013 period.⁶ A related question is whether the current limit on the CB can be maintained at 1.2% of the Community GDP.

It is clear that the regions of Greece that will become ineligible under Objective 1 will continue to receive phasing out funding on the same terms as those currently applied to the EU regions outside Objective 1. Furthermore, the European Commission apparently intends to ensure that financing of current Objective 1 regions will not automatically cease upon transition from CSF III to the next CSF, but will phase out over the period covered by CSF IV (2007-2013).⁷

However, available funds under CSF IV will not be allocated on the same terms as applied to earlier CSFs. The functioning of the Structural Funds will be revised radically. Enlargement calls for simplified and decentralised procedures and effective control by the European Commission. The experience gained so far from the application of procedures and the efficient use of structural resources will be taken into account when the next CSF is established.

The above observations provide an outline within which hard negotiations will be carried out between the current Member States and the new entrants regarding the size and →

1 The *per capita* GDP criterion has the advantages of simplicity and transparency. The possibility of using additional criteria has been mentioned in relevant documents of EU institutions.

2 By an estimated 13% in the EU-25.

3 According to 2002 data, this possibility concerns 18 regions with a population of 21 million.

4 Voices for a certain “re-nationalisation” of the regional policy do not seem to have gained ground.

5 In November 2003, the European Commission will submit a Communication to the Council of Ministers concerning the reform of the own resources system, the ceilings on funding etc.

6 See the Opinion of the European Council in the European Commission’s *First progress report on economic and social cohesion*, November 2002.

7 According to statements by Michel Barnier, Commissioner responsible for Regional Policy and Institutional Reform, on 31 January 2003. A similar transitional arrangement had been adopted for 60 regions that ceased to qualify under Objective 1 in the 2000-2006 period (Decision 1999/502 of 1 July 1999, *OJ L* 194, 27 July 1999).

→ allocation of the next CSF. In these negotiations, Greece should seek to secure resources that will not fall considerably short of those allocated to it under CSF III.

The outlook of transfers to the agricultural sector of Greece (and of other Member States) will depend on the decisions to be made on CAP reform. The January 2003 Mid-Term Review of the European Commission specified the changes to be effected. Until 2006, the current 15 Member States will receive the farming subsidies agreed at the Berlin European Council. The 10 new entrants will receive support according to the following schedule of increments (expressed as a percentage of the level of such payments in the EU): 25% in 2004, 30% in 2005, 35% in 2006 and 40% in 2007, and thereafter in 10% annual increments so as to ensure that the new Member States reach in 2013 the support level then applicable in the current EU.¹ However, the amount and structure of CAP resources will be subject to further negotiations. In any case, it is certain that farming subsidies under the CAP for the 2007-2013 programming period will drop as a percentage of GDP,² while expenditure under the Structural Funds will increase (for a detailed discussion of the proposals on CAP reform, see Box III.5).

Accordingly, it is evident that the enlarged EU's transfers to Greece and the other existing Member States will phase out after 2006 over a transitional period lasting at least until 2013. The amount and composition of Community funds will depend mainly on the final changes to be made in the structural and agricultural policies of the EU and the implications will differ across Member States.

It should be stressed that the Community Budget is only one aspect of the redistribution mechanism of the EU. It should not be ignored e.g. that Greece benefits from the internal market and from intra-Community trade. Therefore, although inflows of EU resources will phase out from 2006 onwards owing to the forthcoming enlargement, the enlargement itself opens up significant opportunities for Greece, in terms of investment and exports to the new Member States, thereby enhancing its presence and role in Central and Eastern Europe and the Balkans. Greek business investment and export penetration in these areas in recent years show that the Greek economy has a good starting point and enjoys comparative advantages that can be further utilised. This, however, cannot be achieved through static or accounting calculations only; it will also require the efficient use of EU resources today, so that the conditions can be created for a competitive and permanent penetration into the new markets by Greek firms.

1 Decisions of the European Councils of Brussels and Copenhagen.

2 The current budgetary burden of the CAP corresponds to 0.4% of the Community GDP. An increase in CAP expenditure of around 1% annually is considered likely for the 2007-2013 programming period.

2. FINANCIAL ACCOUNT

2.1 Introduction

In 2002, the environment was particularly unfavourable in international capital markets, as mounting uncertainty about the economic outlook reduced capital movements considerably. This naturally had a negative impact on the Greek capital market. Higher-

risk investments, such as foreign direct investment or investment in equity, were mainly affected; by contrast, safe havens became more attractive, which largely explains the portfolio shifts to the bond market.

In 2002, financial investment, i.e. the sum of direct investment, portfolio investment and “other investment”, showed a net inflow of €12,293 million, compared with a

TABLE IX.6
FINANCIAL ACCOUNT BALANCE
(Million euro)

	2000	2001	2002*
Financial account balance (I+II+III+IV)	8,906.3	6,934.8	10,310.4
I. Direct investment	-1,116.2	1,087.6	-643.0
By resident units abroad	-2,319.0	-688.5	-696.3
By non-resident units in Greece	1,202.8	1,776.1	53.4
II. Portfolio investment	9,107.5	9,464.8	10,937.8
Assets	-933.0	-514.7	-2,230.0
Liabilities	10,040.5	9,979.5	13,167.8
III. Other investment	-4,856.8	-9,794.6	1,998.6
Assets	-1,060.6	-1,467.0	-7,481.9
Liabilities	-3,796.2	-8,327.6	9,480.5
(General government borrowing)	-437.7	-2,809.7	-4,510.1
IV. Changes in reserve assets	5,771.7	6,177.0	-1,983.0
Errors and omissions	-533.9	1,234.5	-1,674.9

* Provisional data.

Source: Bank of Greece.

small net inflow of €758 million in 2001. This was mainly accounted for by a considerable net inflow of €10,938 million under portfolio investment and, secondarily, a net inflow of €1,999 million under “other investment”. By contrast, a small net outflow of €643 million was recorded under direct investment (see Table IX.6).

2.2 Direct investment

As already mentioned, the unfavourable international environment and the considerable decline in direct investment worldwide had a negative impact on investment flows in Greece. This was the case, in particular, with inward foreign direct investment in Greece (a negligible €53 million, which compares unfavourably with €1,776 million in 2001). By contrast, residents’ direct investment abroad (€696 million) remained at the level of 2001 (€689 million).

The country breakdown of residents' direct investment abroad (see Table IX.7) shows that the EU countries continue to absorb the largest share. A considerable portion (over 10% of the total) is directed to the Balkan countries, which indicates a growing Greek presence in these countries. Residents' direct investment abroad includes the acquisition of the Spanish firm Crown Cork by Hellas Can (worth €105 million) and the acquisition of the Montenegrin company "Yugopetrol" and BP Cyprus Limited by Hellenic Petroleum S.A. (worth €65 million and €100 million respectively).

TABLE IX.7
COUNTRY BREAKDOWN OF GREEK RESIDENTS'
DIRECT INVESTMENT ABROAD*
(Million euro)

	2001	2002**
OECD ¹	420 (60.9)	430 (61.8)
European Union	239 (34.6)	368 (52.9)
Euro area	104 (15.1)	35 (5.0)
Balkan countries ²	113 (16.3)	85 (12.2)
Central Europe and former USSR ³	5 (0.8)	12 (1.7)
Middle East and the Mediterranean ⁴	102 (14.8)	164 (23.6)
Other countries	50 (7.2)	5 (0.7)
Total	689	696

1 Twenty-four OECD Member States except for the Czech Republic, Hungary, Mexico, Poland and South Korea.

2 Albania, Bulgaria, Romania and former Yugoslavia countries (Slovenia, Bosnia, Croatia, FYROM, New Yugoslavia/Serbia-Montenegro).

3 Czech Republic, Hungary, Poland, Slovakia and former USSR countries.

4 The major trading partners of Greece in the Middle East and the Mediterranean.

* In parentheses, percentage shares in residents' total direct investment abroad.

** Provisional data.

Source: Bank of Greece.

Non-residents' direct investment in Greece largely concerned inter-company loans which led to a (net) outflow of around €400 million in 2002. Foreign direct investment in equity (capital increases, acquisitions and capital subscriptions, mainly in the banking sector) showed a net inflow of around €250 million. The most important transactions in this category were the €54 million increase in Crédit Agricole's holding in the Commercial Bank of Greece and the participation of Sara Lee Netherlands and BCP Portugal in the capital increases of Sara Lee Holdings Hellas (clothing) and Nova Bank respectively (about €48 million and €50 million). Finally, the country breakdown of non-residents'

direct investment in Greece (see Table IX.8) points to a small net inflow from the euro area, Middle East and Mediterranean countries (including Cyprus).

TABLE IX.8
COUNTRY BREAKDOWN OF NON-RESIDENTS'
DIRECT INVESTMENT IN GREECE*
(Million euro)

	2001	2002**
OECD ¹	1,678 (94.5)	24
European Union	1,641 (92.4)	-44
Euro area	1,333 (75.0)	-326
Balkan countries ²	0.0 (0.0)	0.0
Central Europe and former USSR ³	0.0 (0.0)	0.0
Middle East and the Mediterranean ⁴	25 (1.4)	36
Other countries	73 (4.1)	-7
Total	1,776	53

1 Twenty-four OECD Member States except for the Czech Republic, Hungary, Mexico, Poland and South Korea.

2 Albania, Bulgaria, Romania and former Yugoslavia countries (Bosnia, Croatia, FYROM, New Yugoslavia/Serbia-Montenegro and Slovenia).

3 Czech Republic, Hungary, Poland, Slovakia and former USSR countries.

4 The major trading partners of Greece in the Middle East and the Mediterranean.

* In parentheses, percentage shares in non-residents' total direct investment in Greece.

** Provisional data.

Source: Bank of Greece.

2.3 Portfolio investment

In 2002, inflows under portfolio investment ("liabilities") grew substantially (to €13,168 million, from €9,980 million in 2001), which is associated with the continued purchases of Greek government bonds by foreign investors (€11.9 billion in 2002, €8.1 billion in 2001), whereas equity portfolio investment inflows declined (€1.4 billion, compared with €2.1 billion in 2001). Although it has narrowed significantly, the positive yield spread between Greek and euro area securities still attracts considerable foreign investment in Greek bonds; thus, Greece's current account deficit is comfortably financed at relatively low cost.

Outflows under portfolio investment ("assets") rose to €2,230 million in 2002 from €515 million in 2001, stemming from the purchase of foreign bonds by residents (€1,685 million, compared with sales of €551 million in 2001), as portfolio investment in foreign shares declined (to €309 million in 2002, from €1,134 million in 2001).

Underlying residents' and non-residents' shift to bonds are the global uncertainty that prevailed in 2002 and increased risk aversion. Overall, in recent years outflows under portfolio investment may also reflect private portfolio adjustments following the deregulation of financial markets and the elimination of foreign exchange risk within the euro area.

2.4 Other investment

The net inflow under "other investment" was a result of a considerable increase of €9.5 billion in liabilities, which, however, was largely offset by a rise of €7.5 billion in assets. It should be noted that the increase in liabilities occurred despite sizeable net repayment of general government loans (€4.5 billion). Such repayment, combined with the considerable increase in purchases of Greek government bonds by non-residents, suggests some substitution of euro-denominated bond issues for direct long-term borrowing by general government in foreign currency.

Higher liabilities under "other investment" were accounted for by a considerable increase (of €15.0 billion) in deposits and repos held by non-residents. A substantial part of these deposits (€9.6 billion) concerned Bank of Greece liabilities associated with the TARGET system. As a result, a considerable part of the Bank of Greece liabilities reflects payments associated with Greece's current account deficit. Furthermore, the liabilities of the Bank of Greece are affected by capital flows concerning mainly short-term operations in the interbank market and confirm that Greek financial institutions are increasingly active in the European interbank market – to which they have easy access owing to their enhanced reliability – and are not confined to the Greek market for covering their liquidity requirements.

Higher assets under "other investment" were due to a substantial increase in deposits and repos held by resident units abroad (€7.4 billion), notably by credit institutions after the release of their foreign exchange deposits with the Bank of Greece.

In 2002, Greece's reserve assets grew by €1,983 million relative to end-2001, reaching €9.0 billion at end-2002.¹

3. INTERNATIONAL INVESTMENT POSITION

Greece's international investment position deteriorated appreciably in 2002 (see Table IX.9), with net liabilities having fallen from €–57.3 billion at end-2001 to €–72.1 billion at end-2002. As a result, net external liabilities increased from 43.7% of GDP in 2001 to 51.1% of GDP in 2002, despite the considerable growth of GDP at current prices.

¹ For a definition of reserve assets, see footnote 1 to Table IX.1.

