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Greece

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EXECUTIVE SUMMARY

Greece has experienced serious macroeconomic difficulties throughout the years of its membership in the European Community. These were particularly pronounced twice during the past ten years when it became necessary to obtain Community balance of payments assistance, first in 1985 and then in 1991. The sources of the adjustment failures of the past decade are twofold: a sustained fiscal expansion, which was initiated in the early part of the 1980s and has proved very difficult to reverse in a sustained manner; and the deterioration in the productive potential of the economy. In turn, these have mirrored the increased importance of state interference in many dimensions of economic life, which occured against the prevailing trends of fiscal retrenchment and greater liberalization adopted by other Community Members.

Greece entered the 1990s with its macroeconomic performance markedly diverging from its Community partners, and with its ability under prevailing policies to participate in and benefit from the furthering of European integration in question. Greece's (CPI) inflation, which has been rising since 1988, peaked at over 20% in 1990; its current account and the drachma became subject to unstable expectations raising the clear prospect of an exchange market crisis; the deficit on the current account rose to 5,4% of GDP in 1990, at a time when there was no real output growth; the deficit of the central government budget rose to 17,2% of GDP only after corrective measures were undertaken to prevent it from rising to over 21% of GDP; the share of current public expenditure rose by around 20 points relative to GDP between 1980 and 1990, to 49,5%, but the share of revenues rose by only 4 points, to 34,5% of GDP. Various other indicators provide confirmation of the need for a policy change which has become particularly urgent as Community integration moves to the next stage. Greece now stands as one of the most heavily indebted Member States and the rising share of interest payments in tax revenues (52,6% in 1990, up from 12,7% in 1980) will severely limit the room for fiscal manoeuvre while the rising public debt will sustain upward pressure on real interest rates. Steps to implement this policy change have been initiated.

This study reviews the macroeconomic and structural performance of Greece over the 1980s, particularly from the perspective of the structural problems and the need for reform measures. A principal feature of Greece's macroeconomic performance in the 1980s has been a significant fiscal expansion initiated in the beginning of the decade. The expansionary fiscal policy has played an adverse role by undermining the country's financial and macroeconomic stability, and by making it necessary to retain policies distorting resource allocation; financial policies, for example, aimed at facilitating fiscal objectives, have notably distorted capital allocation and only since 1987 have they been accorded a degree of independence from the fiscal needs of the state. The first part of the study reviews some issues related to the macroeconomic performance in order to highlight the need for budgetary adjustment and for effective financial policies. Chapter I of the study presents the stabilization component of Greece's stabilization and structural reform programme, and also a comparison of the current stabilization programme with that of 1985. The role macroeconomic and financial factors may have played in Greece's balance of payments developments is outlined from an empirical perspective in Chapter IV. The rest of this study reviews some causes of the decline in Greece's potential output, and the programme of structural reform to be pursued in accordance with the 1991 loan conditions.

Some key factors which are correlated with Greece's poor supply performance reflect either failure to initiate modernization policies or the adoption of policies which have adversely affected productivity and resource allocation. A notable feature of the 1980s is the decline in the share of gross fixed capital formation relative to GDP, from around 26% in 1979 to 16,9% in 1987 (18,4% in 1990), a factor of utmost importance in the country's inferior output performance. Here, labour market policies which undermined profitability have played a pricipal role. In addition, adverse expectations emanating from the instability of the macroeconomic environment and from uncertainty with respect to current and future policies have also been damaging. An indication of international investors' perceptions about investment prospects in Greece is the generally minor role direct investment flows play in its capital account, and this is especially striking when compared to the apparent attraction of Spain and Portugal in the late 1980s. Chapter IV provides some evidence on the importance of supply side/investment activity in improving Greece's trade balance, as well as on the lack of dynamism revealed by Greece's apparent specialization along traditional product lines. The country's sectoral trade performance, which is closely related to the distribution of investment spending, is also examined.

Greece's labour market arrangements during much of the 1980s contributed to high costs, low productivity, and serious inflexibilities. Regulations governing employment adjustments and terminations, and procedures determining wage setting and the allocation of working time, resulted in a labour market viewed by many European businessmen as the most inflexible in the Community. A direct consequence of labour market intervention has been endemic wage inflation, which has required the adoption of severe incomes policies in both the stabilization programmes, and has led to a serious deterioration in the country's international competitiveness. Chapter III of the study examines Greece's labour market policies; the impact of cost competitiveness on Greece's trade balance, among other factors, is examined in Chapter IV. Since 1990 measures to reform and modernize the labour market have been introduced.

Another dimension of state intervention has been the extensive system of price controls and the occasional price freezes initiated with a view to controlling inflation. It is doubtful whether the social objectives intended to be served by price controls, as with wage interventions, have been met; instead, price flexibility has been impaired. Also Greece supports through subsidies its industry to an extent perhaps high relative to the Community average.

Monetary policy has traditionally served the financial needs of the public sector. Since 1987 liberalization steps have been adopted, and the reform process has gained momentum during this period. However, the increased resort to deficit financing through Treasury bills has been a key factor distorting financial variables. Despite the interest subsidies and the administrative controls imposed on the financial system, Greece's investment performance did not respond adequately.

The programme of structural reform is a central component of the government's medium term programme. The programme was motivated by two principal considerations: first, by the need to modernize Greece's economy and, secondly, by the recognition that the stabilization component of the programme would be likely to fail if not complemented by structural measures which would promise a more efficient and productive economy. The envisaged measures of structural reform fall under four broad categories: containment of the public sector; reform of the tax and of the social security system; deregulation of the goods and labour markets; and liberalization of financial markets and of capital movements. The progress made in meeting the structural reform targets has so far been slow and much needs to be accomplished.

The containment of the public sector is intended to be achieved through a programme of privatization and through reductions in the size of public sector employment. The privatization programme applies to both ailing public enterprises and sales of shares in public utilities. Of the 170 enterprises available for privatization (of which twenty five are in liquidation) ten had been sold by September 1991, a reflection of numerous difficulties encountered in the process. The sale of shares in utilities now appears to be a more distant event likely to come on stream in 1992 and in 1993. With respect to the reduction in public employment, which must amount to 10% of the end-of-1990 employees by the end of 1993, current trends in public employment indicate that this target will be difficult to meet. In accordance with the loan conditions the finances of public enterprises must be consolidated so that their net borrowing requirements decline from 1,7% of GDP in 1990 to zero by 1992; a monitoring system to assist in this process has already been set up by the Ministry of National Economy.

Little progress has been made in tax and social security reform. Greece's tax system is in urgent need of modernization both in order to increase revenues and to eliminate its numerous distortions. The government has undertaken to widen the tax base by taxing agricultural incomes, to introduce an alternative income tax for professionals, and to reform the tax code. While various measures have been introduced, Greece's tax system continues to be characterized by overregulation and inefficiencies.

Greece's social security system is in an untenable financial position, caused by widespread contributions evasion, demographic changes, payouts rising in excess of inflation during much of the 1980s, generally low contribution rates, generous early retirement provisions, and by various administrative problems. IKA, the principal entity of the system, is virtually insolvent and has been sustained through transfers from the central government budget. The government has initiated a first round of reforms and a further proposals are expected for the autumn of 1991. In accordance with the targets of the programme, the net borrowing requirements of the public entities are planned to stay flat at 1,5% of GDP from 1992 onwards.

Financial market reforms and liberalization of international capital movements are the areas where Greece has made most progress. Steps to adapt Greece's legislation to Community directives have been undertaken at a vigorous pace and since May 1991 several key capital account transactions have been freed from controls. As a result, Greece's integration in the European financial area has been enhanced. Chapter II of the study takes a closer look at various financial market issues.

Developments in 1991 suggest an improvement in inflation and the current account deficit by somewhat more than initial estimates, but a serious overshooting of the budgetary targets; at the same time, there are continued delays in meeting the structural reform objectives. The gains in inflation and the external deficit will not be sustained unless budgetary adjustment is achieved; and neither will the stabilization programme survive nor will Greece's convergence to the Community take place unless there is the prospect for higher standards of living from a more productive economy. There is, therefore, urgent need for Greece to secure budgetary adjustment and to accelerate the process of structural reform, especially in order to be able to participate meaningfully in the closer integration currently under way in the rest of the Community.

MACROECONOMIC POLICY AND STRUCTURAL REFORM IN GREECE[*]

Performance and Prospects after Ten Years of Membership in the European Community

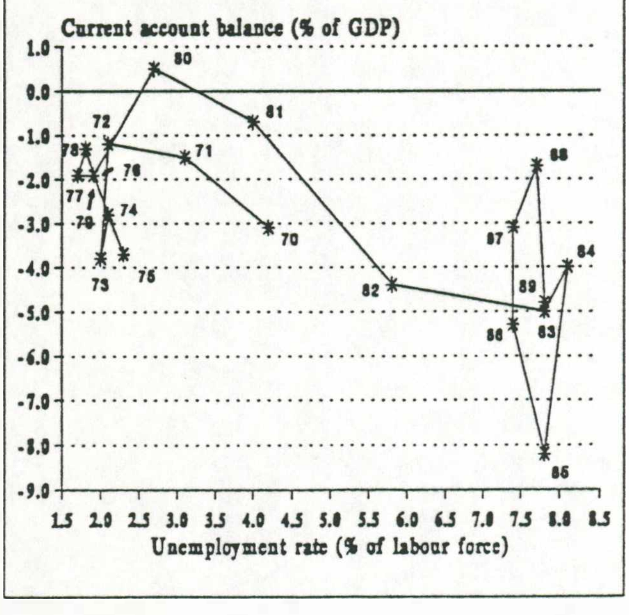
1. Introduction

Greece joined the European Community in 1981. In most EC countries the following ten years were marked by a steady retrenchment in the role of the state in economic activity; by contrast, in Greece state interference intensified. The decision to enlarge the role of an already dominant public sector became a principal component of the economic programme pursued in the first half of the 1980s. As a result of the state's pervasive involvement in economic decisions the economy's supply potential has diminished. At the same time, the increased demands on output made by the public sector, and the deteriorating productivity performance, have resulted in high trend inflation, financial instability, and severe fiscal imbalances.

A stylized characterization of Greece's macroeconomic performance in the past twenty years is presented in Graph 1. The locus of points of unemployment and of external deficits has shifted sharply to the right, implying that greater balance of payments deficits coexisted with greater unemployment in the 1980s compared to the previous decade. A similar message is conveyed in Graph 2, where the locus of unemployment and fiscal deficits since 1970 is presented. Expansionary fiscal policies in the 1980s have coexisted with a deterioration in external, labour market and output performance [1].

Greece's macroeconomic and structural difficulties became particularly apparent during the 1980s when membership in the Community has been characterized by a disappointing economic record. Greece's preparation to meet Community challenges was insufficient, and once it became a member of the EC few of the necessary steps were undertaken. Indeed, Greece's macroeconomic policies diverged notably from those pursued in the key Community countries during the decade, while the absence of structural reforms stood in marked contrast to the initiatives introduced in other Member States. As a consequence, the process of catching-up to the rest of the European Community has not simply ended; it has been reversed[2]. This raises serious questions about Greece's prospects for achieving nominal and real convergence with the Community, and about the policies which will be necessary in order to foster convergence.

Graph 1: External deficit and unemployment

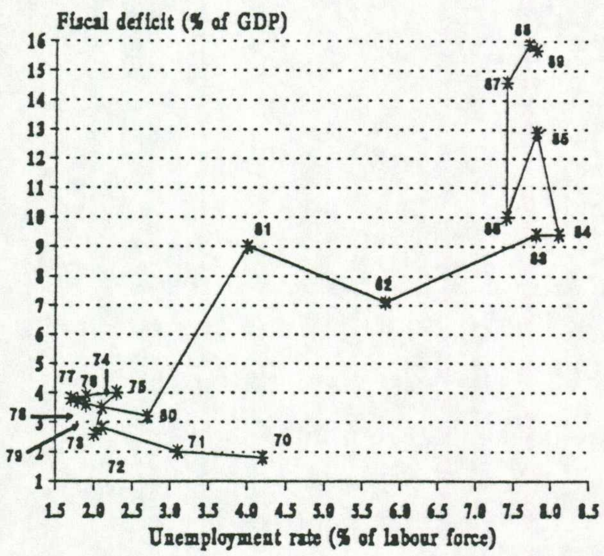


* This study was discussed in September 1991 by the Economic Policy Committee and reflects developments principally up to that date.

1 It should be noted that the measured unemployment rate may have risen in the course of the 1980s as a result of changes in the definition used by Greece's statistical services.

2 Greece's per capita income in 1990 was 53.4% of the EC average; this compares unfavourably to the experience at the beginning of the decade when it represented 58.2% of the EC average. Ireland, Spain, and Portugal each have narrowed their divergence from the Community average during this period. See "Real Convergence in the Community", European Economy, Supplement A, no. 2/3, February-March 1991.

Graph 2: Fiscal deficit and unemployment



In recent years there has emerged a range of indicators (a large underground economy, endemic inflation, persistent fiscal imbalances and rapid growth in public debt, a rapid rise in external indebtedness, and the 1985-87 stabilization failure, to mention only the most prominent among them) suggesting that persistent domestic imbalances, if not addressed in a timely and irreversible manner, will permanently lower Greece's potential to achieve a sustainable improvement in standards of living.

In response to the emerging financial instabilities threatening a foreign exchange crisis, the authorities initiated a series of measures starting with the May 1990 budget and culminating with the 1991 three-year stabilization, adjustment, and structural reform programme accompanying a Community balance-of-payments loan. The 1990 budget measures halted the deteriorating budgetary and macroeconomic trends. The measures adopted were a weakening and ultimate abolition of the inflation adjustment of wages (ATA), increases in indirect taxes, a special levy on the net income of self-employed and on retained profits of corporations, and cuts in subsidies and grants. In an effort to address the fundamental structural difficulties of the Greek economy, changes in labour legislation and a new investment incentives bill were introduced. In addition, a first stage of reforms of the Social Security system were initiated in September 1990. These were aimed at halting the rapid deterioration in the system's finances, while a second stage of reforms was planned for later.

These measures, it became subsequently apparent, were inadequate when compared to the need for a permanent adjustment and reform. This realization, together with emerging severe exchange market difficulties, made it necessary to adopt a formal stabilization and structural reform programme. The programme was adopted in February 1991; its broad aims are fiscal consolidation and structural renewal. Since stabilization and adjustment involve substantial economic costs which, in turn, could undermine the commitment to the policies, the structural reform initiatives have been designed to complement the fiscal adjustment programme. In this respect the government has already initiated several reform steps aimed at improving the supply side of the economy. However, the results of these measures are difficult to evaluate, partly because the reform of an over-regulated economy such as Greece's requires considerable time before it is securely in place. In the light of the enormity of the problems the government is confronting, it has become clear that the structural reform programme should be implemented without delay; the government appears to be committed to this, realizing that failing to do so could threaten the viability of the stabilization programme. Furthermore, such failure could raise questions about the government's commitment to the programme objectives and could invite a repetition of the 1985/87 stabilization experience which had very serious consequences once the programme was abandoned.

Despite the similarities in the circumstances leading to the granting of a Community loan in favour of Greece in 1985 and in 1991, the latter episode has unfolded against a background of a different intellectual climate. The scope of Community objectives and targets has widened, offering new economic opportunities but also demanding new commitments. Failure to meet the requirements of the adjustment programme will not only risk increasing Greece's divergence from the Community but will also severely diminish the prospects for raising the real incomes of its citizens over the medium-term.

2. Macroeconomic Policy and Macroeconomic Imbalances

2.1 The Fiscal Expansion of the 1980s

The thrust of fiscal policy became unsustainably expansionary in the 1980s. The share of general government expenditure in GDP rose from 39.9% in 1981 to over 50% in 1989; this share increased to 53.3% in 1990 and is expected to remain at that level in 1991, before declining to a planned level of 45.5% in 1993. Factors underlying the growth of public expenditure have been the pronounced need to finance deficits of the social security organizations, as well as the shift of deficits from public sector entities to the government budget.

There has been a notable shift in the composition of public expenditure during the 1980s. The share of interest payments in GDP has advanced rapidly, from 3.2% in 1981 (8.0% of total public expenditure) to 11.1% (20.8% of public spending) in 1990; this is a reflection of the growing demands to service the accumulated debt. At the same time, the share of spending on consumption and transfers in GDP has risen by almost seven percentage points in the period 1981-1990 (its share in total public spending, however, has declined substantially), but spending in the investment budget has been on a downward trend relative to GDP, and its share in total public spending has fallen from 9.9% in 1981 to 5.5% in 1990.

Tax policy provided only passive support to the increased spending. The share of general government revenues in GDP, which was around 29% in 1981, rose by about six points to 34.5% in 1990. The behaviour of budget revenues in recent years reflects the decline in the effectiveness of the collection and assessment mechanism (widespread tax evasion, particularly with respect to the VAT introduced in 1987), delays in the adjustment of administered oil product prices, failure to adjust in a timely fashion public utility prices, and tax exemptions granted. The decline of revenues in GDP in 1989 reflects the weakening of the tax administration mechanism during the period of heightened political uncertainty. Total resources of the general government are projected to rise significantly over the course of the adjustment programme and to reach 42% of GDP in 1993.

The principal consequence of the tax and expenditure developments has been a sharp increase in the fiscal deficit. The deficit of the central government more than doubled in the period 1981-1990, from 9.4 % to 20.6% of GDP. A similar trajectory was followed by the deficit of the wider public sector which includes, in addition to the central government, the public enterprises and public entities; this rose from 12.2% of GDP in 1981 to 23.8% in 1990. Public sector net borrowing requirements (excluding amortization payments) also rose sharply, particularly in the post-1987 period following the abandonment of the 1985/87 stabilisation programme. Fiscal developments during this period were especially adverse with central government net borrowing requirements advancing to over 21% of GDP in 1990 if corrective steps were not taken to halt the deterioration. Partly as a results of the May 1990 budget measures, the borrowing

Table 1: Public Expenditure and Taxation in Greece (in percent)

	1981	1983	1985	1987	1989	1990
Expenditure			% public expenditure			
Consumption and transfers	82,2	83,2	79,8	78,1	77,7	73,7
Interest payments	8,0	8,8	11,1	15,2	16,0	20,8
Capital spending	9,9	8,0	9,1	6,7	6,3	5,5
			% GDP			
Consumption and transfers	32,8	34,5	38,4	38,0	39,4	39,3
Interest payments	3,2	3,7	5,3	7,4	8,1	11,1
Capital spending	3,9	3,3	4,4	3,2	3,2	2,9
Total	39,9	41,5	48,1	48,6	50,7	53,3
Taxation			% revenues			
Direct taxes	18,3	16,4	16,4	16,8	17,6	18,9
Indirect taxes	44,3	45,6	44,6	48,4	48,1	49,8
Social security contributions	29,8	32,7	33,1	29,8	30,7	27,9
Other	7,6	5,3	5,9	5,0	3,6	3,4
			% GDP			
Direct taxes	4,7	5,5	5,6	6,1	5,6	6,5
Indirect taxes	13,0	15,1	15,3	17,5	15,2	17,2
Social security contributions	9,1	10,9	11,3	10,8	9,7	9,6
Other	2,0	1,7	2,0	1,8	1,1	1,2
Total revenues	28,8	33,2	34,2	36,2	31,5	34,5

Source: Commission estimates; the data refer to the general government, on a national accounts basis. The 1990 revenue data are not comparable to the data in Table 1. of Chapter I which are on a budgetary basis for the central government

Table 2: Public Sector Deficits and Debt in the 1980s (accruals basis; percent of GDP)

	1981	1983	1985	1987	1989	1990
Deficit						
Central government	9.4	10.0	14.1	14.6	20.0	20.6
Public sector (*)	12.2	12.1	17.3	16.6	22.1	23.8
Net borrowing requirements						
Central government	8.3	9.2	12.6	10.5	17.7	17.2
Public sector (*)	11.3	11.3	15.9	12.5	19.8	20.4
Primary deficit						
Central government	5.9	5.8	7.1	3.1	9.3	5.0
Public sector (*)	8.7	7.9	10.4	5.1	11.4	8.7
Public debt						
Central government	32.8	41.2	57.9	64.6	76.3	81.6
Public sector (*)	47.3	61.8	95.1	93.0	104.4	110.0

(*) The public sector is the central government and the public enterprises and entities.
Source: Commission estimates and Ministry of National Economy

requirements of the central government were contained to 17.2% of GDP.

Two other aspects of the fiscal experience of the 1980s are worth noting. The first is the increase in primary spending; the central government (public sector) primary deficit rose from 5.9% (8.7%) of GDP in 1981 to 9.3% (11.4%) in 1989 before declining to 5.0% (8.7%) in 1990. However, primary spending eased during the 1985/87 stabilization programme. The second aspect is the rapid accumulation of public debt, which rose by two and a half times to reach 81.6% and 110.0% of GDP for the central government and the public sector, respectively. The fiscal consolidation programme of 1991 aims at reversing these trends in a sustained manner.

Fiscal developments in the 1980s, it may be argued, were determined by Greece's particular approach to economic policy. In order to raise real income and employment growth, and also to encourage economic and social modernization, while, at the same time, to attain income distribution objectives, an increasing share of economic and social responsibilities was transferred to the central government budget and to the wider public sector. However, achievement of these objectives became increasingly at odds with the maintenance of sound finances and with economic efficiency. The fiscal expansion together with the deterioration in the country's supply potential led to a significant increase in the inflationary pressures which had dominated Greece's economy after the oil shocks of the previous decade, undermining the country's public finances and macroeconomic stability. The fiscal expansion, on the other hand, has not fostered the economy's growth performance, and a substantial crowding-out impact on investment spending. While predictable ex ante, the unsustainability of such policies became abundantly evident in 1985 and again in 1990 when conditions of an exchange crisis developed and Greece had to request balance of payments assistance from the Community.

2.2 The Stabilization Crises of 1985 and 1990

The stabilization episodes divide the decade into two periods both of which ended with the adoption of adjustment measures to rectify the macroeconomic disequilibrium. The first stabilization measures, adopted in 1985, were abandoned in the fall of 1987; the second stabilization programme was initiated in 1991 and is currently being implemented[3]. The 1985/87 programme and its subsequent reversal reveal clearly how onerous it is to implement adjustment in an economy where adjustment has been postponed for too long.

The fiscal course undertaken in the early 1980s was the principal factor behind the serious macroeconomic imbalances of 1985 when the current account deficit rose to almost 10% of GDP while inflation remained persistently high, and also accelerated, and the drachma real exchange rate, measured on the basis of unit labour costs in manufacturing, had appreciated by 17.4% between 1980 and 1985.

The incipient balance of payments crisis necessitated the adoption of contractionary measures to restrain the rapidly deteriorating macroeconomic circumstances; the measures were undertaken in connection with a Community balance of payments loan amounting to ECU 1 750 million. Principal features of the 1985 programme were the containment of the external deficit, the deflation of domestic demand, and a restrictive incomes policy intended to promote adjustment; also, to offset the real appreciation which had taken place during the early part of the 1980s the drachma was discretely devalued by 15% against the US dollar, while quantitative import restrictions were also put into effect in an effort to contain the external deficit.

As seen in Table 3, during the adjustment period there occurred a sharp decline in real wages, while the external deficit narrowed to below 3% of GDP by 1987. Output

3 A review of the 1991 stabilization programme is presented in Chapter I.

Table 3: Macroeconomic Developments 1984-1990 (percentage change and percent of GDP)

	1984	1985	1986	1987	1988	1989	1990
Balance of payments deficit	6.3	9.8	4.5	2.6	1.8	4.8	5.7
Net borrowing requirements central government	9.2	12.6	9.3	10.5	13.9	17.7	17.4
CPI Inflation	18.4	19.3	23.0	16.4	13.5	13.7	20.4
Real wage change	2.8	4.4	-8.7	-4.1	3.1	2.3	0.1
Growth in domestic credit	20.5	22.1	17.6	13.0	15.5	20.0	16.0
Private sector	17.9	17.4	14.8	9.5	14.5	18.8	16.2
Public sector	21.0	24.0	18.5	14.8	15.5	20.1	16.5
Money supply (M3)	25.8	29.7	21.5	22.3	24.8	23.6	15.1
Drachma depreciation (+) against US dollar	24.7	20.3	1.3	-3.3	4.6	13.5	-2.4
Real exchange depreciation (+), unit labour costs in the total economy (*)	2.3	1.8	15.3	3.5	-5.0	-4.1	-6.8
Real GDP growth	2.7	3.1	1.6	-0.7	4.1	3.5	-0.1
Nominal GDP growth	23.6	21.3	19.4	13.5	20.3	16.6	19.1

(*)Measured relative to unit labour costs in twenty industrial countries, in a common currency.
Sources: IMF: "International Financial Statistics"; EC Commission; Bank of Greece; Ministry of National Economy

growth was below 2% in 1986 and negative in 1987. Inflation also declined but, it is evident, very little durable progress was made. The adjustment in the fiscal deficit was inadequate in comparison with the fiscal and macroeconomic disequilibrium. In addition, the fall in oil prices was not passed on to the consumers, thus imposing an implicit tax on imported fuels, and providing some of the much needed revenues.