The worsening of the international investment position was due to both “other investment” and portfolio investment, whereas the influence of direct investment was favourable. The negative impact of “other investment” is attributable to the considerable increase in the liabilities of the Bank of Greece, owing to operations through the TARGET

TABLE IX.9
INTERNATIONAL INVESTMENT POSITION
(Million euro)

	2000	2001	2002*
1. Direct investment	-7,123	-6,394	-5,500
By resident units abroad	6,289	7,229	8,000
By non-resident units in Greece	13,412	13,623	13,500
2. Portfolio investment	-57,440	-57,141	-66,900
Assets	4,135	9,109	13,400
Liabilities	61,575	66,250	80,300
3. Financial derivatives	13	17	15
4. Other investment	-2,015	-789	-8,700
Assets	37,858	46,250	52,900
Liabilities	39,873	47,039	61,600
5. Reserve assets¹	13,208	7,031²	9,014²
Net international investment position	-53,357	-57,276	-72,071
(Memorandum item: GDP) ²	(121,620)	(130,927)	(141,132)
% of GDP	-43.9	-43.7	-51.1

1 According to the new ECB definition.

2 Excluding the participation of the Bank of Greece in the capital and reserves of the ECB.

* Provisional estimates.

Source: Bank of Greece.

system, and of domestic credit institutions. The negative impact of portfolio investment mainly reflected sales of Greek government bonds to non-residents, which more than offset the rise in assets (mainly due to residents' purchases of foreign bonds). Finally, the favourable effect of foreign direct investment is associated with residents' investment abroad (given that non-residents' investment in Greece was very low).

X. THE BANKING SYSTEM AND ITS SUPERVISION

1. THE GREEK BANKING SYSTEM: KEY AGGREGATES AND STRUCTURAL FEATURES

1.1 Introduction

The Greek credit system, as an integral part of the single European market for financial services and products, was affected by negative world stock market developments and slow global economic recovery. Even though the course of the Greek stock market mirrored that of world capital markets, Greek economic growth nonetheless remained comparatively strong in 2002. These developments contributed to a fairly rapid growth in credit extended by banks operating in Greece and helped them increase their operational revenue to total revenue ratio.

In recent years, Greek banks have focused much of their effort on completing their organisational restructuring and improving their operational profitability. Mergers and acquisitions were once more observed in 2002 but were unquestionably fewer in number than in previous years. Meanwhile, Greece's large banks pursued their systematic expansion effort in the Balkans and in the broader region of South-Eastern Europe.

1.2 Banks' key aggregates

Total assets of credit institutions operating in Greece increased by 4% in 2002 (see Table X.1), compared with an increase of 5.5% in 2001. By end-2002 total assets thus amounted to 142.1% of GDP, against 146.4% at end-2001. If off-balance sheet items, which increased significantly (+12%) in 2002, are also taken into account, the sum of off- and on-balance sheet items came to 344.6% of GDP in 2002 (2001: 340.1%). The assets of Greek commercial banks rose by 4.2% in 2002, compared with 9.3% in 2001. On the other hand, the assets of foreign banks operating in Greece declined by 2.7%, as certain foreign banks downsized some of their local operations (especially in retail banking) and transferred some of their other operations (mainly in wholesale banking) to their home countries or to large financial centres. It should be noted that Greek banks tend to take over the branch networks and the operations of departing banks. Cooperative banks once again experienced strong asset growth (2002: 27.9%, 2001: 34.9%), but, with rare exceptions, remain particularly small. Finally, the assets of specialised credit institutions rose by 7.5% in 2002, compared with 6.8% in 2001.

Total bank lending increased by 15.1% in 2002, down from 17.7% in 2001. Greek bank lending continued to grow at a strong pace (16.4%), accounting for 52.2% of their total assets in 2002, compared with 46.8% in 2001 and 42.6% in 2000. One of the reasons

for this strong lending growth is the persistence, albeit at a slower pace, of rapid credit expansion to households.¹

The own funds of credit institutions (as reported in their annual accounts) decreased by 12.4%² in 2002. More specifically, the own funds of Greek commercial banks fell by 14% in 2002, after having decreased slightly (by 1.7%) in 2001. This is primarily due to the fact that some of the larger banks reduced their reserves in order to compensate for portfolio valuation losses. As a result, the own funds of Greek commercial banks accounted for 6.5% of their total assets in 2002, down from 7.9% in 2001.

TABLE X.1
BANKS' KEY BALANCE SHEET AGGREGATES
(Percentage changes over previous year)

	All banks combined		Greek commercial banks	
	2001	2002	2001	2002
Lending	17.7	15.1	18.9	16.4
Own funds	-1.0	-12.4	-1.7	-14.0
Deposits	8.8	5.3	10.3	5.1
Deposits and repos	16.4	2.4	16.1	1.7
Total assets	5.5	4.0	9.3	4.2
Off-balance-sheet items	-11.4	12.0	8.6	13.7

Sources: Published bank accounts and Bank of Greece.

Deposits with credit institutions increased by 5.3% in 2002, compared with a rise of 8.8% in 2001. However, as repos outstanding decreased, the combined growth of deposits and repos did not exceed 2.4%. More specifically, deposits with Greek commercial banks rose by 5.1% and at end-2002 accounted for 63.2% of these banks' assets, compared with 62.7% in 2001 and 61.6% in 2000. Nonetheless, the aggregate rate of increase for repos and deposits combined fell to just 1.7%. Deposits with Greek banks remain comparatively high by European standards, meaning that fund-raising costs are lower for Greek banks than for their European counterparts. Deposits with euro area banks accounted on average for roughly 39% of their assets in 2001.

1.3 Credit system structure and conditions of competition

As shown by the analysis of the Greek credit system's structure (Table X.2), in terms of total assets, Greek commercial banks held 81.1% of the domestic banking mar-

1 For a detailed analysis of credit developments, see Chapter VI above.

2 Part of this decrease reflects the financial restructuring of the Postal Savings Bank upon its conversion into a Société Anonyme. Excluding the impact of this restructuring, the decrease in credit institutions' own funds in 2002 came to 9%.

ket at end-2002, compared with 80.5% in 2001 and roughly 78% in 2000. In terms of total deposits, their market share, after rising by one percentage point in the previous year (2001: 83%, 2000: 82%), edged downwards in 2002 (82.3%). Their lending market share followed a similar course, standing at 82.3%, compared with 82.7% in 2001 and 80.9% in 2000.

Foreign banks saw their assets decline in 2002 and their domestic market share of assets fall to 8.9% from 9.6% in 2001 and 12.6% in 2000. Their market share of deposits also followed a slightly downward course, falling to 7.6% at end-2002 from 7.8% in 2001 and 8.1% in 2000. Their domestic market share of lending, on the other hand, rose by one percentage point (2002: 10.4%, 2001: 9.4%) after having decreased one year earlier (2000: 10.9%).

TABLE X.2
STRUCTURE OF THE GREEK CREDIT SYSTEM
(End-2002)

	Number of banks	Number of branches	Assets (%)	Lending (%)	Deposits (%)
Greek commercial banks	22	2,854	81.1	82.3	82.3
Foreign banks	21	188	8.9	10.4	7.6
Cooperative banks	15	56	0.5	0.8	0.6
Specialised Credit Institutions ¹	4	155	9.5	6.5	9.5
Total	62	3,263	100.0	100.0	100.0

1 Specialised Credit Institutions comprise the Postal Savings Bank, the Deposits and Loans Fund and investment banks.
Source: Bank of Greece.

Specialised credit institutions¹ marginally increased their market share of assets (2002: 9.5%, 2001: 9.4%). Their market share of deposits moved up to 9.5% in 2002 from 8.7% in 2001, while their market share of lending declined slightly to 6.5% in 2002, from 7.2% in 2001.

Cooperative banks slightly improved all of their market shares. More specifically, their total assets accounted for 0.5% of the domestic market in 2002, compared with 0.4% in 2001, while their deposit and lending market shares rose, respectively, to 0.6% and 0.8% in 2002, from 0.4% and 0.7% in 2001. Though less developed than in other European countries, cooperative credit in Greece has nonetheless strengthened in recent years and is projected to develop further as a result of the fairly recent launching of activities by Panellenia Bank (a commercial bank whose main shareholders are cooperative banks and whose additional task, as stipulated in its Statute, is to promote cooperative banking and to support the key operations of cooperative banks).

1 Specialised credit institutions comprise the Postal Savings Bank, the Deposits and Loans Fund and investment banks.

Mergers and acquisitions by credit institutions operating in the Greek market were fewer in number than in previous years.¹ Apart from the fact that Piraeus Bank completed its acquisition of ETBA, merger and acquisition activity in 2002 mainly involved: (i) the National Bank's acquisition of ETEBA and its France-based subsidiary (the latter of which now operates as a National Bank branch), and (ii) the acquisition of ABN-AMRO's retail banking network and operations by Aspis Bank. Furthermore, the Postal Savings Bank's acquisition of a qualifying holding of 17.2% in the share capital of Attica Bank is part of a broader strategy to convert the Postal Savings Bank into a commercial bank.

With regard to concentration in the Greek banking system, the combined market shares of the five largest banks convey a mixed picture for 2002. More specifically, the top five banks increased their asset market share by nearly one percentage point (2002: 67.5%, 2001: 66.7%), but their loan and deposit concentration ratios decreased by some 2.5 percentage points (lending: 2002: 66.1%, 2001: 68.7%; deposits: 2002: 68.9%, 2001: 71.3%). Market share data for the top two banks point to a decrease in concentration across all indicators. More specifically, the asset market share of the two largest banks fell to 38.1% in 2002 from 38.5% in 2001, while their lending and deposit market shares dropped by around 1-2 percentage points (lending: 2002: 31.6%, 2001: 32.3%; deposits: 2002: 41.4%, 2001: 43.2%). The market shares of the five largest banks have therefore changed significantly, reflecting the faster expansion of some and increased competition between them.

The size of Greek banks continues to be comparatively small by international standards. Based on total assets at end-2001, only two Greek credit institutions ranked amongst Europe's top 100, whereas none ranked amongst the top 100 worldwide (see Table X.3). By way of indication and based on the same data, Europe's top 100 banks included 24 German, 15 Italian, 11 British, 8 Spanish and 7 French banks, while the top three banks in four respective countries (Germany, United Kingdom, France and the Netherlands) ranked amongst Europe's top 20.

The number of branches in the Greek banking market continued to rise (2002: 3,263; 2001: 3,134), albeit at a slackening pace. This increase is entirely attributable to Greek commercial and cooperative banks, as the number of branches of specialised credit institutions and foreign banks remained unchanged. For Greek banks, branch networks clearly remain the primary channel through which services are provided and promoted, especially in the field of retail banking. However, branches are gradually changing, as they tend to become smaller, with centralised back-up functions, and more customer-oriented. Furthermore, modern banking now benefits from the integration of "Customer Management Systems" aimed at expanding and tailoring services to customer needs. These systems, along with the upgraded and integrated credit risk

¹ For a detailed account of the acquisitions and mergers that took place between 1998 and 2001, see Bank of Greece, *Annual Report 2001*, Chapter X.

rating systems that banks have either set up or are currently developing and the information made available by the “Credit Bureau” of the Tiresias Bank Information Systems SA, will enable banks to better assess the risk profile of individual customers and borrower categories and to price their products accordingly. Meanwhile, an increasing number of transactions are carried out through alternative distribution channels, such as Internet and phone banking, while both the number of ATMs (2001: 4,377; 2002: 4,955) and the range of facilities provided via ATM continue to grow. Nevertheless, the ratio of ATMs to population (end-2002: 452 ATMs per million

TABLE X.3
NUMBER OF BANKS IN THE TOP 100, BASED ON TOTAL ASSETS
(End-2001)

	Top 100 in Europe	Top 100 worldwide
Germany	24	17
Italy	15	6
United Kingdom	11	7
France	7	7
Spain	8	3
Netherlands	5	3
Switzerland	4	2
Belgium	3	3
Sweden	4	4
Ireland	3	2
Austria	3	1
Portugal	3	–
Denmark	2	1
Finland	1	–
Greece	2	–
USA		16
Japan		11
Canada		5

Source: *The Banker*, July and September 2002.

inhabitants) remains considerably lower than the euro area average (end-2000: 650 ATMs per million inhabitants).

During 2002, the number of employees in banks operating in Greece increased by 1.5%, as the small decrease in foreign bank personnel was more than offset by increased employment in Greek credit institutions. However, the number of employees per bank branch, which decreased slightly from 19 in 2001 to 18.5 in 2002, still exceeds the EU average¹ (around 14 employees per branch in 2000). Nevertheless, it should be borne in mind that the structure of a country’s credit system is a major determinant of the average number of employees per bank branch. In Germany, for instance, the large number of savings

¹ See Eurostat, *Statistics in Focus, Statistics on credit institutions*, theme 4-26/2002.

banks and, especially, cooperative banks with a much smaller staff than commercial banks has significantly lowered the country's average. This, however, is not the case in Greece. A narrowing of the comparison to commercial banks alone¹ reveals that the average number of employees per bank branch in the EU (excluding Luxembourg) is only about 1.5 persons lower than the Greek average.

1.4 Presence of Greek credit institutions abroad

The year 2002 saw Greek credit institutions pursue their expansion effort worldwide, particularly in countries of the Balkan region where stabilisation and confidence in the new political systems and institutional reforms have strengthened and, in some cases,

TABLE X.4
PRESENCE OF GREEK BANKS IN SOUTH-EASTERN EUROPE
(End-2002)

	Country	Number of Greek bank groups	Type of presence	Number of operational units	Staff number
1	Albania	2	Subsidiaries	9	156
		2	Branches	9	103
2	Armenia	1	Subsidiary	1	31
3	Bulgaria	3	Subsidiaries	267	3,670
		3	Branches	5	112
4	Georgia	1	Subsidiary	1	26
5	Cyprus	3	Subsidiaries	63	980
		2	Branches	2	10
6	FYROM	2	Subsidiaries	104	1,572
7	Romania	5	Subsidiaries	147	4,127
		1	Branch	1	39
8	Serbia – Montenegro	2	Branches	5	20
9	Turkey	1	Subsidiary	2	30
		1	Representative Office	1	
Total				617	10,876

Source: Bank of Greece.

have been further bolstered by the prospect of EU membership. Greek credit institutions are currently active in 20 countries, with a total of 26 subsidiaries and 20 branches, which operate 700 local units and employ 12,000 persons.

¹ Calculations based on OECD data, *Bank Profitability*, 2003.

The bulk of Greek bank activity abroad is concentrated in the wider South-East European region, where 18 subsidiaries and 10 branches — managing a total of 617 operational units and 10,876 employees — have been set up (see Table X.4). This activity can be associated with:

- the need for banking support among the fast growing Greek businesses in the region, especially after the radical political changes in these countries in the 1990s;
- risk differentiation considerations; and
- the development potential of the specific region, especially in the fields of retail and corporate banking.

This increase in Greece's presence in the region, which is rather remarkable considering the size of the Greek banking system and the comparatively small presence of banks from other European countries, is summarised in Table X.5.

TABLE X.5
SUBSIDIARIES AND BRANCHES OF GREEK
CREDIT INSTITUTIONS IN SOUTH-EASTERN EUROPE (1990-2002)

Years	Subsidiaries	Branches
1990-1995	2	2
1996	6	4
1997	6	6
1998	7	6
1999	9	6
2000	15	7
2001	16	8
2002	18	10

Source: Bank of Greece.

Based on available data for the last two years, Greek credit institutions control 10-15% of the total bank assets of each of the Balkan countries where they operate, with the exception of the Former Yugoslav Republic of Macedonia (FYROM), where this market share amounts to 28%, as a result of the acquisition of a large credit institution.

The volume of transactions conducted by the branches and subsidiaries of Greek credit institutions *outside the Balkan region* is rather insignificant, in relation to both the size of the specific banks and the size of the local markets. Thus, any negative developments in the host country economies or in the specific banking units operating abroad would have a negligible negative impact on Greek credit institutions on a consolidated or non-consolidated basis.

As already mentioned, however, Greek bank activity in the Balkan region is quite significant. Based on data for the first half of 2002, the aggregate exposure of Greek banks to the Balkan countries rose to 1.07% of their assets or 12.23% of their regulatory own funds, on a steady upward trend. This increased presence abroad calls for the develop-

ment of effective risk management mechanisms and the allocation of sufficient own funds for risk coverage. Given the crucial importance of “country risk” evaluation, the Bank of Greece has recently adjusted the framework within which banks are required to report their prudential returns, and promotes systematic cooperation with supervisory authorities throughout the Balkan region.

2. DEVELOPMENTS IN THE MAIN DETERMINANTS OF THE BANKING SYSTEM'S STABILITY

2.1 Developments in the profitability of Greek banks

The profitability of Greek banks declined considerably in 2002 (see Table X.6). Pre-tax profits decreased by a further 48.6%, after dropping by 14.9% in 2001. Reduced profitability in 2002 is mainly attributed to a 13.1% decrease in total gross income and an 18.6% increase in provisions, with the decline in income stemming from a significant drop (–42.9%) in non-interest income, only partly offset by a 7.7% rise in interest income.

The growth of net interest income came as the result of a faster decrease in interest expenses (–23.2%) than in interest income (–11.1%). The decline in both categories can be explained by the course of interest rates not only in Greece, but also in the euro area. Indeed, during periods of declining interest rates, interest income tends to fall at a slower pace than interest expenses, as loans usually have longer maturities than deposits. This partly explains the weaker decrease in interest income than in interest expenses, even though the rates applying to new lending in 2002 were, on average, reduced more than the rates on new deposits. Another reason for the relatively small decrease in interest income lies in the rapid expansion of Greek banks in the field of retail banking, which offers wider profit margins.

As already mentioned, non-interest income dropped substantially, owing to a significant decrease in income from shares and equity holdings (–54.1%), as well as in net income from financial operations (–72.3%) as a result of adverse stock market developments once again in 2002. Net income from commission fees also declined, albeit only slightly (–1.5%).

Developments in recent years have brought about considerable changes in the breakdown of total banking income. Thus, while non-interest income used to exceed net interest income, the operating profitability of banks now relies increasingly on interest-bearing transactions. Indicatively, net interest income accounted for 73% of banks' total gross income in 2002, compared with 63% in 2001 and 55% in 2000.

Operating costs increased by 3.3% in 2002 (2001: +7.7%), as the result of a moderate (3%) rise in administrative expenses and staff costs and a 5.4% increase in depreciation costs (2001: +16.2%). Specifically, staff costs dropped to 1.3% of average assets in 2002, from 1.4% in 2001 and 1.5% in 2000. Banks have indeed made hard efforts in recent years to contain their operating costs, as a crucial means of ensuring competitiveness.

However, staff costs in Greece continue to represent a considerably larger share of operating expenses than in the EU on average (Greece 2002: 59%; EU 2001: 52%), in spite of Greece's lower average cost per employee (Greece 2002: €40,000; EU 2001: €67,000). Productivity, as measured by gross income per employee also remains low (2001: Greece: €117,000, EU: €212,000).

The provisions set aside by Greek commercial banks in 2002 grew by 18.6% relative to the previous year, appreciably faster than total assets, reflecting the banks' discretionary policies and, to some extent, the stricter provisioning requirements for credit risk inherent in banks' lending portfolios, as well as the need to write off bad loans. This development led to a rise of 5.6% in the stock of provisions, as reflected in banks' balance sheets.

TABLE X.6
BANKS' OPERATING RESULTS
(As a percentage of average assets)

	2001	2002
Interest income	5.8	5.1
Interest expenses	3.2	2.7
Net interest income	2.6	2.4
Non-interest income	1.5	0.9
Operating expenses	2.4	2.3
Pre-tax profits	1.4	0.7
Pre-tax profits as a percentage of own funds	16.5	9.3

Source: Bank of Greece calculations based on banks' accounts.

Against this background, the overall profitability of Greek commercial banks deteriorated considerably in 2002. Their return on average assets (ROA) fell to 0.7%, from 1.4% in 2001 and 1.8% in 2000, while their return on equity (ROE) dropped to 9.3% in 2002, from 16.5% in 2001 and 20.3% in 2000. Despite this deterioration in recent years, the profitability of Greek commercial banks remains satisfactory in comparison with that of their European counterparts. In 2001, EU banks had an ROA of 0.7%¹ and an ROE of 13.3%.

It should be noted that a number of leading European banks with an international presence have been facing additional difficulties, owing either to their loss-making exposures to emerging markets or to their investment banking and asset management activities, which declined markedly and in some instances caused substantial losses. By contrast, banks that relied primarily on retail banking and effective distribution networks suffered

¹ Bank of Greece calculations based on OECD, *Bank Profitability*, 2003.

fewer losses. Greek banks roughly fall into this second category and therefore succeeded in maintaining satisfactory levels of profitability.

2.2 *Banking risks*

2.2.1 Credit risk

Developments in credit risk-related aggregates

As mentioned in other sections of this Report, rapid credit expansion increases the importance of credit risk assessment on the part of banks, as this is the predominant type of risk they face.

The quality of bank portfolios has improved considerably over the last three years, while the ratio of provisions to non-performing loans one year past due has increased (2001: 67.4%, 1999: 43.9%). However, according to reported data for the first half of 2002, total non-performing loans three months or more past due grew marginally, while the provisioning coverage of non-performing loans ratio declined, causing a further deviation from the corresponding EU average figure.

While cross-country comparisons are obviously difficult, owing to the differences in the countries' cyclical positions and in banks' risk-mitigating policies, in particular internal control and risk management systems (where Greek banks have made considerable progress in adopting international standards since 1999), the following points can be made:

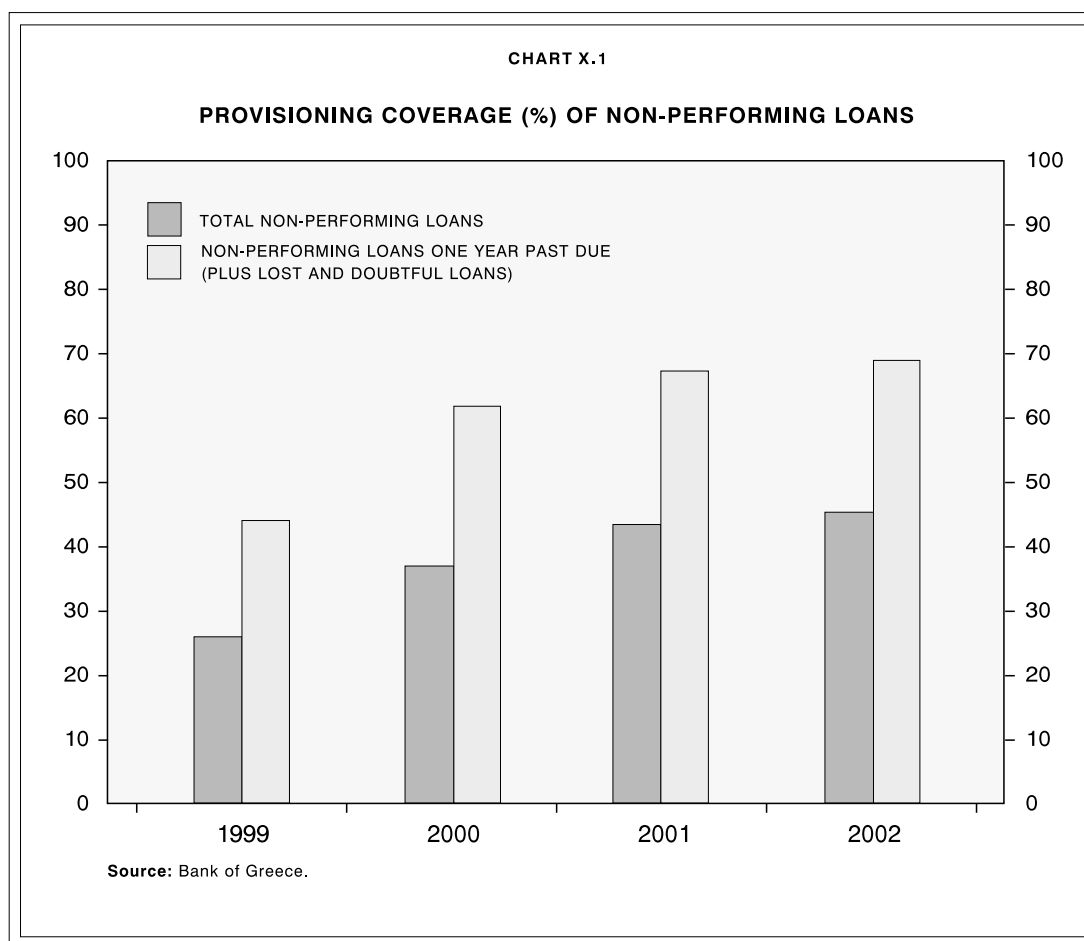
- Although the Capital Adequacy Ratio (CAR) of Greek banks remains relatively high, its decline over the last two or three years has led to a decrease in capital buffers.