The programme was abandoned in the autumn of 1987 and another fiscal expansion commenced. In the months leading to the second crisis political difficulties and short term expediencies dominated amidst sobering economic developments. It soon became apparent that the capital account would register a surplus significantly less than that required to finance the current account deficit at a stable exchange rate; in addition, depreciation expectations became particularly pronounced thus enlarging the external financing gap. Nominal growth accelerated reflecting the growth in liquidity, while output growth weakened. The recovery in real wage growth eroded the country's international competitiveness and by 1990 the real exchange rate, measured on the basis of unit labour costs in the total economy relative to twenty industrial countries, had risen about 17% above the low reached in 1987; furthermore, the real exchange rate measured on the basis of unit labour costs in manufacturing, also relative to twenty industrial countries, had risen by 30.8% during this period. The real appreciation is less pronounced, however, when measured on the basis of price indices, amounting to around 12% between 1986 and 1990.[4]

In these circumstances it became apparent that the external financing requirements could not be met without serious disruptions in the country's financial relations, and a balance of payments loan, conditional upon an adjustment programme, was negotiated with the Community. Unlike the earlier programme, however, the current one places major emphasis on both budgetary adjustment and structural reform in recognition of the fact that, unless the economy's productive potential is restored, the stabilization efforts will not be sustainable. The programme is defined in terms of fiscal and monetary targets to be achieved within a specified timetable. In addition, the programme measures have been set in such a manner that much of the adjustment is front-loaded to ensure that the minimum adjustment required to halt the fiscal deterioration is securely achieved. Major reforms of Greece's social security system , of the wider public sector, and of the financial, labour, and goods markets are central elements of the structural component of the programme. The policy mix involves a restrictive fiscal policy supported by a non-accommodative monetary and exchange rate policy; unlike the 1985 programme, the current one does not involve a currency depreciation. Finally, while the public sector is subject to an incomes policy, wage determination in the private sector has been left to reflect labour market conditions. A further discussion of the programme is undertaken in Chapter I.

4 By 1990 the real appreciation measured on the basis of consumer prices is 11.9% against the group of twenty industrial countries, and on the basis of the private consumption deflator it is 12.8%, relative to the low reached in 1986. Measured against the ERM countries and in terms of unit labour costs, or in terms of the price indices, a similar pattern emerges; however, the real appreciation relative to ERM and in terms of unit labour costs in manufacturing alone is 26,4% between 1987 and 1990.

2.3 The Impact of Fiscal Policy on Inflation, the Balance of Payments and Growth

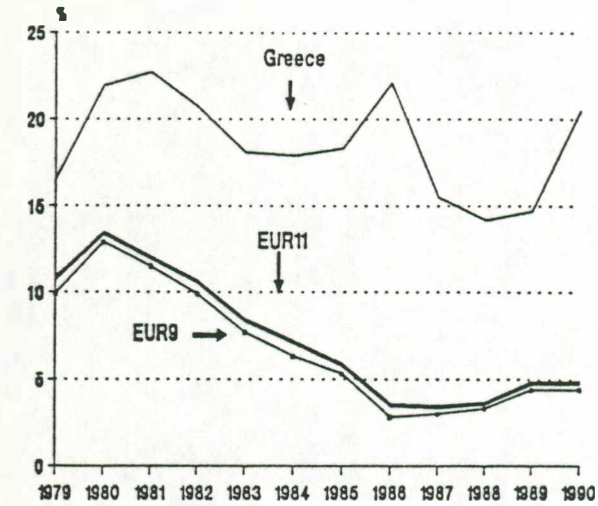
Fiscal policy has been a decisive factor in Greece's poor inflation performance. By contributing to rapid liquidity growth, fiscal policy has sustained the rapid growth of nominal spending, undermined price stability, and made depreciation expectations a recurring characteristic of the country's balance of payments flows.

An important implication of the fiscal expansion of the 1980s has been the rapid growth in domestic liquidity. The share of credit to the government in total credit rose sharply, from an average of 26% in the 1970s to 56% in 1989; similarly the proportion of credit extended to the private sector has followed a downward trend and was 44% in 1989.

Credit extended to the government by the consolidated banking system has also advanced at rapid rates over the past two decades. However, unlike the 1970s when both credit to the private and to the public sector grew at parallel high rates (averaging 19.5% and 24.2%, respectively), in the 1980s the decline in the growth of bank financing of the private sector is partly a reflection of the increased demands for credit to accommodate rising fiscal deficits. Over the period 1980-87 credit to the private sector grew at an average rate of 15.1%, and it had declined to 9.5% in 1987; credit to the government, on the other hand, advanced at an average rate of 26% in 1980-87.

Greece's inflation rose from marginally above the EC average in the 1970s to as much as three times the EC average in the following decade. This marked nominal divergence from Community inflation trends has been a notable feature of Greece's experience in the 1980s. The principal macroeconomic cause of Greece's high and stubborn inflation has been the failure to correct its persistent budgetary disequilibrium[5]. The lax fiscal policy has undermined price stability and the credibility of anti-inflation policies pursued by the Bank of Greece. Econometric estimates suggest that Greece's inflation is determined by two principal factors: exchange depreciation and the excess supply of money originating in the budget deficit[6]. Apart from this direct effect the fiscal imbalance contributes to the inflation process in an indirect manner through exchange depreciation; under quasi-fixed exchange rates a deficit-induced excess supply of money raises the balance of payments deficit, expected depreciation, and realized depreciation. It is also possible that inflation has undermined private domestic savings thus widening the current account deficit required to finance a given level of domestic spending. In Greece's case, the coexistence of rapid monetary growth, persistent inflation, trend depreciation, and external imbalances are closely correlated with the fiscal disequilibrium.

Graph 3: Inflation in Greece and in Community countries



Source: Commission services
EUR9 - ERM excl. Spain and Portugal
EUR11 - EUR12 excl. Greece

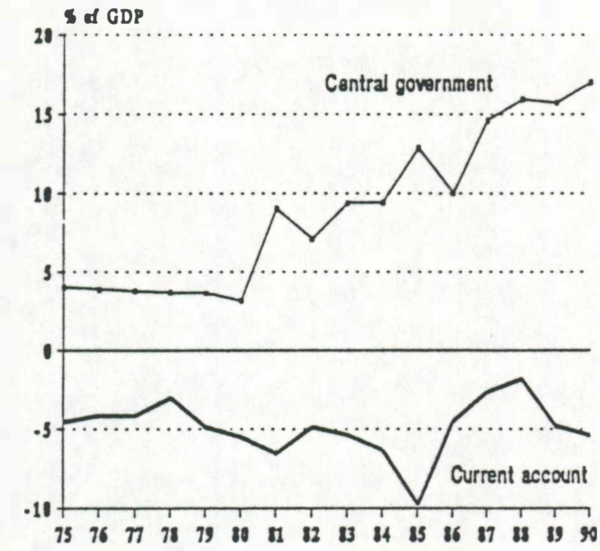
Greece has experienced serious balance of payments difficulties in the 1980s, and these have originated to some large extent in the expansionary fiscal policies pursued[7]. Three principal macroeconomic factors have been behind Greece's external difficulties: first, the high domestic monetary growth, associated with the lax fiscal policy, has been partially converted into foreign money, goods, and services; secondly, the resulting inflation has lowered the demand for

5 Prior to 1973 Greece's CPI inflation averaged below 3%. Failure to adjust in response to the oil shock, and subsequent accomodative policies were compounded by the 1979 oil shock and by the fiscal expansion of the 1980s. During these years many Community countries implemented substantial adjustment programmes. In addition to the monetary nature of inflation suggested here other factors impinging on Greece's inflation have been the oil price increases, increases in agricultural product prices as well as indirect tax increases.

6 The excess supply of money can be approximated by the deviation of the demand for money (M1) evaluated on the basis of its economic determinants (the rate of interest, real income, and inflation) from the supply of money arising from the budget deficit; the latter is defined by the government budget restraint.

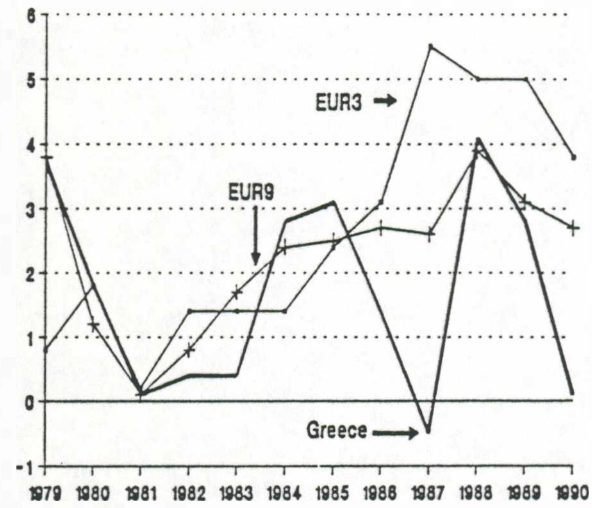
7 It is now recognized that Greece's external disequilibrium of the past decade is a reflection of the fiscal imbalances. Alogoskoufis and Christodoulakis, for example, argue that "the rise in Greece's external indebtedness in the 1980s can be directly attributed to the rapid growth of government expenditure and the persistently high budget deficits. The rise in world real interest rates and the slowdown in economic growth have, of course, accentuated the rise in domestic and external debt". See G. Alogoskoufis and N. Christodoulakis (1991) : "Fiscal Deficits, Seigniorage, and External Debt : the Case of Greece", in G. Alogoskoufis, L. Papademos, and R. Portes (ed.) : "External Constraints on Macroeconomic Policy : the European Experience". Cambridge University Press, Cambridge.

Graph 4: The fiscal and external deficit



Source: Commission services

Graph 5: Comparative real growth performance



Source: Commission services
EUR3 = Ireland, Spain and Portugal
EUR9 = ERM excl. Spain and Portugal

domestic money, thus contributing further to the incentive to exchange it for foreign money, goods, and services; thirdly, depreciation expectations induced by the fiscal disequilibrium have undermined net capital inflows putting severe pressure on the holdings of international reserves.

Greece's current account has invariably registered deficits throughout the past decade. The mean value of the current account deficit/GDP ratio is 3.9% in the 1980s. In 1985 this ratio reached 9.8% and was a central ingredient of the stabilization crisis; in 1990 it was 5.7%. While there is a significant cyclical component in current account movements, the medium-term behaviour of the external balance is a reflection of the persistent net disaving of the public sector. This, in turn, is highly correlated with the structure of public expenditure and taxation. It is clear that in the absence of fiscal reform and structural renewal Greece will continue to experience external adjustment difficulties over the medium term.

Greece's growth performance in the 1980s has been very poor, averaging 1.5% in the period 1981-1990 compared to 4.7% in the previous decade. While it is difficult to establish directly the impact of the fiscal expansion on Greece's real growth performance, the coexistence of large fiscal deficits with high inflation and low real growth constitutes the least propitious of economic circumstances. An expansionary fiscal policy and increased state interference may have inhibited economic growth by crowding out private investment, or by undermining the financial stability of the environment in which private enterprise can flourish; or by interfering with the incentive structure through greater government intervention; or, finally, by undermining rational resource allocation.

3. The Supply Side

The decline in actual and potential output growth in the 1980s took place against a background of increased state intervention. This state activism contributed to affecting adversely the investment climate, labour market and competitiveness developments, price flexibility, and the performance of financial markets. This section illustrates the importance of the structural reform programme for the recovery of the supply potential.

3.1 Factors Affecting Investment Performance

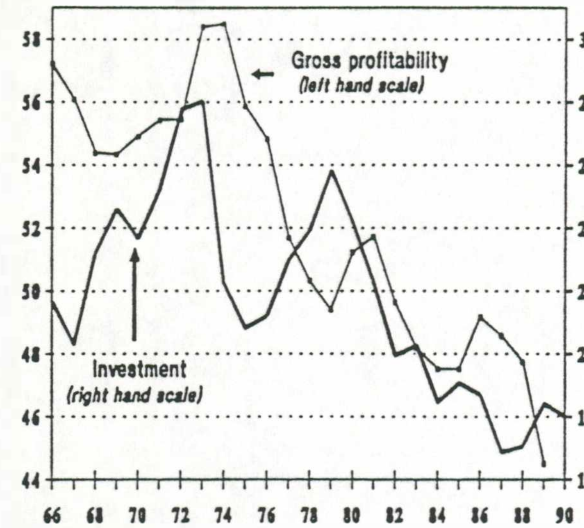
The decline in the share of private investment in GDP has been a crucial factor in the deterioration of Greece's output performance. The causes underlying the poor investment performance are closely linked to policy decisions and especially those taken in the 1980s. Investment spending is highly correlated with profitability; a principal determinant of profitability is the wage bill. During the 1980s systematic policies were pursued, aimed at improving the real wage of workers; these adversely affected corporate profitability, and investment spending declined sharply. The ratio of gross fixed investment to GDP was around 26% in 1979, but fell to 16.9% in 1987 and recovered to 18.4% in 1990. This has been a factor of utmost importance in the deterioration of Greece's output and macroeconomic performance.

The decline in corporate profitability dates from the first oil shock (1973), but, in addition, labour market rigidities introduced in the 1980s have played a central role. Government regulations regarding layoffs, wage rates, and working time, have caused serious inflexibilities in firm behaviour and have been the principal factor in the sharp acceleration of labour costs. The consequent real exchange appreciation was not offset in its entirety through nominal depreciation and, as a result, the rate of return in the traded goods sector fell substantially inhibiting investment activity.

In addition, the expansionary fiscal policy of the 1980s has affected negatively private investment through a variety of channels. First, the financial needs of the state have crowded out private investment financing; secondly, the unsustainable course of fiscal spending implied sharply higher future corporate tax liabilities, or the possibility of an inflationary outburst, or both; and thirdly, current consumption, or investment in less productive, less visible activities, became preferable to investment in productive capital as the net rate of return to this investment became less certain.

An important factor in investment decisions is expectations about the future course of economic policy and, in particular, expectations about the reversibility of announced policies. Economic theory suggests that a government which is not bound by constraints imposed outside its domain, such as constitutional restrictions or international commitments, has

Graph 6: Profitability (*) and Investment (% of GDP)



* gross operating surplus
Source: Commission services

incentives to reverse its announced policies, once decisions are made on the basis of the initial announcements, at a later date[8]. Once the private sector realizes this, the policy has no credibility and, in spite of announcements, the intended impact on the economy is not realized. Greece's economic policy has suffered from this distortion, and this has been reflected in private investment spending. Indeed, the reversal of the stabilization programme undermined the commitment to adjustment; the fiscal imbalances undermined the credibility of fiscal rectitude; the ad hoc administration of tax matters and the extensive use of regulatory measures adversely affected the incentive to invest. One example of policy inconsistency has been the extraordinary levy imposed in 1990 which retroactively taxed incomes earned in 1989.

For a country at a relatively low level of economic development and with correspondingly scarce national savings, capital inflows from abroad are an essential factor in financing domestic investment. Furthermore, foreign capital in the form of direct investment is important for economic development because it incorporates technical progress and management know-how with significant positive externalities. Finally, the evolution of foreign direct investment is a good indicator of the attractiveness of a country to international investors, reflecting the general economic conditions prevailing in that particular country relative to alternative locations.

The data on foreign direct investment indicate that the attractiveness of Greece has declined in the 1980s, confirming the trends suggested by the behaviour of domestic private investment.

8 This is the problem of time inconsistency which underscores economic policies made without credible commitments that the policies will not change in the future. See F. Kydland and E. Prescott (1977): "Rules Rather Than Discretion: The Inconsistency of Optional Plans", Journal of Political Economy, vol. 85, no. 3.

Table 4: Net Foreign Direct Investment in Greece

Period average	in USD million	in DRS billion at 1985 prices	% of GDP	% of total gross direct investment inflow into the Community
1961-65	47	20	0.94	na
1966-70	38	13	0.48	na
1971-75	50	12	0.33	0.6 *
1976-80	481	61	1.49	3.6
1981-85	465	58	1.31	3.9
1986-90	764	69	1.46	1.8 **

* 1972-75; ** 1986-89
Source : Commission services

After the dramatic rise observed in the second half of the 1970s foreign capital inflows for direct investment declined somewhat in the early 1980s before rising again in the second half of the decade. It seems that the improvement in the investment conditions following the stabilisation programme of 1985/87 stimulated not only domestic investment but also capital spending from abroad.

This improvement, however, took place in a period of a substantial increase in the overall volume of foreign direct investment throughout the Community. The mean value of foreign direct inflows into the Community as a whole more than tripled in the period 1986-89 compared with the two preceding 5-year-periods. Thus, despite the rise observed in absolute figures for Greece in the later part of the 1980s, Greece's share in total Community inflows declined sharply, as can be seen in Table 4. By contrast, the share of Portugal increased markedly while that of Spain fluctuated around 15% of the total in the 1980s.

Greece grants various investment incentives. Law 1262/82 provided for grants, subsidies, interest rate subsidies, tax favours, accelerated depreciation allowances, and other measures to encourage private investment. The disappointing investment performance of the past decade suggests that the tax expenditures provided have only contributed to increasing the budgetary costs. This law was replaced by Development Law 1892/90, which, among other provisions, gives greater weight to tax incentives, removes inequalities, encourages high-technology investments, and streamlines the various procedures.

3.2 Labour Market Policies and Competitiveness

Until the beginning of the 1990s the allocation of human resources in Greece has been regulated to an important extent through state intervention, resulting in an inflexible labour market, low productivity, and high costs. For most of the 1980s, real wages have risen rapidly, while productivity has fallen. The government pursued policies aimed at raising the real wage bill of the workers, but economic stagnation militated against this objective. By fostering a climate of dependence and of unreasonable expectations for wages and employment, the policies have affected adversely the supply side of the Greek economy. In addition, Greece's international competitiveness, which is a critical factor in the prosperity of a small open economy, was severely reduced. The reform programme initiated in the context of the 1991 balance of payments loan aims at removing these distortions and enhancing labour market flexibility.

The chief features of labour market policies have been inflexibilities in employment adjustments and layoffs, rigidities in wage determination, and rigidities in the allocation of working time [9].

Layoffs have been governed by rules which require that the intended plant closure be approved by the Minister of Labour. Thus, it has been possible that even bankrupt firms may be required to continue operating. In several instances the government was forced to take over unprofitable firms, and to continue paying the wages of workers. Many of these firms are now in the hands of the Industrial Reconstruction Organization (IRO), a body responsible for the management of problematic enterprises. Even here, however, it has not been entirely possible to discontinue employment despite the financial distress of the firms.

Greece's system of arbitration of wage disputes reduced wage flexibility. An arbitration board, where the government representative dominates, was given the authority to set wages in an industrial dispute. In the event, the frequency of disputes taken to the board increased and the wages and salaries awarded were inconsistent with maintaining profitability. Consequently, many firms found themselves in serious financial distress.

Wage indexation was introduced in 1982, modified in 1985, and abolished at the beginning of 1991. Since the scheme

9 According to survey evidence, Greece is considered by the business community to have the most rigid labour market structure. See "Employment Problems : Views of Businessmen and the Workforce", European Economy, no. 27, March 1986. Chapter III provides a review of labour market issues.

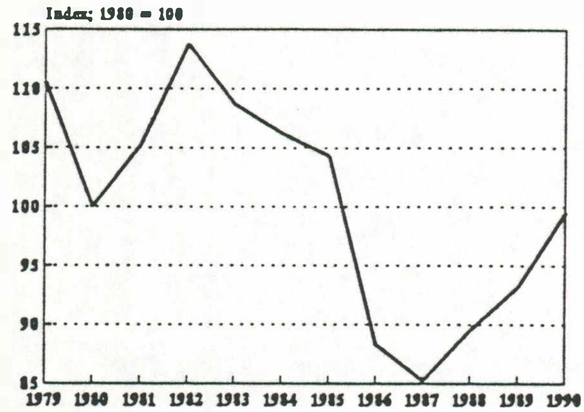
provided for full indexation of wages of low-income groups, and partial compensation for others, wage differentials narrowed sharply; also contributing to this were increases in the minimum wage. These policies induced to a decline in wage and salary inequality; however, they also adversely affected resource allocation in the labour market. It is also questionable if the social objective of the policy was achieved. Indexation clearly narrowed wage and salary inequality, but could not reduce overall income or wealth inequality. Finally, it may also have contributed to the growth of the informal economy.

The length of the working week is strictly regulated, while part-time, overtime, and shift work are subject to a variety of binding restrictions. While some of these regulations are not perhaps observed in practice, they remain barriers to efficient labour allocation. For example, it is very difficult to find part-time work. The government has introduced legislation to remove these obstacles, as can be seen in section 4.4.

Finally, labour legislation adopted in the early 1980s on the regulation of strike activity, appeared to aim at minimizing the authority of unions in calling illegal work stoppages. The legislation was opposed by unions and was ultimately removed in 1988[10]. Consequently, the post-1988 regime governing strikes is more liberal than the one it replaced.

An important consequence of the labour market programme has been the decline in the country's international competitiveness. Greece's real exchange rate for the total economy, measured by unit labour cost relative to the EC 12, rose by 30.2% in the period 1980:Q1-1985:Q1; the real exchange rate for the manufacturing sector rose by 42.1% in the same period. This severe loss in competitiveness was partially offset through the 1985-87 stabilization programme. The programme was abandoned in the fall of 1987 and another nominal expansion commenced. Between 1987:Q4 and 1990:Q4 Greece's total economy real exchange rate rose by 16.3%, while that for manufacturing rose by almost 30% but there has been some modest containment of these trends in 1991. These developments are indicative of the very adverse impact of the labour market policies on Greece's ability to perform in international markets, and, more importantly, in the context of the European Community. Recent labour market reforms, and especially the abolition of the wage indexation mechanism, will undoubtedly contain the real exchange appreciation.

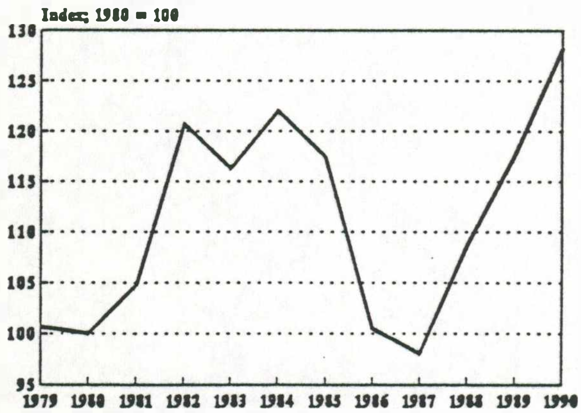
Graph 7: Greece's international competitiveness, total economy (*)



* Total economy unit labour costs relative to 20 industrial countries in common currency

Source: Commission services

Graph 8: Greece's international competitiveness in manufacturing (*)



* Manufacturing unit labour costs relative to 20 industrial countries in common currency

Source: Commission services

3.3 Price Regulation and State Aids

A system of intensive price and profit controls was set in place in 1946 and governed Greece's price formation for over three decades; the system was codified in 1977. An extension of the regulations was implemented in 1979, covering a broader group of goods and services. Changes in the system were necessitated by Greece's persistent and high inflation. Prices were frozen for some time between the end of 1979 and the beginning of 1980, followed by a period of relaxation. However, new restrictions were initiated in 1982. In anticipation of the introduction of the VAT (on January 1, 1987), prices were frozen for the period November 1986-January 1987. In the subsequent years price regulation has been relaxed. At present, the weight of administered prices in the CPI is 23 or 24% ; efforts are also being made to gradually remove all price controls.

10 The relevant legislation is Law 1264/82 and 1365/83; Act 1766/88 effectively repealed them. Additional legislation concerning arbitration was adopted in 1990.

The fundamental motive for price controls has been to achieve social objectives, such as preserving the real income of wage earners, or providing wider access to various markets through influencing price formation. It appears that the policy has ultimately failed: inflation has been a constant threat to real wage gains, and the intensification of social strife is clearly related to price uncertainty; by creating a constituency, price controls become politically difficult to remove; finally, they have an effect on income redistribution which is not explicit, difficult to monitor, and the incidence of the implied subsidization is virtually impossible to assess[11]. Clearly, such social objectives could be better served through more orthodox intervention means (improving the competitive environment, for example) and through explicit provisions in the tax system.

Greece has traditionally provided a variety of subsidies to industry. The fact that these are explicit and more transparent than indirect subsidization through price controls does not make them less harmful. Indeed, such subsidies invariably distort market signals and have deleterious long-run effects on the allocation of resources. Apart from such considerations as competition policy and allocative efficiency, subsidization through the budget could have adverse budgetary and macroeconomic consequences.

Data on current transfers of general government to enterprises (Table 5) show that Greece occupies an intermediate position among the Community countries, with a mean value of current transfers to enterprises relative to GDP slightly higher than the Community average in the period 1976-85. The extent of subsidization increased steadily up to mid-1980s and then it started declining, probably because of the acute budgetary problems.

The results of the recent surveys carried out by the Commission on state aids (Table 6) show a much worse picture for Greece's relative position in the Community. Although the data may not be entirely trustworthy, it is still notable that Greece has the highest level of subsidization in manufacturing (measured either as its share in gross value added or as ECU per employee). According to the survey, Greece's distance from the second ranking country (Portugal according to the first measure, and Italy according to the second), let alone from the Community average indicates the extent of subsidization granted.

Table 5: Current transfers of general government to enterprises (in % of GDP)

Period average	Greece	Eur-10*	Eur-12
1971-75	1.88	1.92	na
1976-80	2.68	2.28	na
1981-85	2.76	2.46	2.54
1986-90	2.12	2.16	2.16

* Community excluding Greece and Portugal
Source : Commission services

The 1991 budget took steps to reduce subsidies to enterprises both in recognition of their budgetary burden and in response to the need to reduce state interference and to enlarge the room for market-determined production activities.

3.4 Financial Policies and Capital Allocation

Greece's monetary policy has traditionally served the financial needs of the public sector. In the absence of well-developed financial markets and under extensive credit and interest rate regulations, monetary policy has contributed little to economic stabilization. In the 1980s, the increased credit demands on the part of the public sector effectively crowded out the financing of private capital formation. The Bank of Greece has initiated steps aimed at modernization and deregulation of the financial system in recent years; however, adverse fiscal developments had until recently retarded this progress since the short-term implications of interest rate decontrol for the public finances were regarded as

Table 6: State Aids in Manufacturing (period average)

	Greece		EUR-12	
	1981-86	1986-88	1981-86	1986-88
I. Aids to manufacturing as % of gross value added	12.9	15.5	4.8	4.0
II. Figures in I excl. steeland shipbuilding	13.9	16.4	4.0	3.8
III. Aids to manufacturing in ECU per employee	na	3545	1761	1515
IV. Figures in III excl. steeland shipbuilding	na	3721	1474	1439

Source : "Second Survey on State Aids in the European Community in Manufacturing and Certain Other Sectors", Brussels, 1990

11 The difficulties encountered in the easing and ultimate removal of price controls have become particularly evident in the housing market. Here the income redistribution effected through rent controls has resulted in important professional constituencies which are contesting the proposed reforms. These reforms are discussed in the next section.

potentially very serious. There have been some important steps to liberalize the financial system in recent months and progress is advancing at a satisfactory pace. These initiatives will bring Greece's financial system into line with the unified European financial area of 1993[12].

The financing of fiscal policy through the banking system has been determined through administratively set rules regarding secondary reserve requirements. Commercial banks are required to hold an explicit proportion of deposits in the form of Treasury bills. This amounted to 39%, but the deterioration in public finances made it necessary to raise it by 1 percentage point, to 40%, in March 1990. Given the Greek government's commitment to further financial liberalization and, also, in light of the loan conditions, this proportion was reduced to 35% in February 1991 and to 30% on July 1, 1991, and it will be phased out entirely by July 1, 1993.

The bulk of the outstanding Treasury bills is non-marketable, and a market-related, but preferential, rate of interest is paid by the government since the summer of 1987. Prior to that date, the Treasury bill rate was very low, and often lower than the rate paid on deposits. The maturity of the bills is determined by the Minister of Finance in such a way that the secondary reserve requirements are met. Since these instruments are rolled over at maturity, they effectively constitute long-term liabilities of the government; and, since the rate of interest paid is administratively set, the government is able to finance its spending and deficit at preferential rates. In addition, commercial banks are required to extend privileges to other borrowers (presently this amounts only to the financing of the handicraft sector by 10% of their resources and to the contribution to export subsidies), while specialized credit institutions have obligations to contribute to the financing of public enterprises and entities.

Deposit rates have been negative in real terms over much of the previous two decades, but lending rates have been positive in the 1980s;the spread between these interest rates has been very wide, even after accounting for intermediation margins[13]. This is a reflection of the structure of Greece's financial system, but also of the fact that Greece's financial system imposes implicit taxes, which are levied on both borrowers and savers, and which have risen sharply in the 1980s. A possible consequence of these has been the decline in the ratio to GDP of credit extended to the private sector by the consolidated banking system; the mean value of this ratio was 43.2% in the period 1976-80, but declined to 31.7% in 1986-89[14]. This decline in the base upon which these implicit taxes are levied has parallelled the likely rise in the implicit tax rate during this period.

There can be no a priori presumption that Greece's financial policies have encouraged domestic investment. Indeed, despite the interest rate subsidies granted and the low and often negative real interest rates[15], private investment performance, particularly in the second half of the 1980s, has been very poor. This paradoxical result appears to suggest that the interest subsidies have not been sufficient in stimulating private investment, or that even lower real interest rates would be required to achieve an increase in investment expenditure. It is also possible that other factors have dwarfed the potentially stimulative effects of financial policies in investment decisions. Indeed, it has been argued that Greece's financial policies have not been important in investment demand, and that private firms, instead of allocating credit extended to them towards financing investment, they substitute it for retained earnings[16]. Greece's financial policies, it appears, have simply distorted the allocation of capital without enhancing investment spending and economic growth.

Recent measures involve deregulation of deposit interest rates with the exception of savings deposits where a minimum rate has been retained; since saving deposits account for two thirds of total bank deposits this restriction continues to be important. Interest rates on bank lending to the private sector and to public enterprises are largely market determined[17] and the regime of preferential credit extension to the latter has been abolished. Draft legislation is also in preparation aimed at modernizing banking and capital markets. In particular, it covers the second banking directive, the directive of solvency ratios for credit institutions, and the directive on own funds. The planned regulatory measures concerning the capital market will involve adoption of five Council directives; this legislation is expected to become law before the end of 1991[18].

12 Chapter II reviews aspects of Greece's financial system in more detail.

13 The mean differential between the lending and deposit rates in the 1980s is around 500 basis points; in the spring of 1990 it reached 700 basis points, and in May 1991 it was 900 basis points.

14 The domestic credit data is from IMF: "International Financial Statistics", line 32d at Greece's country code (174).

15 The lending rate, the principal interest rate for short-term loans relevant for industrial borrowing, deflated by the CPI rate of inflation, had a mean value of -18 basis points in the period 1970-1980; it rose to 130 basis points in the period 1981-1986, and had a mean value of 370 basis points in the period 1981-1990. This interest rate was liberalized in the summer of 1987 and has since risen very sharply.

16 This observation is from J. Dutta and H. Polemarchakis (1988) : "Credit Constraints and Investment Finance : Some Evidence from Greece", ch. 5 in M. Monti (ed.) : "Fiscal Policy, Economic Adjustment, and Financial Markets", IMF and Centro di Economia Monetaria e Finanzaria, Milan. The authors argue that a $1 increase in credit availability will yield only $0.04 of new investment and $0.96 of dividend payments. In interpreting this behaviour they suggest that corporate savings finance the gap between the credit which is available and investment plans; should credit availability increase, firms reduce corporate savings and do not increase investment spending.

17 According to the Bank of Greece interest rates on 90% of total bank lending are now market determined.

18 See Chapter II for a further discussion of these matters.

4. The Programme of Structural Reform

4.1 Greece and the Challenges of the 1990s

At the outset of the 1990s the Greek economy is in urgent need of adjustment and reform. These requirements, though fully motivated by the unsustainability of the present economic trends, have become even more pressing as new developments in the Community are undertaken. At this time, Greece faces three major challenges :

(a) the completion of the European Single Market by 1992

(b) the progress towards Economic and Monetary Union

(c) the possible enlargement of the Community to encompass several EFTA and Central and Eastern Europe countries.

The completion of the internal market by 1992 is the first challenge. A recent study[19] on the sectoral impact of 1992 in the individual Member States revealed that among the least developed countries of the Community Greece is the least prepared for facing the challenge of 1992. Greece's external trade in the 1980s indicates that of the 45 sectors identified as the most sensitive to the lifting of non-tariff barriers only 8 have registered a strong trade performance, while 37 sectors were found to be vulnerable (these sectors represent less than 20% of total value added and over 40% of employment). For the second half of the 1980s Greece's very weak investment performance contrasts with that of the other peripheral countries. At the same time, investment in modernising and expanding existing capacity and/or investment in new activities is a prerequisite for restructuring the production potential and adjusting to the geographical distribution of output emerging in the integrated European market.

The completion of the internal market is a significant step in the ambitious process of economic and monetary union (EMU) now under discussion in the Community. A prerequisite for EMU is economic convergence; nominal convergence is necessary for Member States to exploit the gains from exchange and price stability, and real convergence is essential in order to improve the economic opportunities of the member states.

Greece's preparedness to participate in closer Community integration deteriorated over the 1980s. A synthetic indicator of convergence taking into account five major macroeconomic variables measuring the health of an economy[20] shows that Greece's position deteriorated significantly between 1983 and 1989 and is projected to worsen further in 1991. The Greek economy is inadequately prepared to profit from the process of EMU.

The prospects of closer co-operation with, and possible enlargement of, the Community to encompass new members will increase competition and will create new opportunities for investment in human and physical capital. Greece's needs for foreign capital means that it will have to compete to attract international investment, but also to contain any potentially damaging brain drain. In addition, product competition from producers serving a larger free-trading area could marginalize weak and uncompetitive members. Unless urgent steps towards modernization are undertaken, Greece's prospects in this respect could remain dim.

The medium-term economic programme of the Greek government, which formed the basis for the recent Community balance of payments loan, is to be seen and appreciated against the background of these multiple challenges. The 1991 stabilization programme has two broad objectives: containment and reversal of the fiscal imbalance and of the macroeconomic deterioration, and the restoration of the economy's ability to produce through the initiation of structural reform measures, and, consequently, the betterment of the real income prospects of Greece's citizens[21]. The programme is defined in terms of a specific timetable. In order to achieve the final objectives, intermediate targets for key macroeconomic and structural variables are set. Thus, the programme is specific and represents an exogenous constraint on the conduct of economic policy. Another feature of the programme is the conditional disbursement of the loan tranches in order to secure that not only the programme objectives are achieved, but also to monitor the progress of the programme implementation.

In acknowledging the importance of restoring the productive potential of Greece's economy, the programme places much emphasis on structural reform initiatives. These initiatives are intended not only to improve the medium-term productive ability of Greece, but also to generalize the acceptability of the stabilization programme by offering the prospect of improved economic opportunities and real incomes once the programme is complete. The experience of the 1985/87 stabilization made it clear that without steps to enhance Greece's productive prospects a stabilization programme would enjoy limited support and it would not be sustainable; furthermore, no lasting improvement in the underlying economic difficulties could be achieved without modernization of

19 "The Impact of the Internal Market by Individual Sector : The Challenge for the Member States", European Economy - Social Europe. Special Edition, 1990.

20 These indicators are inflation, budget deficit, public debt, unemployment and external current account. See P. De Grauwe, and D. Gros (1991): "Economic Convergence in the Community on the Eve of Economic and Monetary Union", CEPS preliminary paper, June.

21 The fiscal consolidation measures are discussed in Chapter I.

the productive structure and of the organization of economic activity.

The loan conditions stipulate that "the Greek government undertakes to provide, in consultation with the Commission, ... a timetable of legislative action over the adjustment period, to include the main elements in the proposed reforms:

(a) deregulation of goods, labour, and service markets;

(b) tax and social security reform;

(c) a reduction in the share of the wider public sector;

(d) capital liberalization in accordance with Community legislation"[22].

In order to satisfy these requirements a variety of measures have already been undertaken or are planned to be introduced in coming months.

4.2 Containment of the Public Sector

The influence of the public sector on Greece's economy has been pervasive and is of substantially greater importance than suggested by such simple measures as government consumption in GDP. A network of interdependencies linking the state, state enterprises and entities, and financial institutions is the background against which private economic activity takes place. In this "state corporatist"[23] environment the distinction between the public and the private sector is blurred, since state intervention is a crucial factor in, and ultimately underwrites, private economic decisions. Greece's experience of rising public sector deficits, which are shifted between the central government and the wider public sector, supports the view that the budget constraints are "soft", with the public sector performing the role of the lender of last resort rescuing non-viable economic entities. This role increased in importance in the course of the 1980s entailing a variety of state interventions in the economy with the result that the country's output potential has notably declined.

An important characteristic of public sector behaviour in the 1980s has been its role as an employer. Table 7 shows the growth of civil service employment since the late 1970s. In addition, public enterprises and entities have also become prominent employers during this period. These trends are suggestive of the increased dependence for employment on the public sector particularly in a period when non-agricultural employment was growing sluggishly.

Table 7: Trends in Public Employment (thousands and percentage)

	Civil service		Public enteprises & entitities	Civil service, %growth	Public empl. [(1)+(2)] as % of non-agricultural employment	% growth non-agricultural, non-public employment
1977	215.0	(14.6)	128.8	na	14.5	na
1978	220.9	(14.8)	139.1	2.7	14.8	1.6
1979	227.8	(13.4)	140.2	3.1	14.9	2.0
1980	234.6	(13.9)	145.5	3.0	15.1	1.8
1981	240.5	(14.6)	153.0	2.5	15.0	4.3
1982	253.1	(15.5)	153.1	5.2	15.2	1.4
1983	263.7	(16.4)	156.7	4.2	15.8	-1.1
1984	268.1	(14.9)	162.1	1.7	16.0	0.8
1985	281.8	(10.5)	171.3	5.1	16.6	1.0
1986	285.3	(6.7)	171.9	1.2	16.6	0.8
1987	289.5	(6.4)	172.5	1.5	16.4	2.0
1988	289.7	(7.0)	173.2	0.0	17.2	-5.4
1989	311.2	(11.7)	176.2	7.4	17.8	1.4
1990	303.7	(10.4)	168.4	-2.4	na	na

Note: Civil service includes both permanent and temporary employees; the share of the temporary employees in the civil service total is shown in parentheses; na=not available

Source : Budget Statement, November 1985; Budget Statement, November 1990; IMF: "Recent Economic Developments", May 1990; Eurostat: "Employment and Unemployment", various issues; and Commission statistics

22 See Official Journal of the European Communities, no. L 66/22, March 13, 1991.

23 This term is used by L. Katseli (1990): "Economic Integration in the Enlarged European Community: Structural Adjustment of the Greek Economy", in C. Bliss and J. Braga de Macedo (ed.): "Unity with Diversity in the European Community: The Community's Southern Frontier", Cambridge University Press, Cambridge.

Measures directed towards the containment of the public sector include an ambitious programme of privatization and steps to reduce public sector employment.

The contemplated programme of denationalization, which was initially designed to privatize ailing enterprises, has been extended to include the sale of shares in public utilities. The programme is intended not only to improve the efficiency of the Greek economy and to reduce the budgetary costs arising from the support of these entities, but also to reduce public sector employment. The loan conditions postulate that the employment of public enterprises, 49% of which are sold to private investors, will be counted as part of the employment reduction clause (point 3 of the loan condition).

The privatization programme has encountered a variety of legal and administrative difficulties and, as a result, the likely budgetary revenues for 1991 from this source (DRS 125 billion from the privatization of utilities and DRS 50 billion from the sale of ailing enteprises) will be substantially less than projected. Privatization has gained some momentum in recent months. However, a critical element characterizing all public sector entities is lack of transparency concerning their accounting practices and procedures, and this could affect adversely the financial picture and the potential sale of such entities. The government has introduced steps to clear up the balance sheets of several of these enterprises and to enhance their transparency. In addition, the ownership of some enterprises now held by the Industrial Reconstruction Organization (IRO) has been challenged in the courts creating legal difficulties and raising questions about the feasibility of privatization in some cases.

The financial position of Greece's enterprise sector deteriorated severely in the course of the 1980s. The government passed Law 1386/83 which was intended to invite firms in financial distress to apply to the IRO for restructuring. Between 1983 and 1987 the IRO received 250 applications, of which only 44 were accepted. The financial circumstances of these firms became subject to restructuring which involved a 36-month moratorium on debt payments and a plan converting debt into equity. As a result of this, Greece's financial institutions accepted in their portfolios assets of questionable value.

Table 8: Enterprises Available for Privatization, by Holder

Agricultural Bank	36
Commercial Bank	9
Industrial Development Bank	18
National Bank	12
IRO	54
Ministry of Defense	1
Ministry of Finance	2
Ministry of Industry	10
Ministry of Tourism	21
Ministry of Transport and Communications	7
Total	170

Source: Ministry of National Economy

Table 8 shows the distribution of the enterprises available for privatization, including the problematic enterprises, by holder. Of the 170 enterprises available for denationalization 75 are held by banks and another 54 by the IRO. The remaining are held by various ministries, chief among which is the Ministry of Tourism (21 enterprises) followed by the Ministry of Industry (10 enterprises). Some characteristics of the enterprises under Law 1386/83 are presented in Table 9. These enterprises employed 26.6 thousand workers in 1989 and 20.7 thousand in 1990. During these two years bank loans amounting to DRS 107.9 billion and DRS 139.4 billion, respectively, had been used to support their operations. The enterprises have recorded significant losses and, as can be seen in Table 9, these had cumulated to DRS 215.3 billion in 1990, up from DRS 14.6 billion in 1982. Clearly, this financial situation is unsustainable.

Table 9: Some Characteristics of Enterprises under Law 1386/83 (DRS in billion)

	1982	1985	1986	1987	1988	1989	1990
Long-term obligations	30.1	150.4	131.2	23.9	28.4	17.4	20.6
Short-term obligations	81.2	102.9	111.1	92.3	117.8	174.3	209.1
Gross profits	8.7	17.9	26.4	19.7	14.6	22.6	26.3
Net income (loss)	(9.9)	(39.0)	(35.1)	(15.0)	(22.0)	(29.8)	(44.9)
(Cumulative losses)	(14.6)	(108.0)	(139.5)	(139.2)	(140.7)	(174.4)	(215.3)

Source: Z. Mavroukas (1991): "Industrial Policy towards the Problematic Enterprises in the 1980s: Results and Prospects", The Herald (To Vima), June 16 (in Greek)

Table 10: Progress in the Privatization Programme

	end-September 1991
Total number of available enterprises	170.0
Contract negotiated	12.0
Bids received or deadline for bids set	18.0
Financial advisors appointed	23.0
In liquidation	25.0
Other	82.0
Companies sold	10.0

Source: Ministry of National Economy

The IRO has not so far been very successful in its denationalization efforts. Of its 54 enterprises 10 were sold by the end of the Summer 1991 and 20 are in liquidation, leaving 24 still to be transferred to the private sector. The key enterprise planned to be sold in 1991 is the Heracles Cement Works, a profitable firm in the sale of which much interest has been expressed by investors[24]. The sale of Heracles will determine non-tax revenue prospects this year since it is expected to yield around DRS 135 billion in net receipts[25]. Progress in the IRO privatization programme was adversely affected by administrative difficulties in the summer of 1991, especially when its chairman resigned. Further uncertainty has been created concerning the future of the IRO itself; the government announced in August 1991 that the IRO would be liquidated in the autumn but, it appears, this may not occur until much later. The key question in relation to the IRO is that, while it was originally intended to restructure non-viable firms it has in fact prolonged their existence without actually restructuring them.

The government is planning to consolidate the financial operations of the public enterprises and the principal variables of the contemplated adjustment are shown in Table 11. A key adjustment is on the side of revenues, while expenditures are expected to rise at a slow pace. The revenue increases will be secured through increases in the prices of public enterprise goods, and the strict incomes policy is seen as containing expenditure growth. Thus, the plan foresees that the large operating deficits recorded by these enterprises will be eliminated and a surplus of DRS 38 billion will be recorded in 1992 increasing further in 1993. It is also projected that the squeeze in the investment budget will only occur in 1991; in subsequent years the programme provides for real investment increases of 3% per annum.

There are plans to sell shares in public utilities as well. The principal enterprises are the Public Power Corporation and the Telecommunications Organization. While the government had hoped that these transactions would take place in

Table 11: Medium-term Consolidation Plan for Public Enterprises, 1990 - 1993 (DRS billions)

	1990	1991	1992	1993
Operating account				
Revenue	1269.0	1625.0	1855.0	2016.0
Expenditure	1422.0	1637.0	1817.0	1971.0
Operating deficit	153.0	12.0	-38.0	-45.0
Capital account				
Revenue	---	---	---	---
Expenditure	483.0	509.0	579.0	643.0
Capital account deficit	483.0	509.0	579.0	643.0
Total deficit	636.0	521.0	541.0	598.0
(% GDP)	(6.0)	(4.2)	(3.7)	(3.6)
Total Financing	460.0	467.0	527.0	594.0
of which:				
Grants from central budget*	161.0	142.0	156.0	181.0
European Community funds	42.0	39.0	45.0	56.0
Net borrowing requirements	176.0	54.0	14.0	4.0
(% GDP)	(1.7)	(0.4)	(0.0)	(0.0)

* Ordinary and investment budget
Source: Ministry of National Economy

24 Heracles accounts for 3% of Community cement production and has over 40% of the domestic market. It is now 70% owned by the IRO with another 15-18% owned by various public sector banks; the rest is listed on the Athens stock exchange. About half of Heracles' annual production is sold abroad, and the company has excellent port facilities. In 1989 Heracles posted net profits of DRS 3,46 billion on sales of DRS 39,14 billion.

25 More recent estimates have been markedly less than the original DRS 135 billion.

late 1991 and in 1992 it now appears unlikely that this will be the case. The preparatory framework for the sale of shares in utilities is not complete. Prior to such sales it is required that the regulatory framework is in place; this has as yet to be prepared. Sales of utilities are likely to take place from 1993 onwards, and the revenue potential from such sales could be substantial.

4.3 Tax and Social Security Reforms

Tax Reform

Greece's tax system embodies a large number of regulations which have multiplied in recent years as a result of efforts undertaken to combat tax evasion and increase revenues. Widespread tax evasion and fraud have reduced the revenue potential of the tax administration system while a considerable number of potential taxpayers are outside the tax base altogether. There can be no presumption that the tax system is neutral in its effects on resource allocation and the OECD has remarked on the relatively higher tax rates in Greece compared to the OECD average and the small share of tax revenues relative to the tax base[26]. The tax base does not include farmers[27] and the generous tax exemptions have made it even narrower. The net impact of the tax regulations on incentives to work, save, and produce, let alone to pay taxes, has been adverse as manifest from the budgetary developments in recent years. These trends in tax revenues over the 1980s, as well as the erosion of tax and fiscal ethics, indicate that Greece's tax system, in addition to improving its effectiveness, is in urgent need of reform.

Progress towards a new tax code has been slow. The government has announced its intentions concerning the rationalization of the tax code, with a view to enhancing its equity and improving its allocative function. Recently two working groups have been established to review the requirements and make proposals for reform. The reforms will cover the personal tax code. However, there is uncertainty about the nature of the proposals that the working groups will make and the establishment of a timetable of implementation of whatever measures will be proposed.

Social Security Reforms

Greece's social security system has experienced chronic difficulties, the principal sources of which have been : demographic and overgenerous eligibility criteria, widespread evasion of contributions, extension of pension rights to individuals of dubious qualifications, early retirement at full pension, low contributions over much of the system's history, above-inflation increases in pension disbursements during much of the 1980s, and the linkage of pension payouts with wage settlements. These have contributed to real increases in pensions over much of the 1980s which, in view of the revenue shortfall, have made the social security system virtually insolvent.

The principal entity of the social security system is the Workers Social Insurance Organization (IKA), while as many as another 300 occupation-specific private funds are also in operation. In the course of the 1980s pension expenditures advanced rapidly so that by 1989 they amounted to around 15% of GDP, or more than twice as much as at the end of the 1970s. The widening deficits have burdened the central government budget increasingly over the years. For example, grants from the central government budget financed 40% of the operating deficits of all public entities in 1986, rising to 66.8% in 1990; the 1991 budget estimated that this would fall somewhat to 58.2% however. The net borrowing requirements of all public entities rose from DRS 82.8 billion in 1986 to DRS 162.5 billion in 1990, and the 1991 budget estimated a further increase to DRS 229.9 billion.

The government initiated reforms in September 1990 as part of a first package of measures aimed at restoring the viability of the system. The measures increased contribution rates (by 1 point to 5.7% for employees, and by 2 points to 11.5% for employers); tightened eligibility criteria for disability pensions; increased the contribution period (from 13.5 years to 15 years in the private sector, and from a wide range of between 15 and 30 years to 25 years in the public sector); instituted a minimum pensionable age in the public sector (to around 60 years of age, to apply to public sector employees according to whether they joined the public service before or after 1983); and linked pension increases in the private sector to the rate of wage increases in the public rather than in the private sector. These measures, in effect, allowed for some significant real declines in pension disbursements which are expected to extend over the adjustment period 1991-93 but, in addition, provided incentives to postpone new retirements.

Since the containment of the deterioration in the financial position of the social security system relied to a large extent on real pension declines, a second package of reforms is being contemplated. The new measures are essential to secure the sustainability of the reforms and the long-term viability of the system. The government has been slow in initiating the new measures. A process of social dialogue has only recently been initiated, and a Scientific Committee involving the social partners is expected to report in the autumn of 1991.

Tables 12 and 13 present the consolidation plans for the public entities as a whole and for IKA in particular. The plans require that the net borrowing requirements of the public entities will not exceed 1.5% of GDP over the adjustment period, and that revenue increases (63% between 1990 and 1993) will strengthen their financial position. Expenditure is projected to increase by 44% between 1990 and 1993, while

26 See OECD (1990) : "OECD Economic Surveys : Greece". Paris.

27 Formally, farmers are subject to income taxation; however, the provisions of the tax code have never been applied to farmers. As a result, the contribution of tax revenues from agriculture amounted to around 0.3% of total tax revenues in 1990. It should be noted that over 25% of Greece's labour force is employed in agriculture.

Table 12: Medium-term Consolidation Plan for Public Entities, 1990-1993 (DRS billions)

	1990	1991	1992	1993
Operating account				
Revenue	735.0	930.0	1076.0	1195.0
Expenditure	1216.0	1474.0	1599.0	1751.0
Operating deficit	481.0	544.0	523.0	556.0
Capital account				
Revenue	---	---	---	---
Expenditure	31.0	51.0	52.0	58.0
Capital account deficit	31.0	51.0	52.0	58.0
Total deficit	512.0	595.0	575.0	614.0
(% GDP)	(4.8)	(4.7)	(3.9)	(4.7)
Total Financing	349.5	365.2	362.0	367.0
of which:				
Grants from ordinary budget	321.0	316.0	312.0	312.0
European Community funds	19.0	43.0	49.0	54.0
Net borrowing requirements	162.5	229.8	213.0	247.0
(% GDP)	(1.5)	(1.8)	(1.5)	(1.5)

Source: Ministry of National Economy

grants from the central government are projected to decline in nominal and real terms. There is a large increase in Community support funds. The consolidated operating deficit of the public entities is expected to stabilize at around 4.7% of GDP.

IKA's planned consolidation involves a 60% increase in revenues (58% rise in contributions) between 1990 and 1993, while overall expenditure is expected to increase by 42%. Pension disbursements are to rise by only 30% over this period, but interest payments are set to rise by almost 90%, reflecting the financial obligations accumulated by IKA over time. The government has also established a monitoring system to determine better the flow of revenues and expenditures of public sector bodies, and IKA is subject to this monitoring procedure. However, it appears that although expenditure control has improved, failure to pay contributions, particularly on the part of other public sector bodies, has made the revenue prospects uncertain.