- The rise in total non-performing loans is directly related to rapid credit expansion, as particularly evidenced by housing loans which saw very strong increases of over 35% in the last two years and a rise of 13.3% in non-performing loans under this category during the first half of 2002 that far exceeded the average increase in total non-performing loans (3.4%) over the same period. It has, however, been estimated that a significant part of non-performing housing loans comes from repair loans, which seem to serve as an unsecured form of consumer credit. The inclusion of repair loans in the housing loan category works to the banks' advantage, since the provisioning requirements for housing loans are, in accordance with Bank of Greece regulations, lower than those for unsecured consumer loans.

- Negative stock market developments reduced the value of collateral in the form of shares, a factor that was indirectly taken into account in determining banks' provisioning requirements.

In response to these developments, the Bank of Greece raised the minimum loan-loss provisioning requirements for certain categories of non-performing assets, as well as for fast-growing loan categories that entail a higher probability of borrower default

(Bank of Greece Governor's Act 2513/2003). The loan-loss and write-off policies implemented by the Bank of Greece and the regulated banks themselves led to a 6.4% net increase in provisions in 2002. This, together with the marginal increase in non-performing loans, caused the ratio of provisions to total non-performing loans to rise to 45.3% in 2002, from 43.3% in 2001, while the ratio of provisions to non-performing loans one year past due increased to 69% at end-2002, from 67.4% in 2001. Net of provisions, non-performing loans declined further, partly as a result of the policy of the Agricultural Bank,

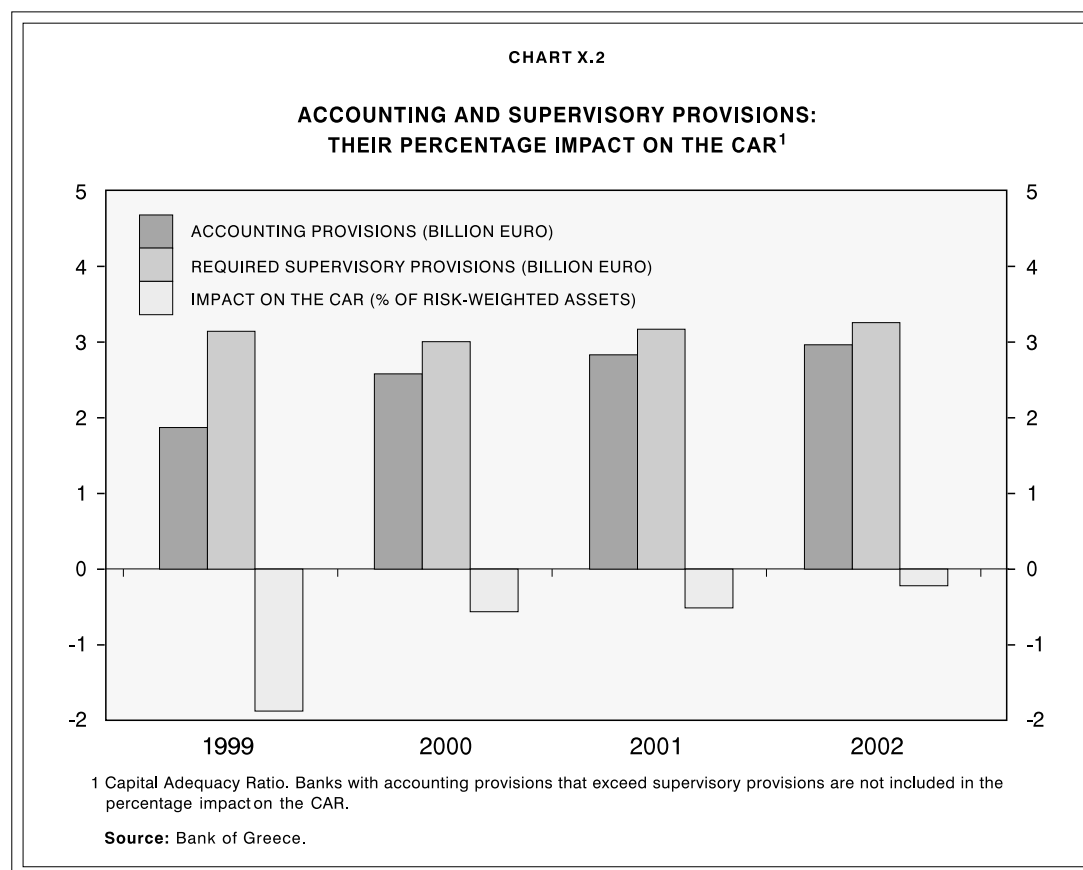


which adjusted its loan servicing schedule to the agricultural sector's production cycle (see Chart X.1).

Any shortfall in banks' provisions against the minimum requirements laid down by the Bank of Greece is deducted from the banks' own funds and thus affects their CAR. In 2002, this impact was reduced to 0.22 percentage point of risk-weighted assets, from 0.51 percentage point in 2001 (see Chart X.2).

The prevailing uncertainty and the fact that some types of loans, notably loans granted for the acquisition of equity holdings in listed or non-listed companies, are typi-

cally not repaid according to the initially agreed time schedule, have increased the need for faster provisioning coverage. Hence, the Bank of Greece makes ad hoc assessments and may require banks to increase their provisions and/or raise the minimum CAR above 8% on a case-by-case basis. On the other hand, the Bank of Greece, recognising the credit-risk-mitigating effect of collateral and the negative impact that provisions are likely to have on bank profitability, will consider deducting the value of certain categories of real



estate collateral from the outstanding balances of non-performing loans. It also intends to adjust the minimum provisions for the unsecured part of these loans, taking into account the quality and the realisable value of various types of collateral.

The financial situation of households and enterprises

Looking ahead, developments in the quality of banks' loan portfolios will depend on individual banks' credit risk management policies, a matter of particular interest to the Bank of Greece as the supervisory authority, as well as on the financial situation of enter-

prises and households against a background of real disposable income projected to grow by about 3% in 2003.

According to available data, household indebtedness as a percentage of GDP rose from 18% at end-2001 to 22.3% at end-2002. However, as already mentioned,¹ it remains low in comparison with the EU average of 47% in 2002. Moreover, the ratio of household indebtedness to the total value of household wealth, i.e. dwellings and direct or indirect (through mutual fund units) equity holdings, was very low (3.8%) at end-2001. If other important household assets (bonds, bank deposits etc.) are also taken into account, the ratio of household indebtedness to their total assets falls even lower, despite the substantial drop in stock prices in 2002. As mentioned earlier, the Bank of Greece recently conducted a nationwide sample survey of household borrowing and indebtedness. According to the survey results, the average outstanding loans of the households that did have outstanding debt liabilities and answered all questions did not exceed their annual income in any income category. Moreover, for 75% of these households, their latest monthly payment of interest and principal did not exceed one third of their monthly income. Therefore, it is presumed that these households could well afford to service their debt.² Even if these overall positive findings do not reflect the borrowing pattern of the households which refused to complete the interview or failed to return the questionnaire, they are still valid, as these households represent just 5% of the total sample or 13% of all respondents.

Turning to the financial situation of the business sector, data from the Tiresias Bank Information Systems S.A. provide mixed indications. On the positive side, the number of bankruptcy petitions reached a post-1996 low and the amount involved in court orders for payment (issued in cases of bounced cheques) declined considerably in 2002 relative to 2001 (see Table X.7). On the negative side, the total value of bounced cheques increased by 26.5% between 2001 and 2002, reversing the downward trend witnessed in the previous three years.

Regarding developments in return on equity (ROE) and in the indebtedness of the entire business sector during 2002, full data are not yet available. However, a Bank of Greece study, based on the published 2002 financial accounts of a sample of 418 non-financial corporations³ (262 of which are listed on the Athens Stock Exchange), concluded the following:

- The pre-tax profits of the entire sample increased by 5.4% in 2002 over 2001.
- Developments in profitability vary considerably across sectors. Profitability in manufacturing grew by 2.5% between 2001 and 2002, while for commercial and construction firms it rose much faster (by 24.7% and 18.1% respectively). By contrast, profits in the IT sector declined by 14.6%.

1 See Chapter VI in this Report.

2 See Bank of Greece, *Monetary Policy 2002-2003*, March 2003, Annex to Chapter VI.

3 I.e. other than banks, insurance companies, leasing companies etc.

– Total ROE edged downwards to 11.8% in 2002, from 12% in 2001. The gearing ratio (i.e. the ratio of own to borrowed funds) of the sample firms fell from 1.20 in 2001 to 1.15 in 2002, but remains high in comparison with the five-year average (1997-2001: 0.65) for all industrial and commercial firms that are sociétés anonymes or limited liability companies.

TABLE X.7
ANNUAL PERCENTAGE CHANGES IN BAD CREDIT RECORD DATA

	1997	1998	1999	2000	2001	2002
1 Bankruptcy petitions						
Number	-20.1	-36.7	-1.0	-22.1	1.7	-37.1
Total amount involved	34.6	-45.4	82.9	-9.5	-22.1	-67.8
2 Court orders for payment						
Number	19.4	-10.9	-5.2	-34.7	-26.7	21.9
Total amount involved	31.5	-12.2	7.5	-18.4	-18.5	-38.5
3 Bounced cheques						
Total value	16.4	1.4	-4.5	-18.4	-18.6	26.5

Sources: Bank of Greece and Tiresias Bank Information Systems S.A.

Corporate and household indebtedness, as a percentage of GDP (end-2002: 61.3%, end-2001: 56.5%), remains considerably lower than in the euro area (127.8%) or the United States (142.9%), according to end-2001 data.

2.2.2 Market risk

In 2002 portfolio investments that are subject to market risk declined. Specifically:

– As expected, the exposure of the banking system to foreign exchange risk declined considerably following the introduction of the euro; as a result, capital requirements for foreign exchange risk fell from €354.5 million in 1999 to €127.5 million in 2000, €58.6 million in 2001 and €53 million at end-2002.

– The total capital requirement for general market and counterparty risks associated with open positions in debt instruments, shares and derivatives decreased by 13.2% to €577 in 2002 (2001: €665 million).

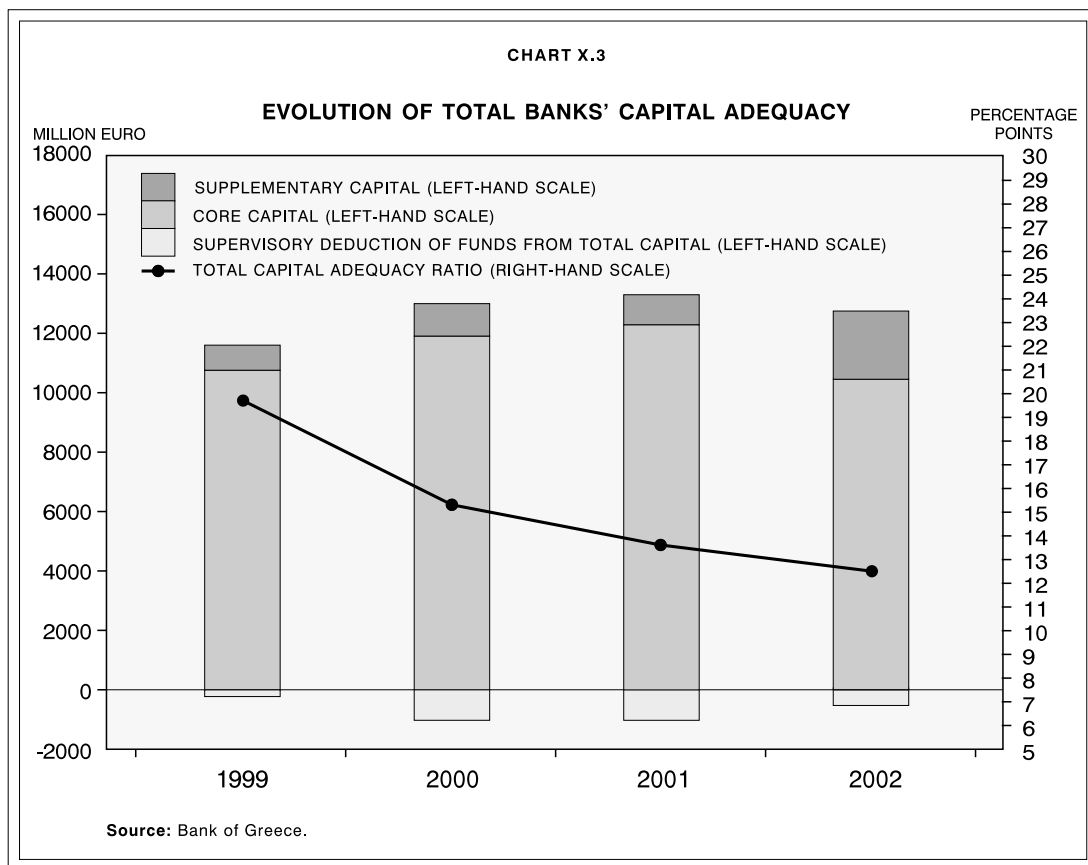
2.3 Capital adequacy

In 2002, developments in the amount and composition of banks' supervisory own funds, risk-weighted assets and the resulting Capital Adequacy Ratios were shaped by

their limited scope for internal and external fund-raising and by strong credit expansion (see Chart X.3).