In April 1991 the government undertook a debt consolidation operation involving state guarantees which had fallen due up

Table 13: IKA's Consolidation Plan, 1990-1993 (DRS billions)

	1990	1991	1992	1993
Operating revenue	529.4	668.0	770.0	847.0
of which:				
Social insurance contributions	470.9	597.0	674.5	742.0
Supplementary contributions	56.1	68.0	77.0	84.0
Other	2.4	3.0	18.5	21.0
Operating expenditure	897.6	1077.6	1164.0	1275.0
of which:				
Pensions	575.0	678.0	695.0	750.0
Interest payments	133.5	177.0	220.0	252.0
Other	189.1	222.6	249.0	273.0
Operating deficit	368.2	409.6	394.0	428.0
(% GDP)	(3.5)	(3.3)	(2.7)	(2.6)
Total Financing	193.1	180.1	180.1	180.1
of which:				
Grants from ordinary budget	193.0	180.0	180.0	180.0
Net borrowing requirements	176.6	232.0	216.4	250.9
(% GDP)	(1.7)	(1.8)	(1.5)	(1.5)

Source: Ministry of National Economy

to the end of 1990; of the DRS 626 billion subject to consolidation, DRS 276 billion involved two social security funds, IKA and the Seamen's fund (NAT). Despite these measures, the financial position of these entities remains precarious with no visible improvement as yet in place[28].

4.4 Deregulation of the Goods and Labour Markets

Measures in these areas involve deregulation of the oil market, easing and reform of the regulatory framework governing the housing market, and deregulation of the labour market.

The Oil Market

The oil market is to be fully liberalized in 1991 in accordance with the reform programme. The proposed reforms involve liberalization of retail prices for fuel, fuel import liberalization, and the establishment of a fuel consumption tax fixed in absolute terms [29]. The deregulation of the oil market is complicated by the presence of two state-owned refineries the competitiveness of which could be adversely affected, and no decision has been made about their future; by the fact that oil consumption in remote areas of Greece is desired to be made available at subsidized prices; and by the Community minimum oil reserve requirements which must be met.

The intention to deregulate the oil market was announced in July 1991, and the enabling legislation was passed by parliament in the fall. However, much remains to be achieved before deregulation is fully attained. In particular, not only the relevant Community legislation must be respected, but also a variety of legal, technical, and administrative hurdles must be overcome before the deregulation steps are made effective.

The Housing Market

Deregulation of the housing market has already commenced; the government has taken some bold measures to ease the extensive controls characterizing Greece's housing market, and progress has been made in this area.

In June 1991 the government initiated legislation as a result of which as much as 40% of Greece's housing market is now free of rent controls. For the remainder, rent increases allowing for greater market influences are provided for. New buildings, buildings newly rented, and buildings which have remained vacant for more than one year, as well as houses or apartments valued at DRS 30 million or more or purchased with foreign exchange, and those with a surface area of over 120 m^2, will be free of rent controls. For the remaining, rent increases of 12% on July 1, 1991, and 8% on July 1, 1992 have been proposed. The intention of the government is to undertake additional reform measures in two years time so as to increase the supply of housing particularly in urban areas where the housing shortage has been chronic. Despite a variety of difficulties with lawyers and doctors, steps to liberalize rents of buildings used for professional activities were presented in the form of a parliamentary bill in August 1991.

Reforms in the Labour Market

Steps to reform labour market relationships in a fundamental manner have so far been limited, although there have been efforts to reduce the role of the public sector in wage formation. In indirect ways, the attractiveness of the public sector as an employer has perhaps been reduced, but Greece's youth continues to regard jobs in the public administration as particularly desirable. At the same time, the supply of such jobs encourages the ideology of dependence. These explain the difficulties involved in establishing a less politicized process of employment and a more efficient, professional, and independent public administration. In view of the leadership role played by the public sector in a variety of labour market processes, reform of public sector employment is very important.

The three-tier wage negotiation process continues to dominate Greece's labour relations. In the first place, the minimum wage is set by a national collective agreement involving the Greek Federation of Industries and the Greek General Federation of Labour. Secondly, employees organized by trade negotiate wage increases on the basis of seniority, qualifications, etc. Here the powerful banking and electricity unions have played a dominant role. Finally, negotiations at the plant or local level provide for productivity increases. This system has produced high wage inflation, substantial increases in labour costs in excess of productivity, and has eroded Greece's competitiveness. Also, resort to strikes by the banking and other unions has had a deleterious effect on economic stability and performance.

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28 As part of the policy to improve the transparency of the accounts of the social funds, and to ease the financial burden, debt write-offs are planned as well. These will amount to DRS 275 billion (DRS 182 billion for IKA and DRS 90 billion for NAT) according to current estimates. How this will affect the financial position of these entities is not clear, particularly since effective control of their spending has yet to be established.

29 The system of taxation of fuels in Greece was based on a variable tax which can be adjusted depending on the policy priorities. Oil prices in Greece are determined by the "base price" which is defined by the government. The tax component of the consumption price is comparable to that of most of the Member States (65% of the price); but for diesel fuels it is somewhat lower. The tax together with the low, administratively set, "base price" have made fuel consumption prices in Greece lower than in the rest of the Community except Luxembourg.

Table 14: Labour Market Trends (percentage change over previous period and percent)

	1986	1987	1988	1989	1990	1991*
Total employment	1.2	-0.1	1.7	0.4	0.2	-0.5
Compensation/head	11.4	10.9	17.9	17.8	20.2	15.3
Real compensation per head	-9.4	-4.1	3.8	3.6	-0.2	-2.5
Unit labour costs	9.9	11.6	14.7	14.1	20.9	13.7
Unemployment rate	7.4	7.4	7.7	7.5	7.2	8.4

*Forecasts
Source: Ministry of National Economy

The principal labour market measure introduced by the government has been the abolition of the wage indexation mechanism (ATA). In addition, the arbitration boards which were dominated by the government representatives are now replaced by professional mediators; their role is to assist in conflict resolution in an impartial manner. The policy of granting wage increases of 4% on January 1, 1991 and 4% on July 1, 1991 in the public sector and the general stabilization climate, contributed to the signing of a collective agreement in the private sector providing for moderate wage increases over the period to the summer of 1992. This is the first stage of negotiation and it has been followed by similar moderate agreements at lower levels[30]. The acceptance of this agreement is in sharp contrast to the tradition of wage settlements in excess of official inflation projections and possibly confirms that the stabilization programme enjoys credibility.

Greece's experience with strikes, and especially with public sector strikes (such as electricity or bank employees) has been dismal. The 1990 initiatives have been aimed at curbing the propensity to strike and, in this respect, the legislation provides that if the court declare a strike illegal workers, including permanent civil servants, can be dismissed. Furthermore, various other measures are devised to enhance union leaders' accountability.

There have been no reforms of the legislation governing layoffs. Greek workers appear to enjoy considerable protection under the law and the Ministry of Labour can reverse decisions to lay off large numbers of workers (equivalent to 2% of the labour force in one month). On the other hand, the system regulating working hours and part-time work is under review. The legal framework has been prepared to permit a fourth shift, while shopping hours have been liberalized.

4.5 Liberalization of Financial Markets and of Capital Movements

Liberalization measures covering the area of banking and financial services have been introduced at a good pace. Steps were first introduced in 1987 in response to recommendations from the Committee on the Reform and Modernization of Greece's Banking System. These recommendations indicated the need for interest rate deregulation, the gradual abolition of secondary reserve requirements, and the removal of credit controls. Despite progress made so far, Greece's financial system, when compared to that of other Community countries, has yet to be developed.

All deposit rates are now market-determined except that a minimum rate on saving deposits has been retained; since saving deposits account for two thirds of overall bank deposits, this remains an important restriction. Furthermore, until July 1, 1991, banks were not allowed to freely dispose of more than 50% of their resources; this restriction resulted from the compulsory investment of deposits in Treasury bills, the financing of the handicraft sector, and the minimum reserve requirements for reasons of monetary policy. The setting of interest rates on Treasury bills is now influenced by market conditions to a greater extent than previously, and this has been a welcome development in the removal of financial regulations. A variety of rules governing credit allocation have also been abolished with the exception of the remaining restrictions on consumer credit. Finally, the Bank of Greece is now allowed to engage in repurchase agreements and Treasury bill auctions, thus extending its monetary policy instruments and enhancing its role in the setting and implementation of monetary policy.

Parallelling these developments, the financing of fiscal policy has gradually and increasingly relied on the non-bank private sector since 1986. Thus, while in the early 1980s less

30 The agreement was approved by the Greek General Federation of Labour in March 1991 and provided for nominal wage increases of 6,9% on January 1, 1991; 5,6% on July 1, 1991; 5,4% on January 1, 1992; and 5,2% on July 1, 1992. It was also agreed that if inflation exceeds the official projection appropriate compensation will be granted.

than 1% of the borrowing requirements were met through non-bank borrowing, in 1987, as shown in Table 15, 20.2% was met through private savings, and in 1990 49% of the cash PSBR was financed through sales of government debt to the non-bank public[31]. This has not only made it easier to remain within the monetary programme objectives of the Bank of Greece by limiting public sector credit overruns, but it has also led to a more market determined allocation of capital. Despite the deleterious implications of high real interest rates on expenditure, these liberalization measures constitute, so far, the boldest steps towards modernization of Greece's economy. However, they also underline the need for fiscal rectitude, in the absence of which financial liberalization will be accompanied by very high real interest rates and rapid debt accumulation.

The adaption of Greece's legislation to Community directives has been undertaken at a vigorous pace. Draft legislation has been prepared covering the second banking directive, the directive on solvency ratio for credit institutions, and the directive on own funds. These are essential steps in the preparation for participation in the unified European financial area from 1993 onwards. There are some institutions which have been slow in adapting to the new financial environment, however. For example, there are difficulties in meeting the 8% capital/asset ratio required by the directives by some state-owned banks, even though most other banks have already achieved this. Similarly, concerning the restrictions imposed by the second banking directive[32], not all the commercial banks have as yet complied. The general assessment of the current developments is that Greece's banks are preparing to integrate themselves in the European financial area and that progress in this respect is encouraging.

Effective May 6, 1991 Greece removed restrictions on capital movements and on tourist allowances which were subject to a derogation under Article 108 of the Treaty. These measures, which were taken as part of the loan conditionality, liberalized fully tourist expenditures, the use of credit cards abroad, capital transactions for the acquisition of property abroad, and capital transactions for purchases of foreign long-term securities. The Commission abrogated the derogation in Greece's favour on June 6, 1991.

As a result of these measures Greece's integration with the European financial area has been enhanced. Furthermore, pressure to modernize the domestic financial and non-financial markets at an accelerated pace will undoubtedly become more pronounced. As regards short-term capital transactions, Greece retains various restrictions; these could be in place up to the end of 1992, according to Community directives. As well, Greece's restrictions vis-a-vis the non-Community world remain so that the liberalization measures undertaken cover only part of the country's international capital transactions. Although it is conceivable that the liberalization of long-term capital transactions could adversely affect Greece's capital account, there is no evidence that this is happening.

Table 15: The Financing of the Cash PSBR, Central Government (in percent of total financing)

	1981	1985	1986	1987	1988	1989	1990
Domestic borrowing	85.8	67.4	71.1	91.1	96.4	86.9	87.9
Bank of Greece	54.3	14.0	9.3	6.6	-1.4	10.0	17.0
Treasury bills and bonds sold to:							
Banks	31.5	52.3	59.7	64.3	66.7	58.0	33.9
Non-bank public	—	1.1	2.1	20.2	31.1	18.9	49.0
External borrowing	14.2	32.6	28.9	8.9	3.6	13.1	12.1
Cash PSBR, % GDP	14.7	17.9	14.1	13.5	16.0	18.2	18.7

Source: Annual Report of the Governor of the Bank of Greece, various issues; and Bank of Greece

31 The increase in the share of bank of Greece financing of the PSBR in 1990 reflects the investment of deposits of Social Insurance Funds, held at the Bank of Greece, in government securities. The amount invested was DRS 327 billion, equivalent to 19% of the domestically financed PSBR. Pure Bank of Greece financing was negative, equivalent to 2.0% of domestically financed PSBR.

32 These require that no more than 60% of a bank's capital can be invested in a non-financial business, and that no more than 15% of a bank's capital can be invested in any one non-financial business. On the second banking directive, see Official Journal of the European Communities, no. L 386/1, December 30, 1989.

5. Conclusions

The 1991 stabilization and structural adjustment programme adopted by the Greek government is a necessary and crucial attempt to reverse the country's macroeconomic decline and restore its productive potential. The gap which has developed between the Community and Greece must be bridged if Greece's prospects to exploit the gains from the process of European integration are to improve. The measures of fiscal adjustment and structural reform are interdependent: in order to achieve the adopted targets and sustain the stabilization efforts both components of the programme must be implemented. Fiscal adjustment without structural improvements is unsustainable; similarly, structural reforms will be entirely ineffective if the fiscal imbalances are not reduced.

During the first year of tighter policies Greece's macroeconomic adjustment has recorded progress. The restrictive monetary and exchange rate policies have contributed to a weakening in economic activity and have accelerated the process of disinflation. The rate of consumer price inflation, on December/December basis, was 17,8% in 1991, down from 22.8% the previous year. The external deficit has also narrowed while capital inflows have been strong. The cumulative external deficit in the period January-November 1991 is US$ 1163 million, and net capital inflows US$ 3159 million. Overall, current macroeconomic prospects appear more optimistic than initially estimated as far as the inflation and external balance targets are concerned.

However, the sustainability of these gains is by no means guaranteed. It has become evident that the pace of fiscal adjustment is inadequate while there are serious delays in the implementation of structural reforms. In the crucial areas of tax and social security reforms, as well as in the intended improvements of the tax collection management, more rapid and more effective progress is necessary. Failure to achieve adequate budgetary adjustment and structural reform worsen the prospects for the Greek economy and put at risk the achievements so far. Since the government will have to finance a larger deficit through an expanded programme of Treasury bill sales, debt service payments will also exceed the ex ante estimates. In turn, the dominant presence of the public sector in the absorption of Greece's savings and the rising indebtedness, in the context of financial market liberalization, will continue to sustain the already high real interest rates and will have very deleterious consequences for Greece's growth prospects. Finally, insufficient containment of the fiscal imbalances would make the restrictive monetary and exchange rate policy unsustainable, and risks eroding the credibility of the whole programme.

The central theme of this study is that a vigorous fiscal expansion and a deteriorating output capacity have been the twin forces which have undermined Greece's ability to improve its standards of living in the 1980s, and to take advantage of the opportunities offered by its membership in the European Community. If this is to be achieved there needs to be a rigorous implementation of the complete stabilization and reform programme. In particular, it is essential that a threshold of adjustment is attained such that the credibility of the programme is established beyond doubt. The achievement of such a threshold will make possible the attainment of debt stabilization and of disinflation, and the effective implementation of the programme of structural reform. Developments so far indicate that the necessary adjustment threshold has not been reached and that greater adjustment effort will be necessary if the prospects for the Greek economy are to be permanently improved.

Chapter I
THE 1991 PROGRAMME OF FISCAL CONSOLIDATION(*)

1. The Stabilization Programme

In April 1990 the newly elected government adopted a series of measures aimed at containing the rapidly deteriorating fiscal and macroeconomic trends. The package, which included a modification of the wage indexation system and a strict monetary policy, did not include exact quantitative targets except for the borrowing requirements of the public sector; absent also were structural reform measures. The inexact nature of the package eroded its credibility, and a more rigorous programme of fiscal adjustment and structural reform was adopted in light of the Community loan granted in March 1991[1].

The 1991 stabilization programme has two broad objectives: containment and reversal of the fiscal imbalances and of the macroeconomic deterioration, and the restoration of the economy's ability to produce through the initiation of structural reform measures, and, consequently, the betterment of the real income prospects of Greece's citizens. The programme is defined in terms of a specific timetable. In order to achieve the final objectives intermediate targets for key macroeconomic and structural variables are set. Thus, unlike the 1985/87 programme, the current one is very specific and represents an exogenous constraint to the conduct of economic policy. Another feature of the programme is the conditional disbursement of the loan tranches in order to secure that not only the programme objectives are achieved, but also to monitor the progress of the programme implementation.

The programme's targets are shown in Table 1. Acknowledging the unsustainability of fiscal policy, the following steps are envisaged:

(1) the central government net borrowing requirements are to decline from 17% of GDP[2] in 1990 to no more than 10.4% in 1991, 5% in 1992, and 1.5% in 1993; similar restrictions apply to the borrowing requirements of public enterprises and entities;

(2) the tax base is to be broadened by introducing an alternative income tax system for professionals, and by raising a target tax revenue from agriculture, set at DRS 65 billion by 1993; a series of measures (such as computerization of tax offices and hiring of specialized personnel) aimed at increasing the effectiveness of the tax collection mechanism and at combatting tax evasion and fraud is also envisaged;

(3) employment in the public sector, measured on the basis of the stock of employees at the end of 1990, is to decline by 10% by the end of 1993; this is equivalent to a 52 500 reduction in employment; this will be achieved with a recruitment policy in which only one for every two employees who leave the public sector will be replaced, and by the privatization measures;

Table 1: Macroeconomic and Fiscal Adjustment, 1990-1993(percentage change and percent of GDP)

	1990	1991	1992	1993
Inflation (CPI end period)	22.8	16.6	12.4	7.0
Unit labour costs	20.9	14.5	10.4	6.8
Current account deficit	5.7	5.2	3.6	3.0
Real GDP growth	-0.1	0.9	1.6	3.5
Total credit expansion	16.0	12.2	8.4	6.6
Money supply (M3)	3.0	15.1	13.0	10.1
Current tax revenues	25.4	28.9	31.5	34.3
Non-tax revenues	1.8	4.6	5.0	3.8
Ordinary expenditure (*)	29.1	28.2	26.7	25.9
Primary deficit	5.4	-1.9	-6.4	-8.3
Net PSBR	19.5	13.0	6.7	3.1
Public debt	109.2	108.2	101.9	94.1

(*) net of interest payments
Source: Commission services and Ministry of National Economy

(4) an incomes policy, granting a 4% increase in nominal wages on January 1, 1991, and another 4% on July 1, 1991, is to apply to the central government and to the wider public sector; a restrictive incomes policy is to continue in 1992 and 1993; restrictions are also envisaged for non-wage expenditures.

(*) This chapter was prepared by T. Belessiotis of the National Economies Directorate.

1 The Council decision granting the loan is published in the Official Journal of the European Communities, no. L 66/22, March 13, 1991.

2 The net borrowing requirements of the central government have been revised to 17.2% in 1990.

The structural reform measures, already discussed in the Part I of the study, are:

(1) the oil market will be deregulated within 1991;

(2) the transparency of the public sector accounts, and especially of the public enterprises and entities will be enhanced through a new system of monitoring and control;

(3) deregulation of goods, labour, and service markets is to be implemented according to a timetable for legislative action so that Greece participates fully in the internal market programme;

(4) the government is to undertake tax and social security reforms, reduce the share of the wider public sector, and liberalize international capital transactions;

(5) the government has also undertaken to proceed with a privatization programme so as to reduce the weight of ailing public enterprises on the budget, and also in order to narrow the presence of the public sector in the economy;

(6) policies of financial repression are to be phased out and the preferential access of the government to the banking system and to the Bank of Greece is to be removed by July 1, 1993.

Restrictive financial policies are set to complement the fiscal adjustment programme and to strengthen the disinflation process. Thus:

(1) the rate of domestic credit expansion, and the rate of monetary growth, are constrained to follow a declining trend;

(2) exchange rate policy will assist in the disinflation process by allowing a rate of drachma depreciation less than the inflation differential against Community member states; the ultimate objective is to join the ERM by 1993.

A key aspect of the programme is the sharp decline in the primary deficit of the central government by 7.3 percentage point relative to GDP between 1990 and 1991, with the cumulative adjustment amounting to 13.7 GDP points between 1990 and 1993. Indeed, a primary surplus is expected for 1991. Similar large declines in the net borrowing requirements are also projected during the course of the adjustment. The tight monetary and fiscal policies are expected to foster external adjustment, and the current account deficit is projected to stabilize at 5.2% of GDP in 1991 and follow a downward trend to 3% by 1993. Inflation is expected to fall sharply between 1990 and 1993, reaching 7% at the end of the adjustment period. During the early part of the programme real GDP growth will remain below potential; in 1993, however, the economy is projected to recover, registering a growth rate of 3.5%. In the course of the adjustment public debt relative to GDP initially falls marginally, but from 1991 onwards it falls at a rapid rate and by 1993 it is projected to decline to 94.1%. This is achieved despite the measures undertaken to liberalize financial markets which will, no doubt, raise the real rate of interest paid on Greece's public debt. The debt adjustment is made possible by the sharp reduction in primary spending as well as by the recovery in output performance in response to the structural initiatives.

In order to secure substantial adjustment upon initiation of the programme, much of the fiscal and structural measures are to be implemented during 1991. This would clearly ensure that further initiatives can be built upon the gains already made. There is an additional consideration supporting this strategy. Since the abandonment of the 1985 stabilization programme, Greece's credibility capital, domestically as well as internationally, has declined markedly. Restoration of credibility and, more specifically, establishment of the credibility of the stabilization programme, requires not only the announcement of the intention to adjust, but also evidence that the government is implementing and will not reverse its adjustment policies. The gains from credibility could come in the form of lower interest rates, a stronger than otherwise capital account surplus, and a stronger international value of the drachma; in this respect the disinflation process would take place at a faster pace and the ultimate objective of joining the ERM would become easier to attain.

2. Fiscal Consolidation Measures

Fiscal consolidation is based on increasing current tax revenues from 25.4% of GDP in 1990 to 34.3 % in 1993, and non-tax revenue revenues from 1.8% of GDP in 1990 to 5% in 1992. The effectiveness of the tax collection mechanism is expected to improve, while the initiatives to broaden the tax base will distribute the burden of taxation more equitably. The Ministry of Finance has reviewed alternatives for the taxation of self-employed in an effort to combat tax evasion and fraud, and it is currently expected that the intended alternative tax system will not be implemented; instead, a system setting an exogenously determined tax liability according to various criteria related to the income-earning potential of the professional is planned to be introduced. The effectiveness of tax administration is expected to benefit from the requirement that all shops must have cash registers by 1993, from the recruitment of specialized tax inspectors, and from the programme of computerization. Already all customs offices are equipped with computers. In order to combat the problem of under-reporting of incomes for tax purposes, various wealth or consumption indicators (cars, yachts etc) are planned to be used in conjunction with the self-assessment to arrive at the "true" income of taxpayers. Furthermore, it is now required that purchases of real estate must be accompanied by a statement of the source of funds, while a capital gain tax on property has also been introduced. Finally, the taxation of interest income from bank deposits, at a rate of 10%, was introduced effective in 1991, while interest from government bills and bonds remains free of tax. As a result of this, there has been a notable shift away from bank deposits towards Treasury bills and bonds during the first half of 1991; this shift is expected to be transitory reflecting a stock adjustment process or portfolio reallocation.

With respect to non-tax revenues two initiatives are envisaged: privatization of state enterprises, and the issue of land bonds. Privatization will be a novel experience in Greece. The IRO is planning to privatize all of its 54 enterprises, and by the end of the summer 1991 ten have already been sold. It is also estimated that a profitable enterprise, the Heracles Cement Works, will be privatized in the fall of 1991, and is expected to raise around DRS 135 billion in budgetary revenue. The government is also preparing the necessary regulatory framework to make possible the sale of shares in public utilities. While it is unlikely that such sales will actually take place in 1991, the medium-term revenue potential from the privatization of public utilities is very significant. Concerning land bonds, these are intended to provide the right to purchase public property at some point in the future. Land bonds are expected to yield DRS 125 billion in revenue in 1991; however, the preparatory work has been very slow and it is unlikely that this target will be achieved.

Public expenditure net of interest payments is projected to decline from 29.1% of GDP in 1990 to just below 26% in 1993; including debt service payments the ratio of central government spending in GDP, which was 48.6% in 1990, is expected to rise to 50.4% in 1991, and to decline subsequently to 47.8% in 1993. These trends are projected on the basis of the incomes and recruitment policy envisaged in the programme, while strict control of expenditure procedures are also expected to contribute to budgetary savings. Expenditure management will also be reformed so as to ensure that expenditure overruns are contained, while the tradition of spending all budgetary savings in a fiscal year through re-allocation from surplus to deficit spending units is to be abolished. The 1991 budget has already taken steps to reduce grants and subsidies and this trend will continue. In this respect, a new public investment policy has been proposed, relying more on tax incentives and less on grants and subsidies, and incorporating a stricter control of approval and monitoring processes. Concerning the burden of the social security system on the central government budget, this is expected to ease as the financial strength of the former is revived through a programme of structural initiatives. Finally, the public administration system is to be modernized by increasing the professionalism of the civil service, and taking steps to depolitisize public sector job allocation and reducing the influence of clientelism.

3. A Comparison with the 1985/87 Programme

Unlike the current programme, the 1985/87 programme had more limited objectives[3] aimed primarily at containing the external deficit, inflation, and the fiscal deficit; a reference was also made to the need for the stabilization measures to be placed in a medium-term perspective. The experience of the 1985/87 programme, seen from the perspective of ten years of macroeconomic imbalances and declining productive potential, became very instructive in the design of the current programme in that it underlined the need for a coordinated fiscal and structural reform in the absence of which the viability of stabilization would come into question. These steps have been articulated in the 1991 programme.