Specifically, supervisory own funds on a non-consolidated basis fell by 0.24% in 2002, while core (or Tier I) capital decreased by 15%, mainly owing to:

- a decline in reserves, as losses from securities portfolio valuations were directly debited to retained earnings; and
- an increase in own shares held, an item that is deductible from core capital.

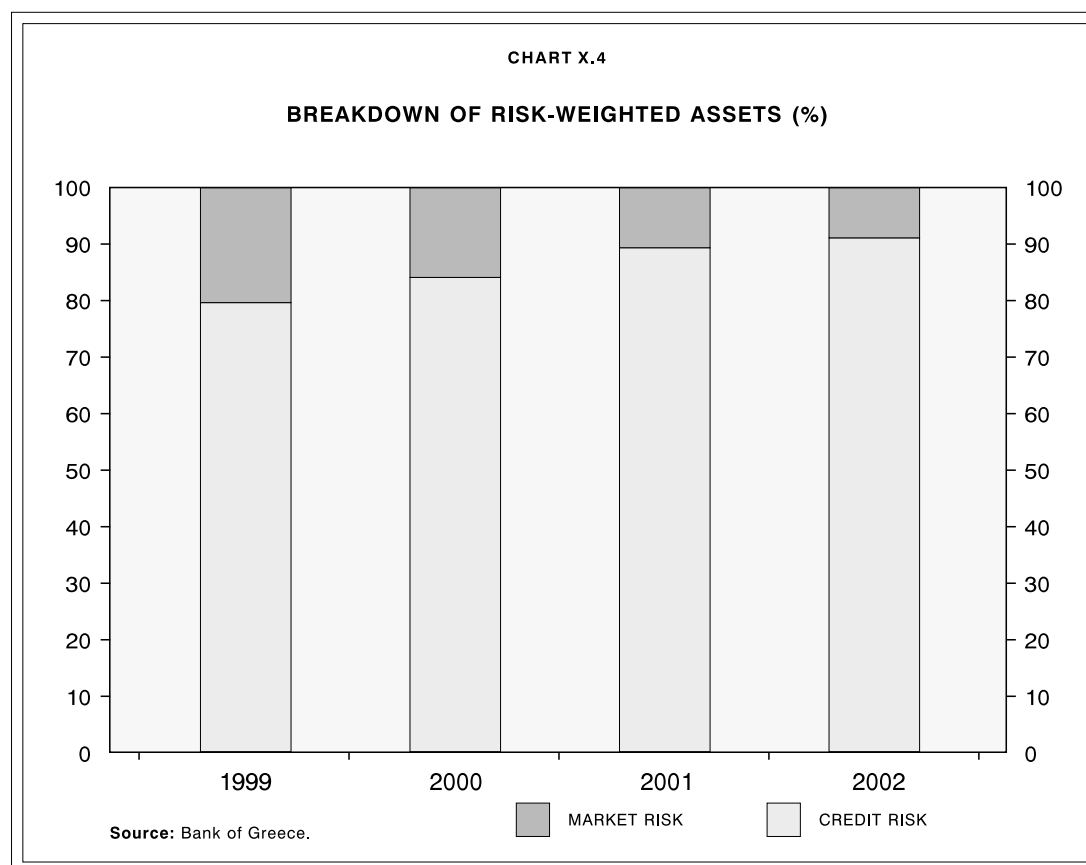


Despite its reduction, core capital continues to be the major component of the supervisory own funds of Greek banks, which is suggestive of the quality of their own funds.

By contrast, supplementary (or Tier II) capital grew by 134% in 2002 owing to new issues of subordinated debt. This development, which reflected not only the overall economic environment in 2002 but also similar trends at a global level, led to a change in the composition of supervisory own funds, with a reduced share of core capital (81% at end-2002, compared with 92% at end-2001). The substantially lower than the maximum allowed ratio of supplementary to core capital leaves sufficient room for certain banks to raise more supplementary capital. This could help them address the persisting difficulties in raising new equity capital, provided that the terms of issuance of subordinated loans, the

issuer bank's policy concerning its asset portfolio structure, as well as market conditions, permit the profitable use of the funds raised. Some banks, however, have limited possibilities in this respect.

At end-2002, the on- and off-balance-sheet risk-weighted assets, including nominal assets corresponding to market risk capital requirements, on a non-consolidated basis, reached €98 billion, having increased by 9% year-on-year. The ratio of risk-weighted assets to total assets rose to 55.9% in 2002, from 53.6% in 2001. This reflected an increase in the credit risk taken, as credit-risk weighted assets rose by 11% due to rapid credit



expansion and the acquisition of participating interests; by contrast, nominal assets, corresponding to capital requirements for market risk, decreased by 9% (see Chart X.4).

These developments in supervisory own funds and risk-weighted assets resulted in a further decline in the total CAR of commercial banks (see Chart X.3) on a non-consolidated basis to 12.5% at end-2002, from 13.6% at end-2001 and 15.5% at end-2000. If the capital adequacy is calculated on the basis of core (Tier I) capital, it remains relatively high (10.6%). Specifically:

– If the shortfall in provisions is deducted from own funds, both ratios still remain satisfactory (total CAR: 12.3%, Tier I-based CAR: 10.4% at end-2002).

– As regards the distribution of capital adequacy ratios, banks with a CAR of below 9% accounted for 9% of the total assets of commercial banks at end-2002, compared with 1.2% in 2001.

– At end-2002, the CAR of cooperative banks stood at the high level of 35.3%, compared with 37.4% in 2001.

– CAR on a consolidated basis fell to 10.6% at end-2002, compared with 12.6% at end-2001, mainly owing to the lower profitability of consolidated entities and to their valuation at market prices.

3. THE INSTITUTIONAL FRAMEWORK OF BANKING SUPERVISION

3.1 International developments

The year 2002 saw progress in the discussion and adoption of Directives on the regulatory framework governing undertakings active in the broader financial sector and relevant supervisory issues. Specifically:

– In June 2002, the European Parliament and the Council adopted Directive 2002/47/EC on financial collateral arrangements. This Directive is aimed at facilitating the effective use of collateral provided to cover credit risk in financial transactions by creating a uniform minimum regime for the establishment and enforcement of such arrangements. It complements the Settlement Finality Directive by including transactions in financial markets in addition to those that concern arrangements between the ECB and the national central banks. The scope of the Directive is limited to negotiable financial instruments and its main provisions concern:

- the abolition of formalities obstructing the effective enforcement of collateral arrangements, other than those required for evidencing the arrangement and for the transfer of collateral to the collateral taker's account;
- the compulsory recognition by all Member States of title transfer financial collateral arrangements and, in cases where the ownership of the collateral remains with the collateral provider, the collateral taker's right to re-use the collateral subject to his obligation to fully replace the original collateral by the due date;
- the abolition of any provisions resulting in retroactive invalidity of collateral arrangements; and
- recognition of the collateral taker's right to appropriate the collateral as an alternative to realising it, which protects the collateral taker in cases of liquidity shortages or market shocks. However, Member States whose civil law does not allow such appropriation on the date of entry into force of the Directive (27 June 2002) are not obliged to recognise it.

Member States are required to implement this Directive by 27 December 2003 at the latest.

— In December 2002, the European Parliament and the Council adopted Directive 2002/87/EC on the supplementary supervision of credit institutions, insurance undertakings and investment firms in a financial conglomerate. Member States are required to transpose this Directive into their domestic legislation by August 2004, effective from 1 January 2005.

Financial conglomerates, defined as financial groups comprising credit institutions, investment firms and insurance undertakings, fall within the scope of this Directive if they meet certain conditions. The application of the Directive is facilitated by the appointment of a single supervisory authority as coordinator, with specific tasks in the supplementary supervision of such conglomerates.

The main objective of the Directive is to address the additional risks facing financial conglomerates not covered by sectoral Directives. The implementation of this Directive is not expected to have any major consequences in Greece because of its limited scope, given that Greek financial conglomerates (predominantly banking groups) have a small insurance component. Notwithstanding its limited impact at this stage, the implementation of the Directive should contribute to more comprehensive supervision and enhance financial stability.

— Regarding the revision of the capital adequacy framework, in 2002 the European Commission continued its work, along with work within the Basel Committee on Banking Supervision and the recent discussions on the scope of this framework. The most important changes so far concern the regulatory treatment of financing to small and medium-sized enterprises and a more favourable credit risk weighting for banks' loan portfolios. Also, under the internal rating-based (IRB) approach, marginal credit risk weightings reflecting borrowers' credit ratings are lowered. This reduces capital requirements compared with those calculated under the standardised approach and thus acts as an incentive for banks to adopt the IRB approach.

In October 2002, the Basel Committee launched a third Quantitative Impact Survey (QIS3) of the new capital adequacy framework, with a new questionnaire that included all the proposed changes. Greece participated in the survey with six credit institutions.

The evaluation of the survey results, soon to be completed, will lead to the issuance of a third Consultative paper and the finalisation of the Committee's proposals for a New Capital Accord by the end of 2003. The adoption of a relevant EU Directive has thus been postponed until early 2004, while its implementation by the Member States will most probably be delayed until end-2006.

The new framework places greater emphasis on the internal methodology of banks. Certain Greek banks, realising both the comparative advantages implied by the advanced techniques of the new framework (flexibility, variety of approaches and incentives for effective risk management) and the "reputational risk" entailed by their failure to keep abreast of developments in a competitive environment, are increasingly adopting borrower rating systems and rapidly improving their internal control systems and their credit and operating risk monitoring and management techniques. Given that the new frame-

work calls for bank-specific adjustments rather than a generalised approach, the Bank of Greece has started consultations with the banking industry with a view to providing guidance and helping banks to adapt to the new risk management and supervisory evaluation methodologies and to the resulting need for qualified personnel.

— In 2002, discussions began at the EU level regarding the Investment Services Directive (93/22/EEC), which lays down the basic regulatory framework governing the operation of the single European capital market. The investment services and regulated markets Directive proposed by the European Commission and amending some provisions of Banking Directive 2000/12/EC and the Mutual Funds Directive (85/611/EC) is aimed at harmonising the institutional framework of investment services across the EU, with a view to enhancing market integration and investor protection in this field.

Key points in the proposed Directive are the abolition of the “concentration rule”, i.e. the obligation to carry out transactions in one regulated market per Member State, and the recognition of types of markets other than regulated ones. The proposed Directive provides for different operating rules for these markets, while ensuring the equal treatment of investors in terms of transparency and information.

In terms of client protection, the proposed Directive introduces rules that help distinguish professional investors by nature and size, and a number of provisions of the Directive are differentiated accordingly. Moreover, it introduces rules on conflict of interest issues and the better execution of client orders.

Another important point in this Directive specifies that only “eligible counterparties” are allowed to use trading systems and sets forth eligibility criteria, which are less restrictive than those currently applying to certain regulated markets. Finally, investment advice is included in core investment services, which places it under a stricter regulatory regime and makes such activity subject to a “Community passport”.

3.2 Cooperation with foreign supervisory authorities

In 2002, the Bank of Greece continued to participate actively in regulatory or monitoring committees and working groups operating in the context of the European System of Central Banks and other international organisations that examine developments in the banking sector and in the financial sector in general. It also further developed its bilateral contacts and signed memoranda of cooperation with the supervisory authorities of countries with Greek banking presence.

With a view to enhancing the effectiveness of financial market regulation, as well as cooperation in financial stability issues, especially in periods of crisis, a new high-level organisational structure was adopted within the EU in 2002.

In December 2002, the ECOFIN Council adopted the recommendations of the Economic and Financial Committee on the application of the Lamfalussy report proposals also in the banking sector. These proposals, concerning regulatory and supervisory

decision-making and implementation of related EU Directives, have already been endorsed by the ECOFIN in the field of securities. The new organisational framework highlights the need to exploit the synergies that exist between banking supervision and central banking, whether or not central banks maintain supervisory powers.

In the context of its bilateral cooperation, the Bank of Greece signed Memoranda of Understanding with the central banks of Albania, Bulgaria, Serbia and Romania. Negotiations on similar agreements with the supervisory authorities of Turkey and FYROM are currently in progress.

An important recent development was the signing in March 2003 of a Memorandum of Understanding between the banking supervisors and central banks in the EU, which will facilitate cooperation in crisis management situations.

3.3 Developments in the domestic institutional framework

In the context of its supervisory powers, the Bank of Greece took a number of important measures in 2002 and early 2003 to improve the supervisory framework of credit institutions and to enhance the transparency of transactions. Specifically:

- Bank of Greece Governor's Act 2494/2002 amended the provisions on the capital adequacy of credit institutions established in Greece, in line with Directive 98/31/EC. Under the new provisions:

- Credit institutions now have the option of using, under strictly specified conditions, internal risk management models to calculate capital requirements for market risk. This enables them to use their own funds more efficiently.

- The calculation of capital requirements for market risk as regards banks' positions in gold, commodities and related derivatives was adjusted so as to better reflect the assumed risk.

- The capital requirement for foreign exchange risk was lowered from 10% to 8% (for cooperative banks, from 12% to 10%) in order to provide a level playing field for credit institutions operating in Greece and those operating in other EU countries.

- Credit institutions are now required to report capital adequacy data more frequently (on a quarterly basis) to the Bank of Greece.

In the context of the Bank of Greece's power to enact transparency rules under Law 2937/2001, Governor's Act 2501/2002 laid down general principles governing the information of bank customers and specific information requirements depending on the type of transaction, applicable both before the conclusion of an agreement and during its term. Specifically:

- Banks are required to: provide customers with sufficient information before the conclusion of an agreement; periodically inform them in writing throughout the term of the agreement; respond to customers' inquiries in a timely manner; establish units responsible for reviewing customer complaints; sufficiently train their staff responsible for informing customers; and ensure the compliance of their advertising material with the rules established by the said Act.

– The minimum information to be provided, depending on the type of banking product, was determined.

– Minimum standards for customer information were set.

– Complaint review procedures were laid down.

– It was stated that the information requirements applying to traditional banking will also apply to Internet banking.

– With a view to promoting the effective implementation of provisions already existing since 1991, the Act specified the types of expenses, costs and commission fees to be compulsorily incorporated in loan interest rates.

– Bank of Greece Governor's Act 2512/2002 expanded the scope of supervision of credit institutions on a consolidated basis by the Bank of Greece to include real estate management subsidiaries and firms whose main activity is the acquisition of holdings in such companies, provided that they meet the criteria laid down in Presidential Decree 267/1995. For the calculation of the solvency ratio, a credit risk weighting 150% higher than the standard weighting generally applicable to such asset items was assigned to holdings in such enterprises and to real estate assets held by banks in excess of 30% of their own funds. These provisions are aimed at ensuring a level playing field in terms of the capital requirements for such holdings and at establishing a uniform regime across banks.

– Bank of Greece Governor's Act 2513/2003 amended Bank of Greece Governor's Act 2442/1999 on the adequacy of credit institutions' loan-loss provisions.¹

– Bank of Greece Governor's Act 2520/2003 required credit institutions to report regularly to the Bank of Greece on their exposures to non-residents on a consolidated basis, by providing both country breakdowns and aggregations by zone. This requirement is aimed at ensuring more accurate information of the Bank of Greece on the risks assumed by credit institutions, especially in view of their considerable cross-border expansion, hence better assessment of "country risk".

Furthermore, the Bank of Greece, in the field of its responsibilities, proposed to the Ministry of Economy and Finance draft laws on:

- the expansion of the Bank of Greece's scope of supervision to include money transfer intermediaries and their inclusion in the existing framework for the prevention and suppression of money laundering; and
- the terms and conditions for issuing electronic money in Greece and the supervision of electronic money institutions (transposition into Greek law of Directives 2000/28/EC and 2000/46/EC).

Besides, legislative work is in progress concerning the improvement of the monitoring and evaluation of auditing companies.

Finally, the question of the implementation of Law 2912/2001 on the restructuring of borrowers' debts arising from surcharges on past overdue bank loans continued to cause tensions in 2002, undermine borrowers' confidence in credit institutions and distort

¹ The reasons that led to the issuance of this Act are discussed in Section 2.2.1 of this chapter.

the public image of the credit system and the role of interest rates in a free and competitive market.

The Bank of Greece, under explicit authorisation by the aforementioned law, reviewed complaints received from borrowers and imposed the statutory penalties on eight credit institutions for 99 cases of insufficient information.

4. OTHER SUPERVISORY ISSUES

4.1 International Accounting Standards and their relevance for banking supervision

International Accounting Standards (IAS) are developed by the International Accounting Standards Board (IASB) to ensure a more accurate picture of the financial position and performance of firms, as well as a higher degree of transparency and comparability in financial reporting, and to improve the quality of information available to market participants and other parties concerned. With Regulation (EC) 1606/2002, the application of IAS will become compulsory as from 2005 for all publicly traded Community companies.¹ In Greece, a recent amendment to Law 2992/2002 made the application of the IAS in the preparation of annual and interim (consolidated and non-consolidated) financial accounts mandatory as from financial year 2004, i.e. one year earlier than stipulated in the said Regulation.²

The introduction of the IAS in Greece will bring about fundamental changes in banks' financial accounts required both by Community legislation, transposed into Greek law by amendments to Law 2190/1920, and by numerous tax and other legal provisions. It is therefore a major concern for the Bank of Greece as the supervisory authority, since banks' own funds and other regulatory indicators will obviously be affected. The Bank of Greece thus plans to play an active role in the introduction of the IAS and in monitoring compliance thereafter.

In spite of the differences in Greek banks' preparedness for IAS adoption and in the quantitative repercussions on their financial positions, the major implications should come from the following standards:

1. Valuation of financial instruments and investments

The adoption of IAS 39 is expected to have a negative impact on banks' net assets, as derivative financial instruments will be accounted for at fair value and recognised on

¹ This Regulation will enter into force after the European Commission endorses all or part of the existing 41 standards.

² Exceptionally for financial year 2003, financial statements will be prepared in conformity with the accounting standards at present in force and will be adjusted to the IAS by corrective entries to be effected after the end of the financial year.

the balance sheet. Furthermore, the mandatory consolidation of all subsidiaries irrespective of their line of business (according to IAS 22) may have negative consequences, especially in cases where insurance subsidiaries with very low own funds are consolidated. Finally, banks will benefit from the consolidation of investments in associated enterprises and subsidiaries at their cost value (IAS 27 and 28), in cases where these investments have been consolidated at market value, which is typically lower than the cost value.

2. Option to value property, plant and equipment at fair value

According to IAS 16, enterprises have the option of periodically revaluing their property, plant and equipment at fair value rather than at cost. The resulting valuation gains are credited to equity (and recognised on the relevant reserve account), while valuation losses are charged to income and reduce profits. The application of this standard is expected to have a positive impact on the balance sheets of Greek banks, as the fair value of their real estate is typically higher than the corresponding book value.

3. Recognition of defined post-employment benefit obligations, including voluntary retirement plans

According to IAS 19, these liabilities, which have not been addressed in EU or Greek legislation, should be recognised on the balance sheets of enterprises. The relevant amounts are derived from actuarial studies and, for certain banks, are considerable in relation to own funds.

4. Recognition of almost all intangible assets of banks as expenses during the first year of IAS application

Contrary to the current practice in Greece, IAS 38 requires an enterprise to recognise an intangible asset if, and only if, it is probable that the future economic benefits that are attributable to the asset will flow to the enterprise and the cost of the asset can be measured reliably. The impact of this standard on the net position of banks as at the end of financial year 2003 will evidently depend on the book values of such asset items.

5. Finance leases

IAS 17 requires banks to include the balance sheets of their subsidiaries that engage in financial leasing in their consolidated financial statements, which will henceforth be prepared in a totally different manner. This impact of this arrangement on the financial position of banks will depend on the size of their subsidiaries.

4.2 Security and operational reliability of information systems

The comprehensive, prompt and reliable provision of services to bank customers calls for on-going adjustments in banks' information systems. The Bank of Greece's supervisory interest focuses on two areas, in which banks are very active and which largely determine the effectiveness and reliability of these systems:

- Installation of ready-made commercial software packages (whether generic or banking-specific) and their incorporation into banks' IT environment.

Banks have traditionally relied on software developed in-house and tailored to their specific needs. However, the urgent need to support new services and the rising costs entailed by the maintenance of often obsolete applications have forced them to shift to ready-made commercial software packages, which may expose them to risks and/or increased operating costs.

The main sources of risk include wrong selection of software, customisation problems, the need for future upgrades and inadequate post-sales service on the part of suppliers.

- Use of public communication networks in customer service

Remote banking (including home banking, office banking etc.) relies on the use of public communication networks, such as the Internet, fixed and mobile telephony and other wireless networks (e.g. cable TV signal). This, however, entails hacking risks.

Security of information, customer identification and the reliability of transactions are paramount concerns. The Bank of Greece has issued decisions and circulars requiring banks to submit related analyses and report best practices, where appropriate, and has set forth minimum standards for the secure and reliable use of information systems. Also, it uses input from banks' IT-related internal control units and then relies on its own supervisory resources to check whether the appropriate security and reliability control procedures and mechanisms are in place. In this context, the Bank of Greece monitors carefully the readiness and adequacy of contingency plans for disaster recovery.

4.3 Prevention and suppression of money laundering

The Financial Action Task Force (FATF) established within the OECD, which is the leading body responsible for the institutional framework regarding the prevention and suppression of money laundering, expanded the scope of its authority to issues relating to the financing of terrorism. Hence, it issued eight special recommendations on terrorist financing and invited its members (including Greece) to implement them within a reasonable time span.

The Bank of Greece participates actively in FATF's work and, pursuant to its recommendations, proposed a legislative provision whereby money transfer intermediaries come under a licensing and supervision regime and the Bank of Greece is designated as the "Competent Authority" within the meaning of Law 2331/1995.

Furthermore, the Bank of Greece continued in 2002 to issue circulars aimed at adapting the regulatory framework governing the prevention and suppression of money laundering to the requirements of the international community and to carry out on-site inspections in credit institutions and financial organisations to check compliance with its instructions. Where cases of non-compliance were identified, specific instructions to take remedial action were given and sanctions were imposed according to the seriousness of the violations and the overall conduct of the supervised institution and its willingness to cooperate with the Bank of Greece and the “Competent Body” (i.e. the Committee provided for by Law 2331/1995, Article 7). This issue is also seriously taken into consideration in the assessment of the adequacy of the administrative organisation and the internal control mechanisms of the supervised institutions.

Credit and financial institutions have made progress in recent years in implementing the requirements of Law 2331/1995 and Bank of Greece circulars, by adopting, *inter alia*, “Know your customer” policies and by improving staff training and awareness, so as to ensure that all suspicious transactions are detected and reported to the Competent Body.

The findings of on-site inspections and the uneven distribution of suspicious transactions reported to the Competent Body indicate that there is room for further improving the effectiveness of systems for detecting, controlling and reporting such transactions. Credit institutions should dedicate the resources required for the attainment of this objective.

5. PAYMENT SYSTEMS

5.1 Oversight of payment systems

Pursuant to the provisions of its Statute, the Bank of Greece issued Monetary Policy Council Act 50/31 July 2002, which laid down the oversight framework for payment systems. It should be pointed out that the Governing Council of the ECB, whose tasks include the oversight of payment systems, determines the objectives of oversight and the procedures to be applied when the operation of such systems affects the implementation of monetary policy, involves risks to systemic stability and/or does not ensure a level playing field for market participants.

5.2 Retail payment systems

In 2002, cheques processed through the Athens Clearing Office and the DIAS S.A. Interbanking Cheque Clearing System (DIASCHEQUE) amounted to 16.7 million in number and €254 billion in value, dropping by 5.3% and 2.3% respectively over 2001. This decline indicates that cheques are being substituted for by other instruments, such as credit and debit cards and direct debit orders.

In the field of retail payments, Regulation 2560/2001 of the European Parliament and of the Council, which established the principle of equal charges for domestic payments and cross-border payments in euro (to apply from 1 July 2002 for credit and debit card payments and cash withdrawals, and from 1 July 2003 for credit transfers), is expected to have a favourable impact on the effectiveness and cost efficiency of such payments. The utilisation of the DIAS Interbanking Systems S.A. to its full potential, in conjunction with the standardisation and automation of the internal procedures of credit institutions, should also help in this direction.

5.3 The HERMES payment system

The HERMES payment system continued to operate smoothly and effectively in 2002. The availability ratio of the system remained high throughout 2002 (99.4% on average). In addition to its operational effectiveness, underlying the smooth operation of the

TABLE X.8
PAYMENT TRAFFIC IN THE HERMES AND TARGET SYSTEMS

Payment orders	2001		2002	
	Volume	Value (million euro)	Volume	Value (million euro)
1. Domestic	834,287	1,368,920	901,343	1,425,201
– Customer payments	490,086	284,224	563,869	314,811
– Interbank payments	344,201	1,084,696	337,474	1,110,390
2. Cross-border	224,492	1,041,653	309,085	1,258,324
– Customer payments	143,615	5,229	212,858	7,470
– Interbank payments	80,877	1,036,424	96,227	1,250,854
Total HERMES	1,058,779	2,410,573	1,210,428	2,683,525
Total TARGET	53,663,478	329,992,000	64,519,000	395,635,000

Sources: Bank of Greece and ECB.

system was the maintenance throughout 2002 of adequate collateral to back overnight credit extended by the Bank of Greece, a facility ensuring the unimpeded flow of payments.