The Council decision defined the following objectives to be pursued by the Greek government :

(1) a decline in inflation from 15% at the end of 1986 to less than 10% by mid-1987, excluding the effects of the introduction of the VAT from January 1, 1987;

(2) a reduction in the growth of unit labour costs through an adjustment in wage indexation; this was to be based on an advance inflation norm excluding the effects of import price inflation;

(3) a reduction in the borrowing requirements of the public sector by four percentage points of GDP in 1986, and by a similar amount in 1987;

(4) a reduction in the rate of expansion of domestic credit to 17% in 1986 and to 11% in 1987, and a significant reduction in the monetary financing of the PSBR;

(5) a reduction in the current account deficit "so that as early as 1988 the external public debt can be stabilized in terms of absolute value"[4].

The decision also required that priority should be given to modernizing Greece's productive structures and to promoting the establishment favourable to the recovery of productive investment.

The Council decision took notice of a series of measures authorized by the Commission after consultation of the Monetary Committee; these were[5] :

(1) a foreign exchange, interest-free, deposit equal to 40%, and 80%, respectively, of the cif value of specified goods; these deposit certificates would be issued automatically; the deposits were to be released after six months;

(2) some exceptions to the import goods subject to the above condition were specified, concerning re-export of goods and related matters;

3 The programme was drawn up as part of the loan conditions. See the Council Decision in the Official Journal of the European Communities, no. L 341/17, December 19, 1985.

4 Council decision point 5.

5 See the Commission decision authorizing Greece to take measures under Article 108 (3) of the EEC Treaty published in the Official Journal of the European Communities, no. L 373/9, December 31, 1985.

(3) Greece was to ensure that there was no discrimination in the granting of credits to domestic and Community producers;

(4) Greece was permitted to continue various restrictions on international capital flows up to a period of three years, as well as to provide export subsidies;

(5) the Commission and the Greek government would jointly review the progress in the application of the measures.

The programme was implemented with a 15% devaluation of the drachma against the US dollar and a restrictive incomes policy. However, little was done to redress in a fundamental manner the public finances, and there was no effort directed towards limiting the role of the state in economic activity. The restrictive stabilization measures and the depreciation-induced inflation eroded sharply the real incomes of Greece's citizens; together with the lack of structural reform the prospects for recovery were dimmed. These factors were crucial in the failure of the stabilization programme. The current programme has taken this experience into account and has placed strong emphasis on a change in the policy regime and in the implementation of both structural and stabilization measures to reform Greece's economy.

Chapter II
FINANCIAL MARKETS AND POLICIES(*)

1. Overview

The financial system in Greece operating for a long time under extensive administrative arrangements and controls has started responding positively to the liberalization measures and reforms taken by the authorities during recent years. The pressure for these changes emanates from the urgent need to improve the efficiency of the financial markets and keep in pace with the developments in the Community concerning the completion of the internal market and the drive towards economic and monetary union.

Despite the progress already made, Greek financial markets still operate subject to some critical restrictions, notably on the external financial flows. The further relaxation and removal of these restrictions and the resulting increased competition is expected to improve the functioning of the financial markets and the allocation of resources. An important step in this direction was the removal, in 1991, of all restrictions on the movement of long-term capital. The structural problems and the modest performance of the Greek economy can be partly attributed to the low allocative and technical efficiency of the financial system.

The normal difficulties of the passage from a situation of tight foreign exchange controls and extensive credit regulations domestically - basic features of the postwar Greek financial system - to a system of free capital mobility and market determined allocation of credit are compounded by the serious macroeconomic imbalances and the high inflation.

This poses also a problem of timing and sequencing with regard to financial liberalization and the entry of the drachma into the exchange rate mechanism of the EMS : full liberalization and a quick entry in order to gain from EMS credibility or a more gradual approach implying a prior substantial reduction in inflation and in macroeconomic imbalances. Economic and financial considerations seem to suggest a gradual, but determined approach.

2. Structural characteristics of the financial system

The structure and functioning of the Greek financial system during the last decades was determined, to a large extent, by the economic situation of the country and the political economy of growth chosen by the authorities : the financial system was considered as a crucial means for mobilising scarce national savings and channelling them to targeted industries and other productive activities.

The administrative arrangements used for this purpose were typical of those followed by most developing countries : tight foreign exchange controls on the external side and administratively set interest rates below their equilibrium levels - combined with credit rationing in the domestic credit markets. To the above stated aim of promoting development was subsequently added, not always explicitly, the need to satisfy the rising borrowing needs of the state.

A financial sector dominated by the banking system, itself largely state-owned or controlled and highly concentrated, best served the aimed for mobilisation and guided channelling of savings and this has been, and to a large extent still is, the basic structural feature of the Greek financial system.

These foreign exchange and credit controls have been considerably relaxed during the recent years. The main reforms and other liberalization measures taken as well as their impact are examined in the section 3 below.

The banking and payments system

Most of the financial savings of the private sector is kept in the form of bank deposits a fact reflected in the rapid rise of the liquidity ratio (M3 to GDP) in the economy :

Table 1: Liquid assets (*) of the private sector as % of GDP

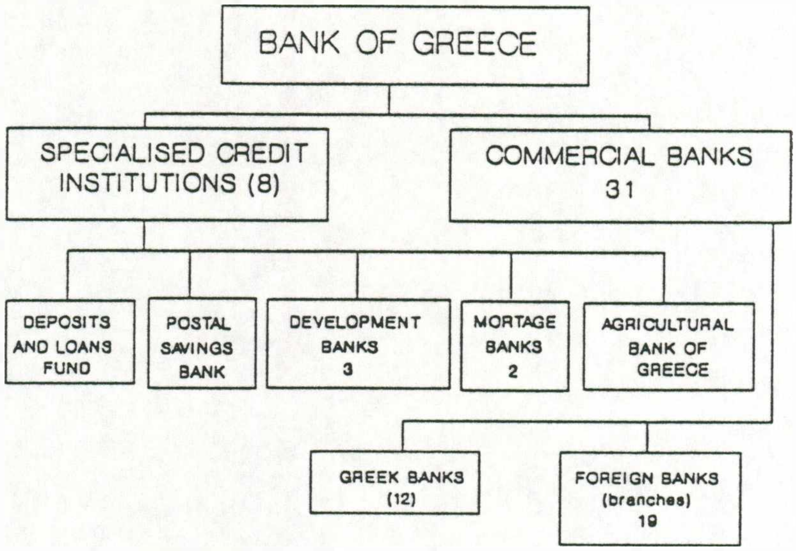
1971	1981	1983	1985	1987	1989
0.43	0.55	0.60	0.67	0.73	0.80

(*) Deposits with banks and other credit institutions
Source :Bank of Greece

This rising ratio of financial savings to GDP indicates in principle a process of financial deepening of the economy, itself a positive factor. On the other hand it shows an inadequate range of attractive financial outlets available to investors apart from the potential problem of monetary control a sizeable volume of highly mobile liquid assets may imply.

(*) This chapter was prepared by T. Papaspyrou of the Financial Engineering and Capital Movements Directorate.

Structure of the Greek Banking System



Source: Hellenic Banks' Association

Commercial banks accept all types of deposits and offer a wide range of financial services and short to medium-term loans. 95% of private deposits with commercial banks are.in the form of savings (68%) and time (27%) deposits.

The largest commercial banks and all specialised credit institutions are state-owned or controlled. The first six largest state-controlled banks (including the specialised ones) represent 86% of total assets and 85% of total deposits (1988 data).

Six Greek banks were ranked among the top 1000 worldwide and three among the top 500 during 1989 (The Banker). The ranking of the largest, National bank of Greece, was 319.

The specialised Credit institutions include 3 development banks extending long-term credit to the industrial sector. The largest National Hellenic Development bank had been using funds from the central bank in financing its activities. Currently most of its resources come from bond issuing on the capital market.

Banks operating in Greece
31.12.1990 Mrd DR

	Assets	Deposits
Commercial banks	8.682	5.769
Specialised credit institutions	5.028	2.649
	13.710	8.418

Source : Bank of Greece

Two other factors not easily quantifiable are cited as contributors to this rising volume of deposits. The sizeable underground economy as well as a certain "financial inertia" on the part of investors long accustomed to financial regulation. The underground economy could explain the rising liquidity ratio only as long as it grows faster than the "visible" economy.

Financial liberalization measures combined with increased supply of tax-exempt government paper have led, recently, to a marked shift of private sector financial placements towards non-deposit assets (mainly government securities).

The most noticeable characteristics of the *payments system* is the high proportion of banknotes in the total amount of means of payments. The ratio of banknotes and coin to narrow measure of money, M1, is twice as high compared to Community average :

Table 2: Ratio of banknotes and coin to M1 %

	1980	1989
Greece	66.5	61.2
Community average	33.5	30.5

Source : EUROSTAT, Money and Finance

This extensive use of banknotes and the parallel limited use of checking accounts or other more advanced means of payments imply considerable transaction costs (in terms of time, risk, safety measures etc.) for the economy. For the banks the counting, storing and other related costs constitute a substantial burden (Report of the National bank, 1989).

National and international credit cards play an increasing though still limited role in the payments system. Salary accounts, automated fund transfers and cash dispensers are also in use but not as yet fully developed.

The low degree of maturity of the financial system is the basic explanation of this phenomenon. Other more specific explanatory factors are the nature and organization of economic activity : the big number and small size of enterprises, the high share of self-employed in the active population, the importance of the agricultural sector etc.

Non-bank financial intermediaries

With regard to non-bank financial intermediaries the insurance companies and the pension funds are in many countries the most important. In Greece the *pension funds* are part of the government sector who finances their deficits.

With regard to the activity of the insurance companies the available information is incomplete as no agency keeps complete accounts for their activity. Data for the 10 largest insurance companies operating in Greece (covering 90% of the market) indicate assets of 93 Mrd DR at the end of 1987. For the sake of comparison, banks assets were 5.031 Mrd. It should be noted that the biggest insurance companies were created and are controlled by the state owned commercial banks.

The low ratio of total gross premiums to GDP compared to the Community average gives also a measure of the still unexploited potential of the insurance market in Greece.

Table 3: Insurance services : gross premiums (% GDP, 1988)

Greece	EC average
1.42	5.5

Source : OECD, Insurance Committee

The capital market

The degree of development of the capital market remains low although it started gaining in importance during recent years mainly for debt finance, following the increasing borrowing needs of the government. Despite a sharp rise in share prices since 1986 and very active trading in the secondary market new equity issues had been, until recently, rare.

The table below shows the share of the principal sources of funds in the financing of the non-financial sectors of the economy in recent years.

Table 5: Sources of finance for the non-financial sectors (shares in %)

	Capital market total	Capital market debt	Capital market equity	Banking sector	External borrowing*	Total
1986	2.6	2.2	0.4	74.1	23.3	100.0
1987	16.1	15.2	0.9	77.2	6.7	100.0
1988	23.8	22.3	1.3	73.6	2.6	100.0
1989	12.2	11.7	0.5	78.3	9.5	100.0

* Public sector only. No data are available for the external borrowing of the private sector

Source: Commission services estimates based on Bank of Greece data

As is evident from the above table the substantially increased share of the capital market is almost exclusively debt financing. New equity issues were few and the amounts involved remained limited although an upward trend is discernible. A break in the trend during 1989 is most probably due to the political instability during that year. This seems to be confirmed by the much higher amount of equity capital raised by the corporate sector during 1990.

3. Flow of funds and financial policies

As was already noted the banking system during the last decades played a pivotal role in mobilizing the available funds of the net savers (households and rest of the world) and allocated them to the net borrower sectors (enterprises and public administration).

The explicit aim of credit policy over this period was to give priority to the financing of industry in order to enlarge the productive potential of the economy and accelerate the economic development of the country. All measures concerning credit policy as well as detailed decisions for its implementation had been taken by the government Currency Committee.

The same policy in its general lines was followed during the first half the '80s. Despite the abolition of the Currency Committee in 1982 and certain reforms, the complex framework of credit controls and regulations remained intact.

A central function of the financial markets is to ensure that the available funds are channelled into the most profitable in-

Table 4: Athens stock exchange DR 000 million

	Market capitalization 1986	1987	1988	1989	1990	Trading volume 1986	1987	1988	1989	1990
Shares	156	565	633	997	2427	4.5	59.6	44.3	89.1	608.7
Fixed interest securities	445	788	1786	2763	3895					

Source : Athens Stock Exchange

ciation of the drachma lead to sizeable "valuation differences" which are a source of liquidity creation. The outstanding amount of these "foreign exchange differences" represented in 1989, 25.3 percent of total claims on private sector.

The table below gives an indication of the relative importance of the deposits in foreign currency with commercial banks and specialized credit institutions in Greece.

Table 10: Deposits:amounts outstanding in Drs (000 million)

	1987	1988	1989	1990
Total	6100	7543	9300	10658
In foreign exchange	1205	1501	1870	2240
In drachmas	4895	6042	7430	8418

Source : Bank of Greece

With regard to the *money markets*, the operation of the interbank market constitutes an important first step towards the development of a fully-fledged drachma money market. Recent Bank of Greece decisions to proceed to sale and repurchase agreements, with banks, of Treasury bills is a movement in this direction. The participation of non-banks and the trading of a wider range of financial instruments would contribute to the creation of a more mature money market. This would also improve the operation of monetary policy in the new framework of interest rates deregulation and financial liberalization.

Financial liberalisation and relaxation of the restrictions on capital movements revived the interest in the *capital market* as is evidenced by the sharp rise in the share price index as well as by the volume of transactions in the Athens stock exchange during recent years. The higher interest rates observed following their deregulation rendered the stock exchange an attractive alternative to costly bank credit for the corporate sector. The supply of newly issued shares, very limited until 1989, rose substantially in 1990. Moreover, government paper has been an important source of capital market's activity as the financing of the huge budget deficits made necessary an increasing recourse to non-bank sources of funds. The combination of market yield plus tax exemption made government paper an attractive placement for investors.

The extensive privatisation programme of the government is expected to increase substantially the supply of new equities and contribute to the further development of the capital market.

Public finance : actual and prospective effects of financial liberalization

The main consequence of the financial liberalization and interest rate deregulation for the public finances has been a higher cost of borrowing for the government as it had to bid for funds on the capital market at substantially higher interest rates than in the recent past. Interest rates rose sharply in the late 1980s, and peaked in 1990, but some easing has taken place in the course of 1991 as inflation has declined. The cost of financing the public sector deficit would have been even higher in the absence of the banks' obligation to invest 30% of their deposits in Treasury bills at rates fixed by the government.

Table 11: Interest rates on Treasury bills: end year

	1988	1989	1990	1991
3-month	16.0	17.0	19.0	18.0
12-month	19.0	20.0	24.0	22.5

Source : Bank of Greece

The imposition of a 10% withholding tax on bank interest income as from 1.1.1991 created a new source of revenue and also made government paper more attractive given that this is not subject to withholding tax. This affected adversely bank deposits during the first months of 1991.

The problem of debt servicing is expected to remain acute for some time as the deregulation of the financial markets and the removal of exchange restrictions will reduce the scope for a reduction in interest rates. Moreover the phasing out of the present system of compulsory investment by banks in government paper is expected to increase further the pressure on government to offer competitive interest rates. Under these conditions a lasting progress in the disinflation process is a prerequisite for a fall in public sector's borrowing costs. Such a development would allow a margin for interest rate reduction.

The disinflation of the economy and the free mobility of capital would imply much lower *seigniorage* revenue for the government : a low inflation target would necessitate a slower rate of currency creation while capital mobility, integrated financial markets and increased competition would tend to equalise, towards a low level, the reserve requirements imposed on banks (a tendency already observed within Community) reducing further the growth rate of the monetary base and the earnings from seignoriage.

Prospects for the financial sector in the unified market

The prospects for an active and profitable presence of the Greek financial sector in the unified market of 1993 are subject to the same conditions applying to any other sector : rationalisation of the cost structure, clear strategy, investment in key areas, European orientation etc.

Concerning factors specific to the financial sector the following elements seem relevant to Greek banking :

(i) *Capital adequacy*. Data for 1988 indicate an average (unweighted) own capital/total assets ratio for Greek commercial banks of around 3% compared to a risk-weighted 8% minimum ratio required (as from 1.1.1993) by Community regulations. This ratio has been probably improved since that date following capital raising by a number of banks but the problem remains for the sector as a whole. The risk-weighted ratio is expected to be closer to the required minimum, if Commercial banks' large holdings of zero-risk Treasury bills is taken into account.

The Community second banking directive sets upper limits for the participation of credit institutions in non-financial enterprises. The control of numerous enterprises by the big state-controlled banks should be reviewed in view of this requirement but also taking into account the above mentioned need for banks to improve their capital base. The sale of these assets, which are peripheral to banks' core business, would serve both these requirements.

(ii) determination of the *state's* degree and form of *participation* in the financial intermediation business. This is linked to the already evoked need for increased capital requirements and the necessity to raise new funds in a period of strain in the public finance. Another important issue refers to the autonomy of bank management in view of the need for flexible strategies, investment decisions, co-operations and mergers;

(iii) an efficient *supervisory and regulatory framework*. Though this is a matter of public policy, it is considered central for the stability and development of a financial centre, especially in the passage from a system with tight credit and foreign exchange controls to a liberalised one. The high interest rates that accompany financial liberalization lead often to phenomena of "adverse selection" - by which safer borrowers are replaced by riskier ones - and to a deterioration of banks' loan portfolios.

This seems a relevant issue for part of the Greek banking system already burdened with debts of the "problematic" companies and the accumulated arrears from loans to public enterprises and entities (see below).

Considerable progress has been made recently regarding the regulatory framework for banks. A number of key legislative acts have been prepared aiming at adapting national legislation to Community regulations. They are expected to become law before the end of 1992.

(iv) the problems facing certain state-controlled credit institutions from accumulated bad debts. There are two main sources of such debts : a) non-performing loans granted to "ailing companies" and b) accumulated arrears from loans granted to public enterprises and entities (PEs). Concerning debt of the second category the government, in a recent "consolidation operation", assumed 625 Bn drachmas of state-guaranteed debt which had fallen due up to end-1990. For the banks concerned the operation involved the exchange of debt owed to them of public enterprises and public entities for claims of the above amount in the form of newly issued government bonds. No interest will be paid on these bonds for three years. The accrued interest will be capitalised at the end of this grace period. Banks would be free to trade these securities in the secondary market a year after their issue.

Although the consolidation operation was an acceptable solution for the banks concerned it presents nevertheless certain inconveniences. Firstly, it further restricts the banks' ability to freely manage their portfolios, an important constraint in view of the intensified competition in the Single Market. Moreover, regardless of the accounting treatment of the accrued interest during the grace period, cash flow of banks will not improve. This will limit the banks' flexibility and range of strategic options.

Superior local information can be a source of comparative advantage for small financial intermediaries and markets with a well established domestic network as is the case of Greek banks. The setting up of an information collection system on the credit rating of small to medium sized borrowers implies high fixed costs with uncertain return for the outsider. The nature of this comparative advantage, emanating from the credit rating of borrower, is not affected by any monetary arrangement - even in the case of a single currency.

Moreover economies of scale and scope are not necessarily relevant to banking and finance and therefore profitable activity could be compatible with both specialised 'niche' players as well as universal banks. This leaves open the possibility for the choice of an *optimum size* provided that a clear strategy regarding the nature of financial activity and the market segment has already been adopted.

Table 12: Consolidated balance sheet of the monetary system Drs 000 million

	1980	% of total	1990	% of total
ASSETS	1975.9	100.0	18321.6	100.0
Claims in foreign exchange	126.0	6.4	1359.3	7.4
Claims on government	494.3	25.1	6504.1	35.5
Claims on public entities and public enterprises	131.7	6.7	1852.2	10.1
Claims on private sector	862.4	43.7	4946.3	27.0
Foreign exchange differences of the Bank of Greece	:	:	1134	6.2
Other assets	361.5	18.3	2525.7	13.8
LIABILITIES	1975.9	100.0	18321.6	100.0
Money supply (M1)	313.1	15.9	1880.8	10.3
Private deposits	782.1	39.6	7688.1	42.0
Deposits in foreign exchange	190.4	9.7	2240.0	12.2
Liabilities in foreign exchange	150.7	3.0	2141	11.7
of which : L-T loans on behalf of the Greek state	(91.4)	(4.6)	(1436.9)	(7.8)
Other liabilities	539.6	27.3	4371.7	23.8

Source : Monthly Statistical Bulletin, Bank of Greece

Table 13: Balance of Payments : Capital movements $ 000 million

	1987	1988	1989	1990
Total capital movements (net)	1802	2031	2776	3843
Private sector	1530	1826	1724	2762
Enterpreneurial	392	599	640	902
Real estate investment	675	896	739	993
Private Deposits in foreign exchange	377	193	610	566
Other	86	138	265	301
Public sector	272	205	1042	1081
Governm., Central bank Public enterprises	2290	2261	2713	3262
Commercial credits	21	3	12	10
Amortization	-1997	-2059	-1659	-2171

Source : Bank of Greece

Chapter III
THE LABOUR MARKET IN GREECE[(*)]

1. Introduction

The major feature in the Greek labour market during the period of the 1980s has been an expansion in the influence of the State. It has been most apparent in the increasing weight of public sector employment in total employment and in the premium which job-seekers (especially young people) have come to attach to working in the public sector. However, the numbers directly engaged in the public sector represent only a part of the influence of government upon employment patterns. The State has also engaged in subsidy and support of employment in enterprises, both through direct financing and through the lending activities of the banks.

The expansion in the influence of the State has augmented and emphasised structural rigidities in the labour market. The influence has been particularly important in the history of wage determination during the 1980s, in the administration of incomes policy and in the effects of legislation governing strikes. It has also been apparent in the costs of legislation governing hiring and firing practices and in the influence of pension legislation upon the supply of labour from both older and younger workers.

The effect of State influence has been to distort the pattern and distribution of pay settlements and to divorce enterprise performance from the level of reward. The labour market has ceased to function as an allocating mechanism because of the difficulties of both hiring labour (in competition with the public sector) and in releasing labour in the face of restrictive legislation. The consequences for macroeconomic performance can be measured by a worsening in the trend rate of growth of unit labour costs and a deteriorating relationship between output and inflation.

This chapter investigates the foundations of structural rigidity in the labour market in more detail. It begins by presenting some of the special features to be found in the labour market statistics, concentrating upon those which distinguish Greece from the majority of the Member States. Several of the features are associated with a labour market which is heavily influenced by State direction and legislation and where labour market agents have turned to alternative forms of working in order to achieve the best rate of return. The special features are :

- the movement out of agriculture and into other sectors now appears to have stopped, and the numbers engaged in agriculture remain very high,
- numbers in self employment and family working are comparatively high and their share in total employment may now be rising,
- unemployment is rising, and under-employment is almost certainly rising, especially in rural areas,

There is wide conformity in working patterns in the formal sector, with comparatively low levels of part-time working. The statistics describe a labour market where a high proportion of labour market agents are choosing informal and small-scale activity. The implication is a structural decline in productive potential, leading to a substantial constraint upon future growth in living standards.

2. The characteristics of the labour market

2.1 Employment in the formal sector[1]

The pattern of employment growth in the formal sector during the past decade has been in contrast to those which emerged across most Member States. The pattern is also in contrast to the policy priority which has emerged across the rest of the Community, which has been to restrain the rate of growth of public sector employment (and spending) in order to encourage private sector expansion. Although Greece has managed to achieve employment growth during the past decade which has been comparable to the average for the Community, the growth has been dominated by public sector services. Employment growth in the broad services sector in Greece has been robust but it has been dominated by the civil service, the banks and by public enterprises and entities.

(*) This chapter was prepared by R. Bushell of the National Economies Directorate.

1 "Formal" patterns of working are often associated with the agreement of an employment contract, which specifies hours and pay arrangements. Formal employment is often based at a discrete location, such as an office or factory . "Informal" patterns of working are often associated with the activities of a particular family and work is often performed in or around the family home. In an informal work situation, the supply of an individual's hours is probably erratic during the course of a year. Informal working may often be uncontracted.

Each of these parts of the service sector is either heavily dependent upon government financing, or the activities are directly guided and supported by the State. In contrast, employment growth in manufacturing and private services has been generally weak. There was a dramatic (if temporary) reversal during 1988, following the end of the stabilisation programme, but State financing also appears to have influenced the trend in that year.

2.2 Agriculture and informal working patterns

The pattern of formal employment growth concentrated in the public sector has coincided with a deceleration in the movement out of agriculture and a slowing-down in the movement out of informal patterns of working. The proportion of total employment engaged in agriculture remained at above 25% in 1989, compared to an average of below 6% across the rest of the Community[2]. The proportion had fallen from a figure of 30% in 1983. However, the trends revealed from the two latest Labour Force Surveys suggest that there might now be a reverse movement in progress and that the proportions engaged in agriculture may even be rising.

Two of the more unique features of the labour market in Greece are the large numbers of people in employment who declare themselves to be self employed or in family working. The proportion in self-employment was close to 35% for males in 1989, compared to 15% across the rest of the Community. The proportion of females who declare themselves to be family workers was above 31% in 1989, compared to 6% for the rest of the Community. The common feature across all patterns of working is the predominance of full-timers, as opposed to part-timers. The proportion who declare themselves to be part-timers in dependent employment is very low compared to the rest of the Member States[3]. The Labour Force Survey of 1989 shows that the percentage in part-time working, as a proportion of total employment, actually fell between 1983 and 1988. The trend is in contrast to the rest of the Community. The latest Labour Force Surveys also suggest that the preference for self employment and family working is beginning to revive, at the expense of the growth in dependent employment.

2.3 Trends in unemployment and under-employment

The concentration of employment in those sectors subject to public financing, the worsening of employment growth in the non-state sector, the revival of informal working and the weakening in formal part-time working has also coincided with a rise in the measured unemployment rate. The measured unemployment rate, despite some fluctuation, has been on a gradually rising trend during the past decade. The rise has begun to accelerate during 1991. The rate for 1990 was 7.5% of the labour force, compared to an average rate of 7.2% during the period 1981 to 1990 and 2.2% during the period 1971 to 1980. The latest data by region show that measured unemployment is heavily concentrated in the urban areas (a rate of about 9 or 10%) but is much lower and apparently stable in the rural areas. However, results from surveys indicate that rural areas are subject to much higher levels of under-employment.

Under-employment includes those workers who have entered involuntary part-time employment and voluntary part-time unemployment. It also includes those workers who have:

- entered hidden or discouraged unemployment, and have stopped searching for jobs, and those who
- are attached to particular jobs but are not working at the moment, or are working significantly less than their normal hours.

Attempts have been made to estimate a combined unemployment rate, which takes account of both under-employment and measured unemployment[4]. Estimates of this type are subject to wide margins of error, because of the difficulty of measuring actual hours worked in self employment and family working. There is (for example) evidence which indicates substantial multiple job-holding across agriculture, tourism and construction[5].

The estimates by Vassilakopoulos indicate a composite index of unemployment of 10.8% in June 1985, at a time when the measured unemployment rate was 7.8%. The presence of substantial under-employment is supported by more recent survey evidence from the OECD which shows that the proportion of those already in work who claimed to be seeking better working conditions was much higher than in most other Member States. Also, the proportion of males in part-time work who claim to be unable to find full-time jobs tends to be higher than in most European countries.

3. Structural rigidities in the labour market

The special features in the labour market in Greece are indicative of the existence of structural rigidities which have been operating in the formal part of that labour market. The choice of informal working patterns has been the rational response to the difficulties of entering the formal sector. The rise in unemployment, and rural under-employment, has equally been an outcome of the inability of the labour market to generate and sustain sufficient job opportunities within the constraints imposed by institutional rigidity.

2 The data are derived from the Labour Force Survey (Eurostat, 1989).

3 Comparisons over time have generally been made with the European 10, because Portugal and Spain participated in the Labour Force Survey only from 1986.

4 "Under-employment in Greece", D. Vassilakopoulos, (1986)

5 The 1984 and 1985 Labour Force Surveys showed that the holding of two or three jobs was particularly common in rural areas in agriculture, restaurants and hotels work, construction and general services.

Table 1: Characteristics of the labour market in Greece* (percentages)

		1983		1988		1989	
Employment							
1. Total numbers employed in agriculture, as a proportion of total employment		30.0	(7.7)	26.6	(6.3)	25.3	(5.9)
2. Status of males and females in employment, as a proportion of total male and female employment							
Males:	Employer	7.7	(5.1)	7.6	(4.9)	42.8	(18.8)
	Self employed	37.2	(12.9)	36.2	(13.8)		
	Employee	50.2	(80.9)	51.4	(80.2)	52.1	(80.2)
	Family worker	4.9	(1.2)	4.8	(1.1)	5.1	(1.0)
		100	(100)	100	(100)	100	(100)
Females:	Employer	1.4	(1.8)	1.8	(1.8)	18.5	(8.7)
	Self employed	17.8	(6.2)	17.3	(6.8)		
	Employee	44.6	(84.6)	48.7	(85.6)	50.1	(86.2)
	Family worker	36.1	(7.4)	32.2	(5.7)	31.3	(5.1)
		100	(100)	100	(100)	100	(100)
3. Part-time employment, as a proportion of total employment, all sectors		4.9	(12.2)	4.0	(14.7)	4.4	(14.3)
Male and female activity rates							
Males,	aged 14-24	45.5	(53.7)	40.2	(55.2)	41.4	(54.5)
	25-49	96.4	(96.1)	96.2	(95.4)	96.0	(95.4)
	50-64	78.0	(71.7)	71.0	(67.2)	70.0	(66.7)
	65 and	19.8	(7.8)	13.6	(6.6)	11.7	(6.6)
	all ages	---	---	66.6	(68.5)	65.6	(68.3)
Females,	aged 14-24	33.4	(45.7)	31.5	(48.4)	32.1	(48.5)
	25-49	45.1	(58.2)	52.6	(64.4)	54.3	(65.5)
	50-64	30.1	(32.8)	31.6	(33.3)	30.0	(33.8)
	65 and	7.6	(2.6)	5.1	(2.0)	4.1	(2.2)
	all ages	---	---	35.2	(42.4)	35.1	(42.9)
Unemployment							
1. Unemployment rates by age group							
	Aged 14-24	22.8	(19.7)	25.8	(17.4)	24.8	(15.5)
	25-49	6.5	(6.7)	6.2	(7.6)	6.0	(7.1)
	50-64	3.1	(5.1)	2.2	(6.1)	2.1	(5.8)
	65 and	0.4	(2.4)	0.7	(2.2)	---	(2.8)
	all ages	7.8	(8.9)	7.7	(9.0)	7.5	(8.3)
2. Long-term unemployment rate (distribution by age)							
	Aged 15-24	46		59			
	25-45	40		30			
	45 and over	15		11			

Source: Labour Force Survey (Eurostat) and OECD.

*Figures in parentheses refer to the European 10, which excludes Spain and Portugal

The major structural rigidities have emerged from, or been made worse by:

- the development and implementation of pay policy by government, and particularly the leadership role of public sector pay settlements,
- the impact of industrial relations legislation in shifting the balance of power in the labour market towards trade unions and away from employers,
- the constraints upon the hiring and release of workers, the effects of these constraints upon the labour cost of production, and the resulting unwillingness to create jobs in the formal sector,
- the effects of the expansion in the volume and value of public pensions on the supply of labour and,
- the dominant attraction of public sector employment for job-seekers and the consequent effects on the education, training and skills markets.

The following investigates these structural rigidities in more detail, and identifies the way in which they might be expected to affect the choice of activities made by workers and the wider consequences of these choices for economic performance.

3.1 Wage determination.

During the past decade, wage determination in Greece has taken place at three important levels:

- automatic indexation of pay (ATA), increases from which have been dictated or directed by the State and which have been based upon movements in the consumer price index (CPI),
- pay increases over and above those dictated by ATA and which have generally been determined by free collective agreement, although with a strong leadership element from public sector settlements,
- agreements at the level of the individual enterprise, which may or may not be in addition to those negotiated at the level of the industry.

Government has also determined the level of minimum pay through the National General Labour Agreement, which has been applied directly in the private sector. Revaluation of minimum pay has been set by government during each bargaining round.

The influence of this framework of negotiation has been considerable. Real wages trended upwards during the 1980s, although with occasional sharp reductions during periods of stabilisation. The rise in real wages has occurred during a decade when output per head has been in structural decline. Wage trends appear to have been divorced from the state of the labour market. The outcome has been the development of substantial inflationary pressures in the labour market, pressures which have been accommodated by the conduct of monetary and fiscal policy. The development of inflationary pressures has itself been promoted by the State because of its central role in dictating the path of wages within incomes policy.

The influence of the State has extended to both the aggregate real wage and the dispersion of wages across occupations and sectors. The State exercised influence over the outcome of collective agreements both by its direct wage policy for the public sector and through its strategy for minimum pay. Agreements negotiated between government and trade unions in the public sector have set "guidelines" for similar pay increases in the private sector[6]. The effect of minimum pay policy, together with limits on the wages of the highest paid employees, was to introduce compression of wage differentials between the highest and the lowest paid.

Wage differentials were further compressed by the wage indexation mechanism (ATA). ATA was introduced in 1982 and provided for cost of living adjustments for every worker covered by collective agreements. However, adjustments were full only in respect of incomes below a specified ceiling. The ceiling was comparatively low in relation to average earnings and effectively restrained the rate of increase in the total wage bill. The effect of partial adjustment for those earning above the ceiling was to reduce wage increases for the higher-paid and it is possible that this has had serious implications for the allocation of the supply of labour between the formal and the informal sectors.

During the period from 1986 to 1987, ATA was used as an instrument in the stabilization programme. Collective bargaining was suspended and the ATA was adapted to give partial compensation for cost of living increases. Since 1982, cost of living adjustments had been retrospective and automatic every four months, based on movements in the Consumer Price Index during the previous four months. In 1985, a forward-looking indexation system was introduced, based on official projections of the CPI. A further innovation required that the effect of the rise in import prices in the movement of the CPI should be subtracted. Wage increases above the target, official projection for the CPI were made illegal and discrepancies between actual and projected CPI were compensated at the end of the year.

The effect of the adaptation of ATA for stabilisation purposes was to achieve a very substantial fall in real wage growth. However, wage differentials continued to compress during this period, and the effect on the structure of real wage expectations appears to have been negligible. Following the relaxation of incomes policy in 1988, real wage growth surged again. ATA was now restricted to the Civil Service but nevertheless acted as a "guide" and a floor for other collective agreements. Free collective bargaining had now begun

6 The leadership role of the public sector in overall wage trends tends to be confirmed by empirical work in L.T. Katseli (1990): "Structural Adjustment of the Greek Economy" in C. Bliss and J. Braga de Macedo (ed.): "Unity with Diversity in the European Community: The Community's Southern Frontier". Cambridge University Press, Cambridge.

again, following the end of the stabilization programme, and the effect of imported inflation in the CPI was no longer excluded for ATA uprating. In January 1988, the National General Labour Agreement provided for further increases in minimum pay over and above the ATA adjustment. Public sector wages were also negotiated (between government and unions) at a level substantially above ATA. The non-state sector reacted positively to the "guide". In 1989, ATA was extended once again to the whole economy and large increases in negotiated pay settlements above ATA were granted. Substantial wage drift at the level of the enterprise now emerged.

3.2 The effects of incomes policy

Looking at the period between 1982 and 1990, it is clear that ATA has not succeeded in maintaining the real wage gains of 1981 and 1982; however, in 1988 and 1989 it presented the opportunity for large increases in compensation through collective agreement (see Table 3). It is also clear (Table 4) that nominal increases in average earnings in the public sector have generally been in advance of the rate of increase in the private (non-state) sector after 1980.

The data in Table 5 include the relative trends in minimum wages and average wages during the period from 1981 to 1984. The data show the strong improvement in minimum wages compared to average wages during this period, although part of that gain was eroded after 1985. However, the relative improvement in the position of the lower-paid was further enhanced by the effects of the larger increases given to the lower-paid through the ATA mechanism. The data in Table 6 illustrate the effects of incomes policy on the evolution of wage differentials, across various sectors, for the period 1980 to 1988. Convergence has been across-the-board except for female manuals in manufacturing and female clerical workers in the mining industry. Further data collected by the IMF and the OECD suggest that the compression of wage and salary differentials has been particularly severe in the Civil Service.

3.3 The influence of legislation on strikes

The trend of real wage growth during the past 10 years reveals considerable volatility, although the trend was generally upward from 1981 to 1989. The volatility reflects variation in government influence over wage negotiations, both directly because of the importance of government as a direct employer and indirectly because of the indicative nature of public sector pay settlements. The volatility is likely to have had an important effect upon the perceptions of private agents and particularly the willingness of agents to make greater investments in human and physical capital. The willingness to invest should be expected to depend upon the pattern and stability of expectations about the future path of wages and prices, and the anticipated rate of return on the investment. Wage differentials for skill are very important in this process of estimating the expected rate of return on human capital investment.

The behaviour of real wages also emphasises a potential weakness in the legislative framework within which collective bargaining takes place, since the framework may have favoured employees at the expense of employers at the bargaining table. The 1983 law governing the right to strike has rarely been enforced and the provisions requiring majority voting of employees before a strike could be undertaken were only sometimes implemented, and generally against less significant bargaining groups. The protected position of workers in the public sector[7] has meant that the majority of strike activity has been concentrated amongst those workers, and that public sector unions have effectively acted as central negotiators for the formal sector workforce. The reform of the law on the mediation and arbitration of disputes in 1990 further strengthened the position of workers by abolishing the 45-60 day ban on strikes following the initiation of arbitration.

The arbitration system in place during the 1980s has also been used as an instrument of state influence. The disputes mediation system (provided by government officials) has presented unresolved cases to an arbitration court which has comprised three members representing government, labour unions and employers. The decisions of the arbitration court closely followed government guidelines and were binding. The decisions effectively imposed public sector pay settlements throughout the labour market, because most conflict was centred in the public sector. It is clear that resort to arbitration was very common throughout the past decade. The arbitration system effectively supported and promoted the leadership role of public sector pay settlements, and probably introduced considerable distortions into the pattern of pay settlements across sectors.

The analysis of the bargaining system and legal framework of industrial relations in Greece during the past decade illustrates an unwelcome combination of features. The bargaining system has effectively been highly centralised, with one or two public sector trade unions exercising monopoly power in pay negotiations. The power has been founded upon a biased legal framework (biased towards employees) and upon the willingness of government to subsidise public sector employment and activity. The inherent advantages of centralised pay systems are impossible to realise because the legal framework has been inadequate to exercise a constraint over one of the parties to negotiation. The combination of features contributes to segmentation in the labour market, and has been an important factor in both the resort to the informal sector and the rise in unemployment and under-employment.

7 "Protected" particularly by security of job tenure.

3.4 The cost of hiring and firing

State influence in the labour market has also been exercised through legislation governing the ability and willingness of employers to hire and release workers. The individual rights of workers in the event of a dismissal have been a particular constraint, and any dismissal can be challenged in a court of law. The decisions of the court appear to have been generally favourable towards the employee. Part-time workers have had the same rights as full-time workers in being able to challenge the actions of employers. Redundancy payment entitlements for white-collar workers have been more generous than for blue-collar workers; these have also added to labour adjustment costs.

The incentives for private firms to recruit labour are further eroded by regulations relating to employment policy and dismissal procedures. According to legislation operative since 1982, prior notification and consultation with the relevant trade unions and the Ministry of Labour has been required for dismissals of 5 or more persons in plants employing between 20 and 50 persons, and for dismissals of more than 2% of the labour force (or of more than 30 persons) in larger plants[8]. However, the Ministry of Labour has the right of final veto. Dismissals of numbers beneath those limits are unregulated. The significance of these constraints for Greek firms in the past should not be overestimated, because the State has probably pre-empted the need for large-scale dismissals through its policy of maintaining employment in the broad public sector through State-funding and subsidy for firms in difficulty.

Costs of various employment patterns available to firms have also been distorted by legislation governing part-time work. Part-time work in the formal, industrial sector has not been prohibited but incentives to recruit part-timers have been impaired because the calculation of compensation by firms in the event of dismissal has been based on full-time equivalent pay. Employers' insurance contributions in respect of part-timers have been similarly based. The requirements have encouraged the use of overtime-working by existing workers, although overtime-working has also been subject to control. Trade unions have been opposed to the principle of formal part-time work and have been able to impose their preferences in negotiations within the protected public and state- controlled sectors of the labour market. Finally, hours of work (including overtime) have been the subject of strict government control. However, it is doubtful whether these regulations have been effectively enforced over the whole of the labour market, although the likelihood of enforcement is much greater in the formal sector.

The effect of this complicated framework of State legislation upon employer attitudes is very difficult to measure. However, it is inevitable that employers will have been constrained in their choice of production methods and that there will have been strong disincentives to recruit labour. It has also introduced incentives to enter into informal working, both for employers and employees. Surveys conducted by the Commission Services, and published in 1986 and 1990[9], confirm the difficulties which confront firms in recruiting and releasing workers and the effect that these difficulties have upon willingness to raise employment levels.

3.5 Pensions and taxation

The influence of the State in expanding pension provision has had wide-ranging effects on the labour market, although these effects are again very difficult to measure with available data. Greece probably has the highest pension expenditure to GNP ratio in the Community. It has been on an upward trend since 1980, compared to a broad stability or downward trend in the rest of the Member States. In 1989, about 15% of GDP was devoted to spending on all types of pensions, a figure which almost doubled over the course of the decade. The rise in real spending on pension provision has resulted in a very steep decline in formal activity rates amongst older people.

The pension system during the 1980s has included strong incentives for withdrawal from the labour market by older people. These incentives have comprised:

- low minimum contributions and low minimum ages for eligibility,
- the absence of restrictions on re-entry to regular employment for pensioners leaving jobs in the public sector,
- the indexation of many pensions to wages, implying a substantial increase in the real value of pensions per head.

The other major incentive has been the flexibility of regulations governing entry to invalidity pension, where growth in expenditure has been particularly large. In fact, disability pensioners now represent about 25 per cent of the total number of all pension recipients.

The quantitative effect of the expansion in pension transfers is very difficult to estimate. However, the size of the transfer of GDP to older people (which is effectively a transfer into extended family income) must have had substantial implications for labour supply and demand, and for general competition for vacancies in the labour market. One of the intentions of expanding pension provision was probably to create jobs for younger people. However, the difficulties of recruitment implied by the framework of employment legislation suggest that the potential for recruiting new workers to replace retirees would have been small, which further implies a reduction in effective labour supply and upward pressure upon real wages. The effects on extended family income are also likely to have affected the choices available to young people in those families. The most likely effect is to contribute to longer job search, and thereby to raise the structural level of unemployment.

8 This requirement is consistent with EC Directive 75/129.

9 "Employment Problems: Views of Businessmen and the Workforce", European Economy, no. 27, March 1986; and "Developments on the Labour Market in the Community", European Economy, no. 47, March 1991.

The fiscal implications of pension-funding are also important. Expansion in pension provision requires an increase in the tax burden upon formal employment and a raising of corporate taxation. In the Greek labour market, the fiscal consequences lead to a distortion which encourages entry to the informal sector. The substantial growth in self-employment in the past two years indicates that the disincentive effects have become more severe and that labour market agents are turning more and more to the informal market.

3.6 Public sector employment

The trend in total employment growth in the formal sector during the past decade has been strongly influenced by the provision of jobs in the State sector and particularly (until 1990) by the expansion of numbers in the Civil Service. (see Part I, table 7). The most recent European Labour Force Survey presents data which enable comparisons of trends in employment in public administration with trends in total employees in employment.

Table 2: Public sector employment

	Employment in central and local government administration (thousands)	Employment in central and local government administration as a percentage of total employees in employment
1983	181	5.2
1984	202	5.8
1985	211	5.9
1986	212	5.9
1987	213	5.9
1988	236	6.5
1989	246	6.7

Source: Eurostat, Labour Force Survey (1989)

The importance of public sector employment growth for overall employment trends was evident in 1990 (see again Part I, table 7). The large-scale dismissal of temporary staff from the Civil Service was a major factor in the sharp fall in public sector employment and was also the major factor in the deceleration in growth of total employment.

The importance of public sector employment in the provision of jobs, and the influence of the State in product and capital markets, has supported the leadership role in wage determination. It has also exercised leadership over wider employee benefits, and human capital investment. Employment in the Civil Service and wider public sector, and in those enterprises enjoying State support or protection, has been outstandingly attractive to job-seekers. It has had the benefit of high security of tenure and has achieved (particularly during the period from 1981 to 1988) the most significant rates of increase in nominal wages. The opportunity for a valuable pension transfer at an early age has been a further strong incentive to enter the public service, as well as incremental pay systems which give generous and automatic increases in salary irrespective of performance.

The effect of this leadership role in the provision of employment benefits has been particularly strong upon young people. The young job seeker has come to regard entry to the public sector as a first priority and this has encouraged queueing for such vacancies. The effect is to lengthen the period of job search and to raise the structural level of unemployment (or under-employment) amongst the young. Attitudes to education and training have also been influenced. The concentration upon general education criteria in selection for entry to the public service[10], in preference to qualifications which are more appropriate to job performance, has encouraged the pursuit of higher educational qualifications rather than entry to vocational training. The attraction of higher qualifications has led to distortions in the allocation and use of labour. Many graduates appear to have been employed in jobs which could have been done by those with lower qualifications or those with qualifications which measure vocational ability rather than achievement in general schooling[11]. The unemployment rate for graduates has been trending upwards when the private sector has at the same time been signalling shortages of higher-level skills.

4. Conclusions and the areas for reform

Europe is embarked upon a period of considerable change. The major force for change is the rising level of competition in capital and product markets implied by trade liberalisation. The programme of liberalisation presents the prospect of higher rates of sustainable growth within a market of stable prices. Greece can most certainly share in the benefits which will arise for all Member States of the European Community. However, full participation in the benefits will be unattainable unless the new regime for monetary and fiscal policy is supported by the pursuit of structural reform in the labour market.

10 The law reorganising entry into the public sector in 1983 attached strong priority to family status (measured by family income and numbers of children) and place of birth as signs of suitability for entry. Professional qualifications and experience were considered to be of less importance.

11 Evidence from the 1989 European Commission Survey, and from the 1989 Labour Force Survey (Eurostat), show that training and education is heavily concentrated in general education establishments. The volume of training and education inside the firm is very low indeed compared to most Member States.

There is a need to open up the opportunities for individual choice for firms and workers. The analysis so far suggests that individuals have (quite rationally) chosen to undertake activities which, whilst the best available from the point of view of personal reward, have nevertheless led to a concentration of employment in sectors of low productivity. The concentration implies an imbalance in the distribution of economic activity and this imbalance will exert a decisive constraint upon the potential for higher growth and living standards in Greece in the future. The analysis also suggests that government has had a direct and powerful influence over the activities of labour market agents. The outcome of that influence has been an expectation that government direction and financial support will always be forthcoming and this has cultivated dependency. The dominance of State direction in wage outcomes has been particularly important.

The decade of State influence has coincided with a gradual rise in unemployment. The level of unemployment has now begun to rise more steeply and the available evidence suggests that under-employment is beginning to increase in the rural areas. Particularly of concern is the survey evidence which shows that unemployment (and especially long-term unemployment) is increasingly concentrated amongst young people, which is in contrast to the experience of most of the Member States. The trend to inactivity amongst the young presents the prospect of low attainment of skill and experience and poor employment prospects for the future[12]. The following identifies where labour market reform has already begun and where more urgent reform might be introduced to enhance labour market flexibility.

4.1 Wage determination

The problems arising from wage determination have been that:

- severe inflationary pressures have arisen from the three-tier system of collective bargaining, made worse because,
- public sector wage outcomes have exercised leadership over collective bargaining throughout the formal sector.

The system of industrial relations has promoted the transmission of inflationary wage outcomes throughout the formal sector. The wider effects of the bargaining system (and particularly ATA) have been to compress inter-industry wage differentials[13] and to distort the incentives for the acquisition of education and training (and the acceptance of higher individual responsibility) through the compression of wage differentials for skill. The effect of compressed inter-industry differentials has been to distort "signals" for job-seekers and to suppress the mechanism which allocates labour.

The Government has announced legal reforms and intentions which (if fully implemented) should be expected to bring about a significant improvement in the flexibility of wages:

- ATA has been abolished in 1991,
- an independent arbitration system has been introduced in 1991, to replace the present system of compulsory arbitration,
- a new law (introduced in 1990) is intended to regulate the right to strike, enabling the dismissal of workers where strikes are declared illegal or abusive by the courts.

The two-year pay settlement negotiated in the private sector in 1991 indicates a substantial change in bargaining attitudes. However, the initiatives so far taken would be enhanced if,

- the intentions of the new law on strikes were supported by decisions in the courts about the nature of strike activity which is considered to be illegal or abusive, and
- the new arbitration system is truly independent of State influence.

The independence of the new arbitration system would be endorsed by the thorough dismantling of the framework of State support for loss-making enterprises. It is the combination of State direction through compulsory arbitration, and State subsidy and financial support, which has contributed to the present distortions and inflationary tendencies in wage determination.

Employment prospects, particularly for low-skilled workers, would improve if pay policy was decentralized and minimum wages were reflecting prevailing supply and productivity conditions. The relatively high level of minimum wages, and the imposition through ATA of faster than average growth in low-skilled pay, has led to low private sector demand for lower-skilled and unskilled workers. The disappearance of formal sector jobs for young people, and particularly training places inside firms, is linked with developments in minimum wages and the compression of differentials at the lower end of the pay range[14]. The problem of creating incentives for skill acquisition at the higher level of the pay range are also associated with the highly progressive system of personal taxation, which further distorts the incentives to accept higher-level responsibilities and to make greater investments in human capital.

12 The Survey by the European Commission in 1989 indicates that Greek enterprises will increasingly wish to recruit skilled labour in the future, in common with trends across all Member States.

13 Work by Katseli claims to identify and measure a severe reduction in inter-industry wage flexibility in the past decade, with industry-relative wages increasingly failing to allocate labour.

14 The 1985 and 1989 surveys by the European Commission identified high starting pay (and insufficient training potential for new workers) as impediments to employment creation and a major factor in the reluctance to recruit new workers into the formal sector.

4.2 The costs of hiring and firing

The central analysis has identified some of the constraints on releasing and recruiting workers. The dismantling of the framework of state support in providing or maintaining employment now implies a substantial reallocation of labour across enterprises and sectors as new firms emerge and others disappear or decline in size. Government has already made legal innovations which (if fully implemented) will promote the process, as well as enabling a rise in productive potential by encouraging more flexible working patterns,

- new laws are intended to promote part-time working in the formal sector by requiring that wages, social insurance contributions and social security benefits be paid in proportion to hours worked,
- temporary working should be promoted by the enabling of new forms of fixed-term contract,
- fourth shift working is to be permitted, enabling greater flexibility of working hours and 24-hour working in factories.

New laws will also permit greater flexibility in overtime working. However, the laws on overtime working remain restrictive. Also, a minimum floor has been imposed on social insurance contributions in respect of part-time workers which, although quite low[15] relative to average full-time pay, may be another factor distorting the relative cost of part-time working. The lay-off rules and redundancy payment provisions also remain unchanged and it is unclear whether the Ministry of Labour veto on terminations continues to be exercised in the same way as during the past decade. The employment security provisions for part-time workers, which have in the past been identical to full-timers, also appear to be unchanged although the present state of this legislation is unclear.