In the pursuit of continued service improvement, a semi-automated system was home developed to enable the settlement of a larger volume of payment orders in contingency situations and the HERMES system was properly adjusted to support the use of the International Bank Account Number (IBAN) and the new SWIFT message type (MT103), which will become mandatory for customer payments as from November 2003.

Payment traffic within the HERMES system increased by 14.3% in volume terms and 11.3% in value terms in comparison with 2001, reaching 1.2 million and €2,684 bil-

lion respectively (see Table X.8). However, both these growth rates fell considerably short of the respective figures for the TARGET system as a whole, i.e. 20.2% in volume and 19.9% in value. The already small share of HERMES in TARGET turnover thus declined further, from 2.0% in volume terms in 2001 to 1.9% in 2002.

Cross-border interbank payments grew by 19% in volume terms and 20.7% in value terms. The value of such payments exceeded that of domestic payments, which rose by 2.4% in 2002, indicating that credit institutions continued to be very active in the single money market in 2002.

Among domestic payments, a decrease in the value of interbank payments was offset by a 15.1% increase in customer payments; as a net result, the value of total domestic HERMES traffic grew by 8% in 2002. Thus, the share of HERMES in the total value of payments processed through organised systems operating in Greece rose from 81% in 2001 to 84.9% in 2002.

APPENDIX TO CHAPTER X

BANK OF GREECE DECISIONS CONCERNING THE ESTABLISHMENT AND OPERATION OF CREDIT INSTITUTIONS AND THE SUPERVISION OF THE FINANCIAL SYSTEM

31 January 2002

— The terms and conditions for the establishment and operation of Finance Companies, as well as the rules for the supervision of such non-deposit taking lending institutions by the Bank of Greece, are laid down. The main activity of Finance Companies is the supply of personal loans and consumer credit to households.

— A new Finance Company, called “Codifis Hellas Finance Company S.A.” is authorised to operate in Greece.

26 February 2002

A new bank called “Aegean Baltic Bank” is authorised to operate in Greece.

1 March 2002

— Natural persons are allowed to open a second joint account with any credit institution, provided that the maximum overdraft amount allowed (€1,500) applies cumulatively for both the accounts kept, irrespective of the number of beneficiaries.

— Credit institutions operating as credit cooperatives may, by a Bank of Greece specific permission, register as members leasing and factoring companies having their head offices outside the area of operations of the above credit institutions.

27 May 2002

Provisions on the capital adequacy of credit institutions authorised in Greece are amended and supplemented, in order to achieve a more effective use of banks’ assets and harmonise Greek banking legislation to that of the European Union. More specifically, the provisions concerning the calculation of the capital required to cover market risk on banks’ positions in securities and foreign exchange are amended. Furthermore, credit institutions are given the option to use Value at Risk-type internal risk management models as an alternative to the standard approach, for the calculation of capital requirements against market risks arising from trading portfolio positions, foreign exchange positions and positions in commodities.

28 May 2002

— The monthly statistical report that credit institutions submit to the Bank of Greece is modified and adjusted to the new ECB Regulation (ECB Regulation 2001/13). The new Regulation does not impose on credit institutions any new reporting requirements; it merely specifies that some reports would have to be submitted on a monthly

rather than on a quarterly basis. At the same time, however, the new Regulation is aimed at better recording changes in credit and monetary aggregates; and to this end, credit institutions are required to submit some additional data on write-offs of loans and transactions in securities.

- With a view to creating a new harmonised statistical series of interest rates in the euro area countries, credit institutions operating in Greece are required to submit to the Bank of Greece deposit and lending interest rate data in accordance with a new form.

- With a view to completing the preparation of financial accounts for the Greek economy, the following entities are required to submit quarterly balance sheets to the Bank of Greece:

- (i) insurance companies;
- (ii) financial leasing firms, factoring firms, venture capital firms, investment firms and finance companies; and
- (iii) non-financial companies.

The financial accounts record in detail the claims and liabilities between the various sectors of the economy and, consequently, they provide meaningful information on the evolution and structure of saving and lending patterns of the respective sectors. This information is essential for the in-depth evaluation of monetary and credit developments.

30 May 2002

With effect from 28 June 2002, the requirement on credit institutions operating in Greece to keep in a special account with the Bank of Greece any remaining unused funds of those earmarked in the past for the financing of small and medium-sized enterprises (Monetary Committee Decision 197/11/3 April 1978) is abolished.

15 July 2002

The National Bank of Greece is authorised to merge with its subsidiary in France, “Banque Nationale de Grèce – France S.A.”. The National Bank of Greece is to continue its business in France through a branch.

31 July 2002

The rules and procedures on the basis of which the Bank of Greece will perform its task of overseeing payment systems are defined. All payment systems operating in Greece, electronic money systems, means of payment used for the transfer of funds through the payment systems, the access channels to the systems, e.g. through the Internet, and the supporting products and services (e.g. electronic signature) are subject to the Bank’s oversight.

26 August 2002

- The National Bank of Greece is authorised to establish five new branches in the Federal Republic of Yugoslavia.
- Alpha Bank is authorised to establish two new branches in Albania.

4 September 2002

- The Postal Savings Bank is authorised to acquire a qualifying holding of 17.2% in the share capital of the Bank of Attica.
- ABC Factors S.A. is authorised to merge with Fact Hellas S.A., the latter being taken over by the former.

24 September 2002

Aspis Bank is authorised to acquire the branch network in Greece of the ABN-AMRO Bank.

30 October 2002

The National Bank of Greece is authorised to merge with its subsidiary “National Investment Bank for Industrial Development” (ETEBA), the latter being taken over by the former.

31 October 2002

With a view to providing more thorough information to banks’ customers, the existing provisions concerning transparency and the conditions under which bank products are offered are supplemented and codified into a single text.

5 November 2002

Alpha Bank is authorised to open a Representative Office in New York.

3 December 2002

- Alpha Bank is authorised to establish two more branches in Belgrade.
- “Piraeus Leasing S.A.” and “P. Leasing” are authorised to merge, the latter being taken over by the former.

16 December 2002

Alpha Bank is authorised to establish a branch in Bucharest.

30 December 2002

- The exemption of the “Hellenic Industrial Development Bank” (ETBA) from the scope of Law 2076/1992 is terminated.
- As from 31 December 2002, real estate management companies, as well as firms having as principal objective the acquisition of holdings in such companies, are subject to supervision on a consolidated basis by the Bank of Greece, on condition that the requirements of Presidential Decree 267/1995 are met. Moreover, any amount by which the sum of the value of real estate appearing in credit institutions’ balance sheets and the value of their holdings in the above companies exceeds 30% of credit institutions’ own funds is subject to a credit risk weighting ratio 150% higher than the general ratio applicable for such asset items.

10 January 2003

The ceiling on the funds that co-operative banks can raise from the interbank market is increased from 15% to 25% of each co-operative bank's own funds, provided that the bank is licensed to operate in the whole of Greece and is a member to the Gross Settlement Payment System in euro (HERMES).

15 January 2003

The ratios that credit institutions need to apply to certain categories of overdue claims for the calculation of minimum provisions are adjusted as follows:

- The ratio applied on loans overdue by more than 12 months and on loans booked, for accounting purposes, as “loans in permanent delay” is raised to 50% from 40%. The ratio is raised from 50% to 60% in the case of doubtful loans.
- The ratios applied to consumer loans, credit cards and personal loans, which were 30% higher than those applied to other loans, will henceforth be 40% higher.
- The 30% cut in the provisioning ratios applicable to residential mortgage loans to households is maintained, albeit under the additional condition that the outstanding balance of the loan and any other loans on the specific property (such as supplementary loans for purchasing or repairing real estate) does not exceed 70% of the objective value of the collateral as determined by the Ministry of Economy and Finance for taxation purposes. In case that the total value of such loans exceeds the above percentage, the reduced ratio is applicable only to the part of the loans which corresponds to 70% of the objective value of the property.

31 January 2003

With effect from 19 March 2003, the Bank of Greece withdraws its license granted to “Citibank Shipping Bank S.A.”.

10 February 2003

Credit institutions having their head office in Greece are required to submit to the Bank of Greece, on a biannual basis, data concerning their exposures towards non-residents. These data have to be broken down by country as well as by economic and geographical region and to be calculated on a consolidated basis.

28 February 2003

EFG Eurobank Ergasias is authorised to acquire 90% of the share capital of “Postbanka AD”, a bank registered in the Federal Republic of Yugoslavia.

GLOSSARY

Collateral: assets pledged as a guarantee for the repayment of short-term loans which credit institutions receive from central banks, as well as assets sold by credit institutions to central banks as part of repurchase agreements.

Community Support Framework (CSF): it is drafted by the Commission of the European Communities (European Commission) in cooperation with the EU Member State concerned and it is approved by the Commission. It includes the development strategy of the country, the action lines and the financing sources (community funding, national public expenditure, private funding).

Deposit facility: a standing facility of the Eurosystem, which counterparties may use to make overnight deposits at a national central bank and which are remunerated at a pre-specified interest rate.

Deposits redeemable at notice: savings deposits for which the holder must respect a fixed period of notice before withdrawing the funds. In some cases there is the possibility of withdrawing a certain fixed amount in a specified period or of earlier withdrawal subject to the payment of penalty. Deposits redeemable at a period of notice of up to three months are included in M2 (and hence in M3), while those with a longer period of notice are part of the (non-monetary) longer-term financial liabilities of the Monetary Financial Institution (MFI) sector.

Deposits with agreed maturity: mainly time deposits with a given maturity, which, depending on national practices, may be either unconvertible prior to maturity or convertible only subject to the payment of a penalty. Some non-marketable debt instruments, such as non-marketable (retail) certificates of deposit, are also included. Deposits with an agreed maturity of up to two years are included in M2 (and hence in M3), while those with an agreed maturity of over two years are included in the (non-monetary) longer-term financial liabilities of the euro area MFI sector.

Effective (nominal/real) exchange rates (EERs): nominal effective exchange rates consist of a geometric weighted average of various bilateral exchange rates. Real effective exchange rates are nominal effective exchange rates deflated by a weighted average of foreign, relative to domestic, prices or costs. They are thus measures of price and cost competitiveness.

EONIA (euro overnight index average): a measure of the effective interest rate prevailing in the euro interbank overnight market. It is calculated as a weighted average of the interest rates on unsecured overnight lending transactions denominated in euro, as reported by a panel of contributing banks.

EURIBOR (euro interbank offered rate): the rate at which a prime bank is willing to lend funds in euro to another prime bank. The EURIBOR is computed daily for interbank deposits with a maturity of one to three weeks and one to 12 months as the average of the daily offer rates of a representative panel of prime banks, rounded to three decimal places.

Euro area: the area encompassing those Member States in which the euro has been adopted as the single currency in accordance with the Treaty and in which a single monetary policy is conducted under the responsibility of the Governing Council of the ECB. The euro area currently comprises Austria, Belgium, Finland, France, Germany, Greece, Ireland, Italy, Luxembourg, the Netherlands, Portugal and Spain.

European Central Bank (ECB): the ECB lies at the centre of the European System of Central Banks (ESCB) and the Eurosystem and has legal personality under Community law. It ensures that the tasks conferred upon the Eurosystem and the ESCB are implemented either by its own activities or through the national central banks, pursuant to the Statute of the ESCB and of the ECB. The ECB is governed by the Governing Council and the Executive Board, and, as a third decision-making body, by the General Council.

European System of Central Banks (ESCB): is composed of the ECB and the national central banks of all 15 Member States, i.e. it includes, in addition to the members of the Eurosystem, the national central banks of the Member States which have not yet adopted the euro. The ESCB is governed by the Governing Council and the Executive Board of the ECB, and, as a third decision-making body of the ECB, by the General Council.

Eurosystem: comprises the ECB and the national central banks of the Member States which have adopted the euro. There are currently 12 national central banks in the Eurosystem. The Eurosystem is governed by the Governing Council and the Executive Board of the ECB.

Executive Board: one of the decision-making bodies of the ECB. It comprises the President and the Vice-President of the ECB and four other members appointed by common accord by the Heads of State or Government of the Member States which have adopted the euro.

General Council: one of the decision-making bodies of the ECB. It comprises the President and the Vice-President of the ECB and the governors of all 15 EU national central banks.