4.3 Pensions and taxation

The importance of the expansion in the volume and value of pensions for labour supply has already been identified. The importance of these distortions will multiply in the middle of the next decade because of demographic trends which will increase the numbers of people who will be eligible (under present rules) to enter retirement. Consequently, revisions to the system of delivering pensions (which is highly fragmented at present) are a crucial component in the strategy for labour market reform. Should reforms be successfully implemented, they would signal an end to the policy of expanding pension provision in order to reduce unemployment, the effectiveness of which has anyway been doubtful.

4.4 Public sector employment

The terms and conditions of employment for those engaged in public administration, and particularly civil servants, remain considerably better than can be achieved outside of the broad public sector. Pension provisions remain very generous for the permanent civil service and it is not clear that numbers employed in permanent public administration will be easily susceptible to control. The decline in numbers in the civil service during 1990 and 1991 has been concentrated amongst temporary workers.

A new law of 1991 proposes substantial revisions to recruitment practices in the public sector. The law requires that the importance of educational and professional criteria should be upgraded and that mobility should be enhanced across government departments through a system of general recruitment into public administration. The reforms, if implemented, should certainly enhance the quality of candidature. However, there is evidence which suggests that too many young people stay in education for too long and that the propensity to stay in education is encouraged by the kudos which is attached to general qualifications in job selection. Recruitment practices for the broad public sector might be adapted to emphasise suitability for the job rather than the general requirement of more advanced qualifications.

The change in recruitment practices might thereby contribute to a new set of signals leading to a more efficient allocation of resources to various types of training and education. The 1989 survey by the European Commission indicates that the majority of education and training is delivered outside of firms and inside educational establishments. The 1988 and 1989 Labour Force Surveys show that the amount of young person and adult training delivered inside firms is very low indeed compared to most Member States. The revival of training investment inside enterprises will naturally require a return to profitability and will also depend upon the dismantling of restrictions which impose substantial additional costs upon the creation of jobs.

15 This amounts to 30% of the prevailing minimum wage.

Table 3: Developments in ATA, Pay and Prices

Year	ATA (1)	Consumer price (2) index		Nominal compensation per employee (3)
1982	9.4	19.1	(21.0)	27.7
1983	19.9	19.9	(20.5)	21.4
1984	19.0	18.1	(18.4)	20.7
1985	17.8	25.0	(19.3)	23.4
1986	10.8	16.9	(23.0)	12.5
1987	9.9	15.7	(16.4)	9.8
1988	17.3	14.0	(13.5)	18.8
1989	16.2	14.8	(13.7)	19.0
1990	16.0	23.4	(20.4)	21.3
Annual average 1982-1990	15.1	18.5	(18.5)	19.4

Source: Commission Services and Ministry of National Economy

(1) The figures represent the maximum uprating which an individual might have received through ATA, for that year, on a December-to-December basis. The higher-paid would have received lower percentage upratings.

(2) The figures represent the CPI figure used for ATA uprating measured on a year-end basis; in parentheses is the annual average CPI inflation rate.

(3) Average annual rate of increase.

Note : In comparing the ATA compensation and the CPI inflation series, the following qualifications should be borne in mind : (a) in the period 1982-85, each year's January ATA increase applied with respect to the previous year's inflation (ex post indexation); (b) during the period 1986-90, each year's January ATA included a correction for the previous year's ATA "underprediction".

Table 4: Nominal increases in average earnings (in per cent)

Year	Public sector (incl. government, public enterprises and entities, banks)	Private sector
1980	18.7	22.0
1981	24.8	23.3
1982	26.3	24.5
1983	17.5	16.1
1984	23.4	22.8
1985	21.9	20.5
1986	13.6	11.3
1987	11.5	10.2
1988	21.8	20.0
1989	18.7	19.8
Annual average	19.8	19.1

Source: Bank of Greece

Table 5: Wages and Labour Costs, Annual Percentage Change

	1985 1980	1986	1987	1988	1989	1990 (1)
Average earnings (2)						
Total	22	12 1/4	11	20 3/4	19 1/2	21
Government	23 1/2	14 1/2	12 1/2	21 1/2	19 1/2	25 1/4
Banking	22 1/2	10	9	26 1/2	19	19
Private sector	21 1/4	11 1/4	10 1/4	20	19 3/4	18 1/2
of which:						
Manufacturing (3)						
Salaries	21 3/4	8 1/2	8 1/4	27	20	21 1/4
Weekly wages	24 3/4	12 1/2	9 3/4	24	20 3/4	20 1/2
Minimum wages	25 3/4	10 3/4	10	17	19	17
Unit Labour costs						
Total, excluding agriculture	22	10 1/2	10 1/2	16 1/4	16 3/4	21
of which:						
Business sector	21 3/4	11 1/4	11	19	18	20
Manufacturing	24	12 3/4	11	19 3/4	18 1/2	21 1/2
Real average earnings						
Total	2.1	-8	-4	5 3/4	4 1/4	1
Government	2.1	-6	-2 1/2	6 1/2	4 1/4	4 1/4
Private (incl. banks)	1.7	-9	-4 3/4	5 1/2	4 1/4	-1

Source : Bank of Greece; Data submitted by the national authorities to the OECD (1991)

Note: The figures refer to non-agricultural sectors.
1. Provisional estimates
2. Estimates for non-agricultural sector, excluding earnings from abroad (Bank of Greece)
3. Plants with ten workers or more

Table 6: Evolution of wage differentials: Manufacturing, Retail Trade, Mines, Insurance, Banking 1980 - 1988

Category of gross earnings	Indices estimated at the fourth quarter of: 1980	1985	1988
Retail trade, white-collar workers, female	100.0	100.0	100.0
Manufacturing, blue-collar workers, female	102.6	109.1	107.7
Manufacturing, white-collar workers, female	138.5	127.4	129.4
Retail trade, white-collar workers, male	143.9	136.7	132.5
Mines, white-collar workers, female	141.9	155.3	155.5
Manufacturing, blue-collar workers, male	165.3	143.1	144.8
Mines, blue-collar workers (male)	213.2	196.3	199.7
Manufacturing, white-collar workers, male	243.3	198.4	195.3
Mines, white-collar workers, male	275.2	234.5	223.5
Insurance, white-collar workers, female	-	140.4	137.6
Banking, white-collar workers, female	-	174.5	169.4
Insurance, white-collar workers, male	-	186.7	179.8
Banking, white-collar workers, male	-	229.6	211.6

Source: Bank of Greece

Note : All earnings are expressed in monthly terms.
For blue-collar workers in manufacturing and mines, monthly earnings are obtained after multiplying weekly earnings by 4.357 (the average number of weeks in a month).

Chapter IV
TRENDS IN GREECE'S CURRENT ACCOUNT AND TRADE(*)

1. Introduction

Since its entry into the European Community Greece's external adjustment has been marked by two serious balance of payments crises, both of which led to Community support conditional upon stabilization measures. The timing of the second crisis, coming so soon after the first, clearly demonstrates that the adjustment measures undertaken in the mid-1980s have been insufficient; as a result, Greece's external finance has continued to be vulnerable to adverse expectations. This chapter reviews the character of the country's balance of payments, and some evidence confirming that expansionary financial policies have been at the center of these difficulties.

Greece is one of the four least industrialized Member States in the Community[1] and the one with the greatest need to close the gap and accelerate the pace of convergence with the rest of the Community. Of the several indicators which attest to Greece's status in this group is the pattern of its external trade. Broadly speaking, Greece specializes in traditional exports, and imports goods with a high content in technology and human capital. The trade deficit has widened especially in the course of the 1980s, coinciding with Greece's membership of the European Community. At the same time, other items in the balance of payments have recorded growing surpluses offsetting to some extent the commercial trade deficit. Seen from the perspective of some thirty years, Greece's trade has been influenced by the increased openness of the economy, and especially by its membership of the European Community since 1981, as well as by relative demand growth in the domestic and in the international economy. However, it appears that the country's supply performance has been poor, mirroring the overall decline in output potential noted from the mid-1970s onwards and particularly in the 1980s. The evidence examined in this chapter indicates that Greece, notwithstanding certain exceptions, has, broadly speaking, followed a path of specialization in its international trade which, although to some extent a natural outcome of the country's relative factor supplies, at the same time suggests a lack of dynamism and innovation. This could have important implications not only for the country's ability to grow without balance of payments strains necessitating Community support, but also for its prospects to benefit in the emerging specialization in the Community.

2. Greece's Current Account

2.1 Current Account Trends

Greece's current account developments, shown in Table 1, have been characterized over most of the post-war period by relatively large deficits in merchandise trade partially offset by surpluses in the balance of invisibles. The trade balance deteriorated substantially through to the mid-1980's while the invisibles balance showed a clear improvement in the second half of the 1980s. The current account deficit was largest in the early part of the last decade culminating in a record deficit of 9.8% of GDP in the crisis year of 1985 when the trade deficit also reached record levels at 18.8% of GDP.

Table 1: Trade, Invisibles, and Current Account Balances (in % of GDP)

Period average	Trade balance	Invisible balance	Current balance
1971-75	-14.4	9.5	-4.9
1976-80	-15.3	10.9	-4.4
1981-85	-16.7	10.1	-6.6
1986-90	-15.8	12.0	-3.8
1970-90	-15.3	10.5	-4.8

Source: Commission services

Table 2 presents data on Greece's trade. Foreign trade expanded steadily up to 1985 bringing the degree of openness (exports plus imports as a percent of GDP) of the Greek economy from a low 23.4% in 1970 to a maximum of 44.4% in 1985; but then it fell back to 37.2% in 1990. The increase in openness up to 1985 was accompanied by a slow but sustained improvement in the relative competitiveness as indicated by the rise in the export/import ratio to a maximum 45.1% in 1984 from a low 30.4% in 1973. However, because of the large difference in the absolute levels, the faster rise of exports did not prevent the trade deficit from widening. On the contrary when in the second part of the 1980s foreign

(*) This chapter was prepared mainly by T. Belessiotis of the National Economies Directorate.

1 The others are Ireland, Portugal and Spain.

Table 2: Foreign Trade Trends (% GDP)

Period average	Exports	Imports	Trade balance	Open-ness	Export / Import Ratio (in %)
1971-75	7.7	22.1	-14.4	29.8	34.8
1976-80	9.9	25.2	-15.3	35.1	39.3
1981-85	12.2	28.9	-16.7	41.1	42.2
1986-90	11.1	26.9	-15.8	38.0	41.3
1970-90	10.1	25.4	-15.3	35.5	39.8

Source: Commission services

trade declined relative to GDP the merchandise balance showed a certain improvement.

The evolution of the balance of invisibles, shown in Table 3, is dominated by a limited number of important items : tourism, emigrant remittances, shipping receipts, and, since 1981, net transfers from the EC. While shipping and private transfers from abroad show a declining trend over the sample period, tourism's share fluctuates around 25% and transfers from the EC show, naturally, a fast rising trend.

Table 3: Invisible Receipts - Principal Items in % of Total

Period average	Tourism	Shipping	Emigrants remittances	Net EEC transfers
1971-75	22.3	29.6	31.4	0.0
1976-80	27.9	28.4	22.1	0.0
1981-85	25.6	23.9	16.7	11.4
1986-90	23.5	14.0	15.1	21.5
1970-90	24.6	24.2	22.1	16.5*

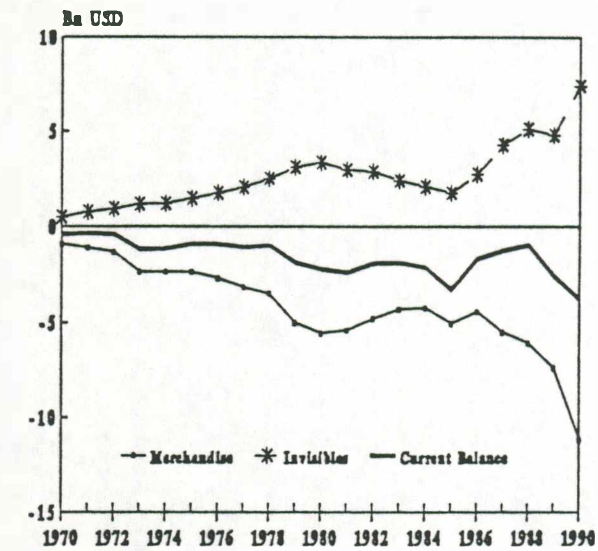
Source: Commission services
* 1981-90

The historical profile of the balance of payments and its components is presented in Graph 1. In the post-1978 period a widening trade deficit has been only partially financed by invisible surpluses, with the result that the current account balance followed a trend deterioration which peaked in 1985; this was then succeeded by a sharp reversal associated with the 1985/87 stabilization programme. After 1988 the deterioration resumed to reach another peak of USD 3.5 billion in 1990, reflecting the large trade deficit (USD 12.3 billion). There are good prospects that the current account deficit will be contained significantly in 1991 as a result of the current stabilization programme accompanying the balance of payments loan granted by the Community to Greece.

Graph 2 presents a decomposition of the balance on invisibles into the service balance and the balance on transfers. The former has weakened notably in the 1980s, while the balance on transfers has shown substantial strength since the beginning of the last decade. This reflects the importance of Community transfers, and is suggestive of Greece's dependence on these transfers to finance its balance of payments adjustment without disruptions in its international financial relationships.

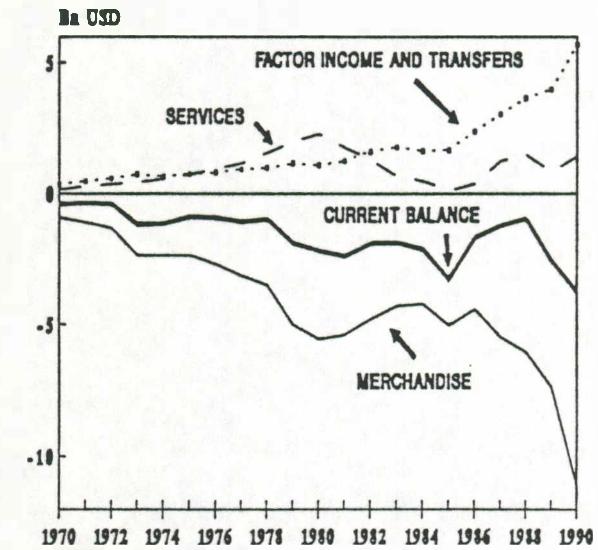
Clearly, Greece's external adjustment would have been substantially more difficult if transfers from the Community were not available. Even though in their absence the economy would have followed a different adjustment path, it is also worth noting that, by rising from 0.4% of GDP in 1981

Graph 1: Components of curent account balance



Source: Commission Services

Graph 2: Components of current account balance



Source: Commission Services

to 4.8% in 1989, they have provided an important source of funds easing the foreign exchange constraint.

An important characteristic of Greece's external adjustment in the 1980s has been the character of international capital flows and the rise in international indebtedness. In the ten years prior to 1981 the mean value of external central government debt to GDP was 6.5%; from 1981 onwards international indebtedness has been rising at a very rapid pace. Thus, in 1985 the ratio of public sector external debt/GDP was 35.3%, compared to 10.1% in 1980; in 1990 this ratio had fallen back to 28.8%. These developments indicate that debt-creating capital flows have dominated the capital account during the last decade, a fact which stands in sharp contrast to the experience of both the 1960s and the 1970s when international indebtedness represented a stable proportion of GDP. The principal debt-creating actor in the 1980s has been the central government.

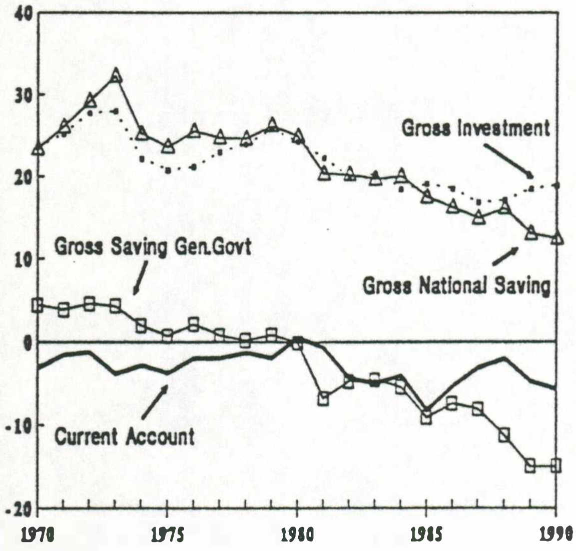
External borrowing by the central government rose steadily relative to GDP up to the middle of the decade, peaking at 5.6% in 1985. In subsequent years it declined to 2.3% of GDP in 1989, but rose once more after that. These developments have not been consistent with one key objective of the 1985/87 stabilization programme, that of stabilizing the absolute value of Greece's international debt. Some modest containment did take place during the implementation of that programme but the increase in international indebtedness resume once more, as subsequent events have shown; in 1991 it is estimated that Greece's international debt will reach over USD 22 billion.

Public sector borrowing has also been an important component of the strength of the basic balance recorded in the 1980s. A deficit equivalent to 2.2% of GDP in 1981, and smaller deficits in 1982 (1.7%), 1984 (1.1%) and 1985 (1.5%) have been recorded, but in the remaining years the basic balance has registered surpluses [2]. However, when only the sum of the current account and direct investment flows are used as an indicator of the sustainability of balance of payments trends, deficits are recorded throughout the 1980s, peaking at 8.5% of GDP in 1985 but easing subsequently. To a large extent this is a reflection of the small direct investment inflows, which averaged USD 203 million in the 1970s and USD 581 million in the 1980s. On the other hand, the prominence of public sector international borrowing has been a key contributor to the basic balance strength. Finally, private short-term capital flows, principally in the form of foreign currency deposits, have risen in recent years. However, these have been volatile declining substantially both in 1985 and in 1988, periods of uncertainty over the course of macroeconomic policy; during the rest of the decade they have shown greater stability.

2.2 Saving, Investment, and the Current Account

The current account is an intertemporal mechanism, allowing domestic residents to optimize the flow of their consumption by borrowing from, or lending to, the international community. As such, the current account represents the difference between domestic expenditure and the availability of domestic saving to finance spending. A key factor in national saving is the behaviour of the public sector; given private sector incentives to save and/or invest, excess demand for savings on the part of the public sector is manifest in current account deficits. While it may be argued that such deficits have a tendency to be reversed when arising from private sector international borrowing, when the source of the deficit is public sector dissaving external adjustment will be achieved only if the fiscal expansion is contained; such fiscal expansions tend to produce widening current account deficits which also have a permanently vulnerable character with respect to shifting expectations.

Graph 3: Investment, saving, and the current account (as percent of GDP)



Source: Commission Services

In the case of Greece, moderate and sustainable current account deficits were recorded between the beginning of the 1970s up to the beginning of the 1980s. During this period gross national saving averaged around 26% of GDP while gross fixed capital formation amounted to around 24% of GDP (the data do not add up entirely to produce the implied current account surplus during this period). The current account deficit in the period 1970-1980 averaged to 2% of GDP and fluctuated within a narrow range.

2 The basic balance is obtained from IMF : "International Financial Statistics", line 77c.d at Greece's country code (174).

Graph 3 shows that in the post-1980 period a sharp movement of the public sector into dissaving was associated with declining national saving, albeit at a slower rate, and also an easing trend in gross fixed capital formation. It is not possible to construct Greece's capital finance account to show the correspondence between private, public, and international saving and investment spending as data for private saving are not available. However, the decline in national saving, from a mean value of 26% of GDP in the 1970s to a mean value of 17.5% of GDP in the 1980s has coincided with a sharp movement in public sector (general government) saving from 2% of GDP in the 1970s to -8.8% in the 1980s. The graph clearly demonstrates these developments; it also shows that the movement into public sector dissaving in the early 1980s coincided with a deterioration in the current account deficit. If investment spending had stayed at its level of the late 1970s during the 1980s, the current account deterioration would have been even sharper; in a sense, the trend decline in the share of investment in GDP has been a supporting factor to the external adjustment occurring under the pressure of an expanding public sector.

The developments depicted in Graph 3 suggest that Greece's fiscal policy is highly correlated with current account movements. Indeed, the rate of accumulation of international indebtedness, which has grown rapidly in the course of the 1980s, has been determined largely by the rate of the fiscal expansion[3]. It is evident that private saving has not increased to the extent required to contain the decline in national saving by offsetting the emergence of public sector dissaving. This may be associated with the increased regulation of economic activity and the intensification of government intervention, or with the continuing high inflation[4], or with financial repression. From a longer-term perspective, restoration of a sustainable current account requires that policies encouraging national saving must be put in place; this is the more so since the country's investment needs, if they are to be met, will require continuing reliance on international savings. Restoration of national saving, in turn, requires first and foremost fiscal adjustment.

2.3 Financial Variables and the Current Account

This behaviour of the current account deficit has put Greece's holdings of international reserves in the 1980s under serious strains. The ratio of the flow of import payments to the stock of international reserves excluding gold, which had a mean value of 17.9% in the period 1960/69, and 19.9% in the next ten years, rose to a mean value of 91% in the 1980s. This ratio peaked at 174.4% in 1985[5]. The import to reserves ratio implies that Greece's ability to finance its imports in the 1980s deteriorated significantly compared to the previous decades; this is only one indicator of the difficulties Greece encountered during this period and is, perhaps, an incomplete picture of the circumstances accompanying the balance of payments loans granted in its favour. Other principal factors were the behaviour of the capital account as well as of invisible receipts, both of which have been subject to shifts in confidence in economic policy in Greece. Although one can only point to anecdotal, but not strictly rigorous, evidence on the influence of confidence factors on the country's balance of payments crises, it is also possible to marshall both theoretical and empirical evidence on the impact of financial and monetary variables, particularly inflation and the rate of credit expansion, on the behaviour of international reserves.

In a regime of fixed or quasi-fixed exchange rates, such as that pursued by Greece over the previous thirty years, domestic money is a close substitute for foreign money, and can be exchanged with a considerable degree of certainty for foreign money and foreign goods through the balance of payments; this approximation of the balance of payments adjustment process is used to develop the model tested here. Greece has pursued a fixed exchange rate policy with respect to the US dollar from the 1950s to the first oil crisis; subsequently the peg has been floating in a range accommodating Greece's high inflation. This exchange regime has been supported by financial and exchange controls which only recently have been eased. In this regime only foreign goods are available to exchange for domestic money; an expansionary fiscal and/or monetary policy which raises the supply of money, for a given demand, sets in motion a process of adjustment through which individuals spend the excess supply of money and restore equilibrium in their money holdings. This model suggests that the balance of payments is a mon-

3 See G. Alogoskoufis (1989) : "Macroeconomic Policy and the External Constraint in the Dependent Economy : the Case of Greece", Discussion Paper no. 3, Birkbeck College, University of London, February.

4 One could conjecture, for example, that inflation may have had a negative effect on private savings and, consequently, the inflationary implications of the public finances have contributed to the external imbalance.

5 The data are from IMF : "International Financial Statistics", line 71 d and line 11 s, respectively, for import payments and international reserves excluding gold at Greece's IFS country code (174); the reserves data are converted into into US dollars using the USD/SDR end of period rate.

etary phenomenon and balance of payments difficulties are invariably associated with excessive monetary growth[6].

The model tested for the case of Greece is based on the following equation determining the supply of money in a small open economy under fixed exchange rates :

$$H = ER + D \quad (1)$$

where

H = high-powered money, money supply

E = exchange rate, units of domestic currency per foreign currency

R = stock of international reserves in foreign currency

D = domestic credit

The money multiplier has been assumed to be unity. Letting the exchange rate be unity and differentiating (1) with respect to time we obtain the profile of the balance of payments as a function of the domestic monetary disequilibrium :

$$dR/dt = dH/dt - dD/dt \quad (2)$$

Letting the demand for money be :

$$Md = h(y, r, pe) \quad (3)$$

$$h_1 > 0;\ h_2, h_3 < 0$$

where

Md= demand for high-powered money

y = real income

r = nominal rate of interest

pe = actual or expected rate of inflation

and substituting into (2), we have :

$$dR/dt = dh(.)/dt - dD/dt \quad (4)$$

Equation (4) can be estimated after appropriate choice of an explicit form and of the explanatory variables. A linear form of this equation was adopted, and OLS results over the period 1973-87 are presented in Table 4. The dependent variable is the change in Greece's international reserves from the balance of payments statistics (IFS line 79c.d.). The independent variables are : D8587 = dummy variable for the 1985/87 stabilization programme, = 1, 1985-87; = 0, otherwise; DC = domestic credit expansion (IFS line 32); YPERM = permanent income, the trend value of real GDP; PDOT = inflation rate measured by the GDP deflator (IFS line 99b/IFS line 99b.p.); and DLENDRATE = first difference in the lending rate (IFS line 60p). Taking account of the fact that Greece's inflation rate is highly correlated with the depreciation of the drachma in the sample, and in order to minimize the presence of multicollinearity, the depreciation of the exchange rate has been dropped from the equation.

Table 4: Determinants of Changes in International Reserves

Constant	4439.42
	(15.40)
D8587	306.23
	(8.19)
log(DC/DC(-1))	-58.03
	(13.53)
log(YPERM/YPERM(-1))	86.63
	(2.70)
PDOT	-88.03
	(11.44)
PDOT(-1)	-68.63
	(8.62)
PDOT(-2)	-23.68
	(5.90)
DLENDRATE	-33.38
	(9.69)
$\overline{R2}$	0.91
DW	2.07
Rho	-0.55
	(1.65)
n	1973-1987

Absoloute t-statistics in parentheses; DW is the Durbin-Watson statistic; Rho is the first-order serial correlation coefficient; n is the sample

The main determinants of this equation are those of the demand for money. The principal change in the stochastic properties of the data in the post-1972 period is related to the sharp acceleration in the rate of inflation, and preliminary regressions confirmed that this equation contained a structural break in 1973; hence the choice of the estimation sample[7]. The equation does not explain well the post-1987 period, and, it appears, there have been serious instabilities in the demand for money in the late 1980s associated with the liberalization measures of these years.