General government: as defined in the European System of Accounts 1995 (ESA 95), it consists of central, state and local government, and social security funds.

Governing Council: the supreme decision-making body of the ECB. It comprises all the members of the Executive Board of the ECB and the governors of the national central banks of the Member States which have adopted the euro.

Harmonised Index of Consumer Prices (HICP): the measure of prices used by the Governing Council for the purpose of assessing price stability. The HICP was developed by the European Commission (Eurostat) in close liaison with the national statistical institutes and the European Monetary Institute (EMI), and later the ECB, in order to fulfil the Treaty requirement for a consumer price index constructed on a comparable basis, taking into account differences in national definitions.

Key ECB interest rates: the interest rates which reflect the stance of the monetary policy of the ECB. At present, the key ECB interest rates are the minimum bid rate on the

main refinancing operations, the interest rate on the marginal lending facility and the interest rate on the deposit facility.

Main refinancing operation: a regular open market operation executed by the Eurosystem in the form of a reverse transaction. Main refinancing operations are conducted through weekly standard tenders and normally have a maturity of two weeks.

Marginal lending facility: a standing facility of the Eurosystem, which counterparties may use to receive overnight credit from a national central bank at a pre-specified interest rate against eligible assets.

Monetary aggregates: currency in circulation plus outstanding amounts of certain liabilities of Monetary Financial Institutions (MFIs) and central government that have a high degree of “moneyness” (or liquidity in a broad sense). The narrow monetary aggregate M1 has been defined by the Eurosystem as: currency in circulation plus non-MFI euro area residents’ (other than central government) holdings of overnight deposits with euro area money-issuing institutions. The “intermediate” monetary aggregate M2 comprises M1 plus deposits with agreed maturity of up to two years and deposits redeemable at notice of up to three months. The broad monetary aggregate M3 includes M2 plus repurchase agreements, money market fund shares/units, money market paper and debt securities with a maturity of up to two years. The Governing Council has announced a reference value for the growth of M3.

Overnight deposits: deposits with next-day maturity. This instrument category comprises mainly those sight/demand deposits which are fully transferable on demand (by cheque or similar instrument) without significant delay, restriction or penalty. It also includes non-transferable deposits that are convertible on demand or by close of business on the following day.

Reserve base: the sum of the balance sheet items (in particular: liabilities) which constitute the basis for calculating minimum reserve requirements on a credit institution.

Reverse transaction: an operation whereby the central bank buys or sells assets under a repurchase agreement or conducts credit operations against collateral.

Standing facility: a central bank facility available to counterparties on their own initiative. The Eurosystem offers two overnight standing facilities: the marginal lending facility and the deposit facility.

Supervisory own funds: the ones defined in Bank of Greece Governor’s Act 2053/8 March 1992, incorporating Directive 89/299 (EEC) into Greek Law. This Directive was later repealed and its content was incorporated into Directive 2000/12 (EC).

TARGET System (Trans-European Automated Real-time Gross settlement Express Transfer system): a decentralised system consisting of 15 national RTGS (Real-Time Gross Settlement) systems (one in each of the 15 EU Member States) and the ECB payment mechanism. These are interconnected by common procedures (Interlinking Mechanism) to allow cross-border express transfers throughout the EU to move from one system to another.

ANNUAL ACCOUNTS
OF THE BANK OF GREECE

BALANCE SHEET AT

IN EURO

ASSETS	2002	2001
1. GOLD AND GOLD RECEIVABLES	1,608,397,562	1,451,491,765
2. CLAIMS IN FOREIGN CURRENCY ON NON-EURO-AREA RESIDENTS	7,598,227,885	5,788,374,062
2.1 Receivables from the IMF	453,088,250	448,657,635
2.2 Balances with banks, security investments, external loans and other assets	7,145,139,635	5,339,716,427
3. CLAIMS IN FOREIGN CURRENCY ON EURO AREA RESIDENTS	3,898,454,257	6,378,397,754
3.1 General government	2,487,408,343	2,805,065,516
3.2 Other claims	1,411,045,914	3,573,332,238
4. CLAIMS IN EURO ON NON-EURO-AREA RESIDENTS	126,377,410	54,451,964
4.1 Balances with banks, security investments and loans	126,377,410	54,451,964
4.2 Claims arising from credit facilities under ERM II	0	0
5. LENDING IN EURO TO EURO AREA CREDIT INSTITUTIONS RELATED TO MONETARY POLICY OPERATIONS	2,940,000,000	510,000,000
5.1 Main refinancing operations	2,879,000,000	510,000,000
5.2 Longer-term refinancing operations	61,000,000	0
6. OTHER CLAIMS IN EURO ON EURO AREA CREDIT INSTITUTIONS	73,641,405	185,327,046
7. SECURITIES IN EURO OF EURO AREA RESIDENTS	5,580,139,098	4,100,534,465
7.1 General government debt	3,737,711,233	3,021,587,049
7.2 Other securities	1,842,427,865	1,078,947,416
8. GENERAL GOVERNMENT DEBT IN EURO	10,475,926,248	11,070,457,699
8.1 Long-term debt	2,052,254,605	2,250,147,387
8.2 Loans for participation in the IMF	842,745,173	878,387,343
8.3 Long-term loans and securities with a euro clause	7,580,926,470	7,941,922,969
9. INTRA-EUROSISTEM CLAIMS	1,442,783,605	1,417,154,865
9.1 Participation in the capital and reserves of the ECB	388,614,874	388,614,874
9.2 Claims equivalent to the transfer of foreign reserves to the ECB	1,028,200,000	1,028,200,000
9.3 Claims related to promissory notes backing the issuance of ECB debt certificates	0	0
9.4 Net claims related to the allocation of euro banknotes within the Eurosystem	0	0
9.5 Other claims within the Eurosystem (net)	25,968,731	339,991
10. ITEMS IN COURSE OF SETTLEMENT	68,849,411	667,266
11. OTHER ASSETS	1,166,371,291	1,854,088,773
11.1 Coins of euro area	30,090,125	4,454,304
11.2 Tangible and intangible fixed assets	220,555,187	226,239,699
11.3 Other financial assets	26,903,275	26,359,102
11.4 Accruals and prepaid expenses	513,271,357	248,648,167
11.5 Sundry	375,551,347	1,348,387,501
TOTAL	34,979,168,172	32,810,945,659
OFF-BALANCE-SHEET ITEMS		
Investment in Greek government securities on behalf of public entities*	9,090,580,290	6,843,450,472

* Including legal persons in public law and insurance funds in public and private law.

Notes : - Under Article 54A of the Bank's Statute, the balance sheet was drawn up in compliance with the rules and accounting practices determined by the European Central Bank (ECB) and applying to the members of the European System of Central Banks.
- The value of gold is calculated on the basis of 100% of the gold price (in euro) per ounce as specified by the ECB and is shown under a separate item.
- Claims/liabilities denominated in euro or foreign currencies are broken down into claims on/liabilities to euro area residents and non-euro-area residents.
- Account balances related to monetary policy operations are shown under separate items.

LIABILITIES	2002	2001
1. BANKNOTES IN CIRCULATION	8,692,709,236	8,753,224,743
2. LIABILITIES IN EURO TO EURO AREA CREDIT INSTITUTIONS RELATED TO MONETARY POLICY OPERATIONS	1,642,692,794	1,671,669,937
2.1 Current accounts (including minimum reserves)	1,642,692,794	1,657,609,937
2.2 Deposit facility	0	14,060,000
3. OTHER LIABILITIES IN EURO TO EURO AREA CREDIT INSTITUTIONS	0	4,737,059,105
4. LIABILITIES IN EURO TO OTHER EURO AREA RESIDENTS	460,503,774	928,477,667
4.1 General government	447,290,853	911,829,075
4.2 Other liabilities	13,212,921	16,648,592
5. LIABILITIES IN EURO TO NON-EURO-AREA RESIDENTS	679,978,437	755,411,273
6. LIABILITIES IN FOREIGN CURRENCY TO EURO AREA RESIDENTS	328,358,912	1,578,438,575
7. LIABILITIES IN FOREIGN CURRENCY TO NON-EURO-AREA RESIDENTS	1,555,735,577	1,675,425,750
7.1 Deposits and other liabilities	1,555,735,577	1,675,425,750
7.2 Liabilities arising from credit facilities under ERM II	0	0
8. COUNTERPART OF SPECIAL DRAWING RIGHTS ALLOCATED BY THE IMF	134,223,455	147,500,677
9. INTRA-EUROSISTEM LIABILITIES	18,187,621,802	8,092,898,988
9.1 Liabilities related to promissory notes backing the issuance of ECB debt certificates	0	0
9.2 Net liabilities related to the allocation of euro banknotes within the Eurosystem	776,446,680	0
9.3 Other liabilities within the Eurosystem (net)	17,411,175,122	8,092,898,988
10. ITEMS IN COURSE OF SETTLEMENT	50,396,950	151,752,634
11. OTHER LIABILITIES	1,219,028,265	1,550,535,122
11.1 Accruals and income collected in advance	231,655,351	64,389,620
11.2 Sundry	987,372,914	1,486,145,502
12. PROVISIONS	202,379,072	188,940,426
13. REVALUATION ACCOUNTS	470,583,083	392,456,989
14. CAPITAL AND RESERVES	1,354,956,815	2,187,153,773
14.1 Capital	66,746,019	49,844,397
14.2 Ordinary reserve	66,746,019	49,844,397
14.3 Special reserves	1,221,464,777	2,076,660,865
14.4 Difference from the revaluation of fixed assets (Law 2065/92)	0	10,804,114
TOTAL	34,979,168,172	32,810,945,659
OFF-BALANCE-SHEET ITEMS		
Investment in Greek government securities on behalf of public entities*	9,090,580,290	6,843,450,472

PROFIT AND LOSS ACCOUNT

IN EURO

<u>DEBIT</u>	<u>2 0 0 2</u>	<u>2 0 0 1</u>
STAFF COSTS	222,081,459	206,204,814
Wages and salaries	119,420,828	110,008,027
Employer's contributions and other levies		
To the Health Insurance Fund	10,978,436	10,454,473
To the Pension Fund	28,315,111	26,162,382
To the Supplementary Pension Fund	11,741,095	10,779,489
Contributions to other insurance funds and other charges	9,017,407	7,547,575
Pensions and benefits	42,608,582	41,252,868
ADMINISTRATIVE AND OTHER EXPENSES	39,830,352	41,105,713
DEPRECIATION OF TANGIBLE AND INTANGIBLE FIXED ASSETS	57,297,693	20,111,634
TAXES-CHARGES	1,222,621	2,847,958
OPERATING PROVISIONS	20,256,848	26,875,467
Provision under Article 71 of the Statute	11,222,941	17,841,560
Provision for personnel pensions	8,805,000	8,805,000
Sundry provisions	228,907	228,907
	340,688,973	297,145,586
NET PROFIT	213,235,881	506,284,636
	553,924,854	803,430,222

FOR THE YEAR 2002

SEVENTY-FIFTH YEAR

<u>C R E D I T</u>	<u>2 0 0 2</u>	<u>2 0 0 1</u>
NET INTEREST INCOME	123,242,315	356,227,317
NET RESULT FROM FINANCIAL OPERATIONS	145,984,150	275,168,677
NET INCOME FROM FEES AND COMMISSIONS	111,254,648	97,203,411
INCOME FROM SHARES AND PARTICIPATIONS	30,986,299	37,003,991
NET RESULT OF POOLING OF MONETARY INCOME	10,583,696	339,991
<u>OTHER INCOME</u>	<u>131,873,746</u>	<u>37,486,835</u>
	<u>553,924,854</u>	<u>803,430,222</u>

DISTRIBUTION OF NET PROFIT OF EURO 213,235,881

(Article 71 of the Statute)

	<u>2 0 0 2</u>	<u>2 0 0 1</u>
Dividend on capital, euro 0.67 per share on 11,918,932 shares	7,985,684	5,989,263
For the ordinary reserve	16,901,623	0
Additional dividend, euro 1.53 per share on 11,918,932 shares*	18,235,966	22,884,349
One-off payment to personnel for contribution to the circulation of the euro	0	1,367,550
Tax payment (Law 2873/2000, Article 6)	14,119,350	18,144,697
To the Government	<u>155,993,258</u>	<u>457,898,777</u>
	<u>213,235,881</u>	<u>506,284,636</u>

* The dividend on capital and the additional dividend for the year 2001 were euro 0.67 and euro 2.56 respectively per share (in total euro 3.23) on 8,939,199 shares.

Athens, 14 March 2003

NICHOLAS C. GARGANAS
GOVERNOR

DIMITRIOS E. MATSIMANIS
DIRECTOR, ACCOUNTS DEPARTMENT