6 This is the monetary approach to the balance of payments; it places emphasis in the analysis of the balance of payments on policy parameters, rather than traditional elasticity factors. Its principal policy conclusion is that external adjustment is intimately linked to, and requires, responsible financial policies. For an exposition of the adjustment process see M. Parkin (1974) : "Inflation, the Balance of Payments, Domestic Credit Expansion, and Exchange Rate Adjustments", in R. Aliber (ed.) : "National Monetary Policies and the International Financial System", the University of Chicago Press, Chicago. The monetary model of the balance of payments is extensively discussed and tested in the papers compiled in J. Frenkel and H. Johnson (ed., 1976) : "The Monetary Approach to the Balance of Payments", Allen and Unwin, London.

7 A confirmation of this is also provided by D. Himarios (1986) : "Administered Interest Rates and the Demand for Money in Greece under Rational Expectations", Weltwirtschaftliches Archiv, Band 22, Heft 1.

The results confirm that Greece's balance of payments difficulties are related to its inflation performance during the post-1972 period. The lagged pattern of inflation suggests that the money demand adjusts sluggishly to inflation, perhaps reflecting sluggish expectations formation, but also past monetary expansion. Inflation induces substitution of foreign money and foreign goods for domestic money and this requires financing by the central bank, leading to severe reserve losses. The growth of permanent income raises the demand for money, and changes in the lending rate, which affect negatively the demand for money, affect also negatively the demand for foreign money; a one percentage point increase in the lending rate raises reserve holding by USD 86 million. Finally, the growth of domestic credit, ceteris paribus, causes a direct drain on the country's reserves.

Greece's balance of payments experience confirms the predictions of the monetary model. The principal conclusion from this analysis is that the external disequilibrium has been principally related to excessive monetary growth, itself associated with the fiscal expansion of the 1980s. The results show that only with responsible financial policies will Greece's balance of payments strains be alleviated and the country's external adjustment will take place without exchange market difficulties.

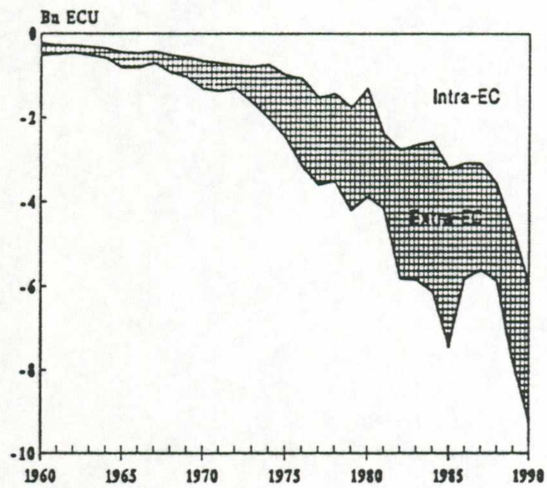
3. The Pattern and Composition of Greece's Commercial Trade

3.1 The Composition of Greece's External Trade

Greece's trade over much of the period since the 1960's has been characterized by imports of goods intensive in technology and human and physical capital, and exports of labour and land intensive goods. This pattern is characteristic of all the geographic distribution of its trade, that is, both with the Community and with the rest of the world. However, there has been a notable shift in the share of manufactures (SITC 6 and 8) in Greece's exports which rose to account for as much as 54% in total exports in 1988, up from around 5% in 1960. Over the period since the beginning of the 1970s the trade balance has followed a trend deterioration, peaking at some ECU 9.2 billion in 1990. There was a temporary reversal of this trend during the 1985/87 stabilization period, but once the programme was abandoned the trend resumed. Graph 2 shows the composition of the trade deficit. It is apparent that the extra-EC contribution to the deficit has risen since the early 1970s, reflecting the importance of fuel imports. However, Greece's trade deficit with the rest of the Community has also widened in recent years.

Indeed, the share of the trade deficit recorded with the Community in 1970 was 49.6% of the total trade deficit recorded that year; in 1990 this has risen to 63.8%. Also, in 1982, a year after Greece's entry into the Community, its inter-EC trade deficit represented 47.5% of the total trade deficit, virtually the same as in 1970. These data suggest that membership in the Community has been accompanied by a widening of Greece's trade deficit.

Graph 4: Intra-EC and Extra-EC trade deficits



Source: Commission Services

Another noteworthy feature of the data is the fact that the level of the merchandise trade deficit rose sharply in the 1980s compared to the previous two decades. Graph 4 indicates that the deterioration commenced immediately after the first oil shock, but in the 1980s the deficit grew rapidly. Its average value relative to GDP in the period 1971/80 is -14.9%; in the following ten years it reached a mean value of -16.3%, a full 1.4 points increase. Factors underlying this are probably the deterioration in the country's international competitiveness during this period, as well as the rapid growth in nominal demand which ultimately spilled over into the external accounts.

Table 5: The Composition of Greece's Trade Deficit (percent of total trade deficit)

	1970	1975	1980	1985	1987
SITC group					
2: Crude Materials	4.3	7.1	5.5	4.3	5.3
3: Fuel Products	9.7	30.5	31.2	43.5	21.0
5: Chemicals	8.5	10.8	10.1	12.2	18.9
6: Manufactures+	9.4	2.8	3.6*	5.5	15.0
7: Machinery and Transport	70.0	59.7	68.6	40.3	46.3

\+ includes textile products, paper, rubber, metal manufactures, etc. See Eurostat: "External External Trade: Glossarium 1990", for the product composition of these groups; *surplus
Source: Commission services

The emergence of an increasing trade deficit with the Community, for a given level of trade imbalance, which developed in the 1980s probably reflects the presence of substantial trade diversion effects associated with membership in the EC. Trade diversion and trade creation are two important elements when countries form a customs union; the former refers to the displacement of traditional competitive suppliers by the union members in a country's trade, and the latter refers to the expansion of trade between the members as a result of the customs union when inefficient domestic production becomes unprofitable and contracts; there is, in addition, the possibility of trade erosion when inefficient domestic production displaces imports from third countries as a result of the customs union[8]. The evidence from the experience of Greece suggests that significant net trade diversion effects have been present. In particular, Plummer shows that net trade diversion has been significant in some agricultural trade, and in trade in manufactures[9]; it is likely, therefore, that static efficiency of the Greek economy, and of the Community economy encompassing Greece, has fallen in the 1980s as a result of this factor.

Greece's trade deficit is dominated by its deficit in high technology, human capital intensive goods such as chemicals, manufactures, and machinery and transport equipment. Since the time of the first oil shock large deficits in fuel products have also emerged. Thus, in 1970 the trade deficit was dominated by net imports of machinery and transport equipment (70% of the total), followed by manufactures and by fuel products. In 1975, as shown in Table 5, the fuel products deficit had risen to 30% of the total deficit and it continued at that level until the beginning of the 1980s. There was another sharp increase in the ratio of the fuels to total merchandise deficit up to the middle of the decade, but subsequently this has declined, reflecting principally the collapse in oil prices in 1986; this ratio was 21% in 1987.

On the other hand, the deficit in chemical products has been widening and increasing in importance in the overall trade deficit; in 1987 it had risen to around 19%, up from 8.5% in 1970 and 10.1% in 1980. The importance of the deficit in SITC category 6, manufactures, has fluctuated from a surplus in 1980 to a large deficit amounting to 15% of the total in 1987; prior to 1980 this ratio had been around 10%. Plummer has found substantial trade diversion effects in manufactures following Greece's membership in the Community[10].

The evolution of these balances is a reflection of the character of the products dominating Greece's exports and imports. In an earlier study on competitiveness and market share growth, manufactured products were disaggregated into

8 For a survey of these issues, see M. Corden (1975) : "The Costs and Consequences of Protection : A Survey of Empirical Work", in P. Kenen (ed.) : "International Trade and Finance : Frontiers for Research". Cambridge University Press, New York.

9 See M. Plummer (1991) : "Ex-Post Empirical Estimates of the Second Enlargement : The Case of Greece", Weltwirtschaftliches Archiv, Band 127, Heft 1. The net trade diversion is estimated to amount to 4.4% of total trade. Plummer attributes the large estimates of trade diversion following Greece's membership to four factors : the changes in relative prices as a result of the formation of the customs union; the deterioration of the Community's Generalized System of Preferences following the accession of newly industrializing countries; structural changes in the CAP aimed at promoting self-sufficiency; and other changes such as increased tendencies to trade intra-Community and the increase in non-tariff protection of basic industries.

10 See Plummer (1991) : op.cit., Tables 1 and 2

Table 6: Greece's Foreign Trade Patterns, 1964-88 (in volumes, annual percentage change)

	1964-70			1971-80			1981-88			1964-88		
	World	EC-11	RoW(4)	World	EC-11	RoW	World	EC-11	RoW	World	EC-11	RoW
Imports												
Agriculture, Fisheries	4.6	3.4	5.0	9.8	8.4	11.0	7.3	34.0	1.9	7.5	15.2	6.4
Energy products	12.4	25.0	11.2	7.2	-7.3	9.1	-2.1	7.2	-2.1	5.7	6.4	6.1
Manufactured products	10.9	9.4	13.6	5.4	5.5	5.9	3.8	6.8	0.5	6.4	7.0	6.3
- Weak demand(1)	6.4	6.6	11.4	5.0	5.8	6.5	7.9	10.9	-1.5	6.3	7.7	5.3
- Mean demand(2)	14.3	11.0	19.1	6.2	6.3	7.4	2.0	6.6	-2.4	7.1	7.7	7.6
- Strong demand(3)	9.6	10.1	8.4	5.6	5.1	7.1	4.7	4.4	5.8	6.4	6.3	7.1
Total Imports	10.6	10.0	11.4	5.5	4.7	6.5	2.3	7.2	-1.5	5.9	7.0	5.3
Exports												
Agriculture, Fisheries	3.5	4.6	3.3	2.1	0.6	4.6	5.9	14.7	-2.1	3.7	6.2	2.1
Energy products	34.4	44.2	35.1	94.9	207.8	43.7	11.4	37.9	3.4	51.2	107.6	28.4
Manufactured products	22.5	27.8	17.4	12.3	10.4	4.6	1.6	5.4	-2.8	11.7	13.6	10.0
- Weak demand(1)	29.2	34.4	24.0	14.4	13.8	16.2	3.7	6.0	0.3	15.1	17.1	13.3
- Mean demand(2)	15.3	20.3	11.3	8.5	4.4	13.0	0.1	8.1	-5.8	7.7	10.1	6.5
- Strong demand(3)	40.6	48.3	35.0	15.2	11.1	19.9	-5.4	-3.0	-6.4	15.8	17.0	15.7
Total Exports	13.1	16.1	10.6	11.8	11.1	12.9	2.2	6.4	-2.4	9.1	11.0	7.4

(1) Weak demand : Ores and metals, non-metallic minerals, metal products, textiles and clothing, leathers, skins and footwear, wooden products and furniture, other manufacturing products.
(2) Mean demand : Agricultural and industrial machinery, motor vehicles, other transport equipment, food products, paper and printing products, rubber and plastic products.
(3) Strong demand : Chemical products, office machines, electrical goods.
(4) RoW: rest of the world
Source : Commission services

those which were subject to weak, moderate, and strong demand[11]. The disaggregation was made on the basis of the growth in the demand for these products over the period 1978-82. In order to extend the data set and to encompass Greece's experience over the past decade, and also over the period since the early 1960s, the same classification is adopted in Table 6 where, in addition, the growth of demand for other product groups is presented. Three points stand out : first, in the period prior to 1981 Greece's exports in the strong demand category rose rapidly but in the 1980s growth has been negative, and a similar pattern is also occurring on the import side; secondly, the growth of primary and energy products has dominated the performance of exports particularly in the 1980s and, on the import side, they have maintained a stable growth rate; thirdly, Greece's exports to the rest of the world have registered declines in the 1980s, and imports have also followed a parallel pattern. The data from this table suggest that Greece's prospects for gaining from the completion of the internal market are very limited as long as the existing pattern of specialization is maintained.

3.2 Factors Affecting the Trade Balance

Since the evolution of the trade deficit reflects domestic relative to international demand and supply conditions it is important to examine some formal empirical evidence on the corresponding contribution of these factors. The model used is based on the hypothesis that the long-run level of the trade deficit is an increasing function of the level of trend GDP in Greece relative to the rest of the world; and a decreasing

11 See the studies published in European Economy, no. 25, September 1985, for a full discussion of the aggregation procedure and the results concerning European industries. Using the aggregation methodology to construct data outside the base period implies that the product mix combined in the three categories of demand has not changed. This is a reasonable assumption to make.

function of relative supply potential of these economies approximated by the ratio of gross investment in Greece to the EUR-12 investment[12]. Other factors postulated to affect the level of the trade deficit are (changes in) the real rate of interest in Greece relative to the real rate of interest abroad, reflecting relative scarcity of capital and/or the relative stance of monetary policy; this variable is constructed using the lending rate (3 to 6 months) for business and the CPI for Greece, and the Federal funds rate, and the CPI in the US; it is assumed that the trade deficit is decreasing function of this variable. Also, the relative real unit labour costs for the total economy in Greece and in 20 industrial countries is used as an index of competitiveness; it is assumed that the trade deficit increases with this variable.

Since Greece's intra-EC trade was liberalized after accession to the Community, and its extra-EC trade continues to be subject to various barriers, the level of international reserves may be a factor rationing the flow of imports. It is assumed here that, ceteris paribus, the trade deficit is an increasing function of the level of international reserves[13]. Finally, the GDP gap of Greece relative to that of the Community excluding Greece, and the growth of real GDP in Greece relative to that of Canada, Japan and the USA are additional, cyclical, variables in which Greece's trade deficit is postulated to be increasing. The equation has the following general form[14] :

TRADE = f(ULC, REALR, GDPGAP, TRENDGDP, RESER, GREUS, INGEUR) (5)

with the following restrictions :

$f_1, f_3, f_4, f_5, f_6 > 0$

$f_2, f_7 < 0$

where

TRADE = trade deficit in $US (IFS line 77acd)

ULC = real unit labour cost in total economy, Greece relative to 20 industrial countries, 1985 = 100 (Commission data)

REALR = change in the real interest rate in Greece minus real interest rate in the US; lending rate (IFS line 60p) and CPI inflation (IFS line 64) and, for the US the Federal Funds rate (IFS line 60b) and the CPI inflation (IFS line 64)

GDPGAP = difference between actual minus trend GDP as percent of trend GDP in Greece and in EUR-11 excluding Greece (Commission data)

TRENDGDP = trend GDP in Greece relative to trend GDP in EUR-11; trend GDP is the fitted value of actual real GDP on a time trend (Commission data)

RESER = level of international reserves excluding gold (IFS line 71d) converted into USD with the USD/SDR end of period rate.

GREUS = growth of real GDP in Greece relative to growth of real GDP in Canada, Japan, and the USA (Commission data and WEFA databank, respectively)

INGEUR = ratio of gross fixed capital formation to GDP in Greece relative to that in the Community (EUR-12) (Commission data).

12 For a discussion of the supply behaviour of export-oriented firms see P. Boothe (1983) : "The Investment Supply Response of Traded-Goods Industries", Technical Report no. 37, Bank of Canada, June.

13 For a discussion of this issue see E. Leamer and R. Stern (1970) : "Quantitative International Economics", Aldine Publishing Company, Chicago.

14 This equation is essentially the reduced form of a three-equation model explaining nominal exports and imports, and their balance; alternatively, it is also equivalent to a reduced form of a five-equation model explaining the volume and price of exports and imports and their balance. The price and exchange rate effects are here proxied by the index of the real exchange rate, ULC. Clearly, a disaggregated model would provide richer insights into the determinants of Greece's volume and price of exports and imports. On the other hand, equation (5) provides a direct summary of the stylised facts of the trade balance according to its postulated determinants.

A regression of the trade balance in real terms, TRADER, against the same independent variables, with the exception of the real unit labour costs in total economy replaced by the one in manufacturing, yields the following OLS estimates:

$$\begin{aligned} \text{TRADER} = & -38.5 + 4.49 * \text{UCL} - 11.21 * \text{REALR} - 11.13 * \text{REALR}(-1) \\ & (0.63)\ (2.76) \qquad (2.24) \qquad (2.16) \\ & +0.04 * \text{GDPGAP}(-1) + 27.29 * \text{TRENDGDP} - 0.14 * \text{GREUS} \\ & (2.18) \qquad (2.23) \qquad (0.96) \\ & +0.21 * \text{RESER} - 7.51 * \text{INGEUR}(-1) \\ & (5.48) \qquad (2.18) \end{aligned}$$

$\overline{R2} = 0.89$; DW = 2.00; Rho = 0.59 (3.20); n = 1962-1990

(Absolute t-statistics in parentheses; the variables are defined in the text).

It is evident that the hypothesised determinants of Greece's trade balance are virtually all supported by the data. However, compared to the results reported in Table 7, the coefficients in this equation are, naturally, different.

Table 7: Determinants of the Trade Deficit of Greece

Constant	-15625.6
	(2.36)
Relative real unit labour costs	64.91
	(2.68)
Real interest rate differential	-182.37
	(3.04)
Real interest rate differential (-1)	-96.22
	(1.45)
Relative GDP gap (-1)	0.335
	(1.62)
Relative trend GDP	44.590
	(4.34)
GREUS real growth differential	1.981
	(1.18)
Level of international reserves	2.375
	(6.99)
Investment ratio (-1)	-73.505
	(2.12)
$\overline{R2}$	0.90
DW	1.60
n	1962-1990

Absolute t-statistics in parentheses; DW is the Durbin-Watson statistics; n is the sample

The equation was estimated in a linear form by OLS over the sample 1962-1990, and the results are shown in Table 7. The equation fits the data very well with 90% of the variation in the trade balance explained by the postulated variables. All coefficients are signed according to priors, and there is no evidence of mispecification as indicated by the DW statistic.

The estimated coefficients of the equation should be interpreted as partial derivatives indicating the effect on the dependent variable of a change in the independent variable, ceteris paribus. The results suggest that, among the determinants of Greece's trade deficit, a one percent widening of Greece's output gap relative to that in EUR-11 would cause the dependent variable to deteriorate by around USD 34 million. Deviation of Greece's trend GDP from Community trends would cause the deficit to widen by USD 45 million, while a smaller (USD 4 million) contribution to the deficit is suggested by the coefficient of Greece's growth performance relative to Canada, Japan, and the US. A sizeable (USD 65 million) deterioration arises from competitiveness losses as well, and small improvements are suggested by the coefficient on the interest rate differential. Finally, the supply variable indicates that the ratio of Greece's investment share in EUR-12 has a restraining influence on the country's commercial deficit; indeed, a one percent increase in the ratio of Greece's investment spending relative to the Community ratio would cause the trade deficit to narrow by USD 74 million.

The importance of the relative investment performance in Greece's trade deficit indicates that gains in international trade, recorded as trade balance improvements, will require an increase in the rate of capital accumulation. It could be argued that investment expenditures and competitiveness are the two factors among the independent variables over which government policy can exercise some beneficial influences which will spill over to the country's external accounts. The lack of investment dynamism, and the parochial specialization which is highly correlated with it, underlie much of the behaviour of the trade deficit. Should the investment climate of the 1980s continue to characterize the 1990s, Greece will be unable to exploit the emerging opportunities in a closely integrated Community.

4. Greece's Revealed Comparative Advantage

Greece's trade pattern has evolved over time both in response to the increased openness of the economy and reflecting the country's changing demand patterns and changes in its comparative advantage. As seen in the previous section, the pattern of specialization has been particularly affected by Greece's membership of the Community. The evolution of trade patterns over time reveals changes in factor supplies, changes in preferences, and the emergence of new products in which a country can exploit a comparative advantage. In the present section commodity trade data are reviewed in order to illustrate changes in the character of Greece's specialization. The evidence from trade performance suggests that there have been some significant gains in certain commodity categories particularly in the 1980s, but also that significant losses have taken place.

The evolution of Greece's comparative advantage can be examined from data on the country's observed commodity composition of trade. This is a revealed comparative advantage since it is only a manifestation of the deeper parameters of production and preferences which, of course, are not possible to ascertain. The index of revealed comparative advantage used here is that proposed by Balassa and Noland[15] and is defined as follows :

$$h = (X_{ij}-M_{ij})/(X_{ij}+M_{ij}) \qquad (6)$$

$$-1 \leq h \leq 1$$

where

X = exports

M = imports

i = commodity i index

j = country j index

The index takes a value of one when the country does not import commodity i, and a value of -1 when it does not ex-

15 See B. Balassa and M. Noland (1989) : "The Changing Comparative Advantage of Japan and the United States", Journal of Japanese and International Economies, June.

port commodity i. Negative values of the index suggest that the country has a trade deficit in commodity i; positive values indicate a trade surplus. It is worth noting that while it is possible that the country could have a comparative advantage in commodity i, this is not sufficient that it will also have a trade surplus in this commodity; for this to happen, world demand for the commodity must exceed domestic demand. Therefore, the results from this index should be interpreted with this caveat in mind.

Data for eight commodity categories were obtained from Eurostat. The data have been disaggregated into trade with other Community countries (EC-11 over the period examined) and with the rest of the world (RoW). They distinguish the commodity groups shown in Table 8 where the index of revealed comparative advantage is presented. The period examined is 1965 to 1988, sufficiently long to indicate any changes in apparent comparative advantage of the country. The level of aggregation (one-digit SITC) is perhaps less informative than a higher level would be but, also, probably sufficient to shed light on the question.

Greece joined the EC in 1981 and this represents a natural date to break the sample. The results show some radical changes which have taken place over the period in Greece's trade. Greece is rapidly developing a comparative advantage in the miscellaneous manufactures category, both against the EC-11 and against the rest of the world. This category is composed of furniture, travel goods, clothing, footwear, building supplies, etc.[16] and is mostly income elastic. Greece has a comparative advantage in the oils, fats and waxes (SITC 4) category. Indeed, this is the country's most important trading advantage in the Table. This has been strengthening over the twenty three years under examination. Another category where Greece has a comparative advantage is beverages and tobacco (SITC 2). Here the country has been experiencing some erosion of its comparative advantage particularly through competition from other EC countries.

Greece in the 1980s reveals pronounced comparative disadvantages against the EC-11 in SITC 5-7, but against the rest of the world it has a comparative advantage in manufactures. Furthermore, the index showing a disadvantage in manufactures improved substantially in the 1970s but a deterioration occurred in the 1980s. This happened because the gains made against the EC-11 in the 1970s were sharply reversed in the following decade. Finally, there appears to have been a peculiar evolution in the food category. While the country made gains in this category in the 1970s, a sharp deterioration against the EC-11 emerged in the 1980s which, despite the continuing gains made against the rest of the world, was sufficient to reverse the country's overall comparative advantage to the level of the pre-1970 years. This development is related to the Common Agricultural Policy.

The data examined in Table 8 suggest that Greece's trade in the 1980s has continued to take place along traditional lines of specialization. Indeed, the values of the index are indicative of the fact that Greece's exports differ significantly from its imports, or that its specialization is inter-industrial rather than intra-industrial[17]. Such specialization is also indicative of the fact that Greece's economic structure differs substantially from that of the Northern European Community countries and, in particular, from the character of trade taking place among the more advanced industrial member states. Conversely, the heterogeneous composition of Greece's imports and exports constitutes an indicator of divergence.

Table 8: Greece's Revealed Comparative Advantage

	1965-70			1971-80			1981-88		
	World	EC-11	RoW	World	EC-11	RoW	World	EC-11	RoW
0 : Food	-0.16	0.20	-0.40	0.04	0.28	-0.14	-0.13	-0.22	0.11
1 : Beverages and Tobacco	0.98	0.95	0.99	0.86	0.71	0.96	0.48	0.15	0.86
2 : Crude Materials	-0.23	0.05	-0.33	-0.29	0.10	-0.46	-0.31	0.01	-0.48
3 : Fuel Products	-0.92	-0.87	-0.93	-0.64	0.27	-0.80	-0.69	0.21	-0.79
4 : Oils, Fats and Waxes	0.36	0.57	-0.08	0.32	0.27	0.40	0.67	0.64	0.82
5 : Chemicals	-0.69	-0.77	-0.51	-0.57	-0.73	-0.16	-0.67	-0.85	-0.25
6 : Manufactures	-0.45	-0.49	-0.38	0.03	-0.12	0.09	-0.13	-0.31	0.17
7 : Machinery and Transport Equipme	-0.99	-0.99	-0.96	-0.93	-0.97	-0.88	-0.89	-0.93	-0.83
8 : Miscellaneous Manufactures	-0.55	-0.69	-0.33	0.17	0.20	0.11	0.31	0.34	0.22

Source: Calculated from Eurostat :" External Trade", Yearbook 1989, Table 7.
RoW: rest of the world.

16 See Eurostat : "External Trade : Glossarium 1990", for the composition of the SITC categories used.

17 If the traded goods are close substitutes index h would take the value of zero, or the Grubel-LLoyd coefficient would be close or equal to unity. See H. Grubel and P. Lloyd (1975) : "Intra-Industry Trade in Manufactures : Theory and Measurement of International Trade in Differentiated Products", McMillan, London.

5. Concluding Comments

The pattern of Greece's trade in the 1980s raises some important questions about the country's prospects in an integrated commercial European space. Clearly, specialization along inter-industry lines is a reflection of exploitation of advantages conferred by static factor endowments which, in Greece's case, is physical labour. On the other hand, intra-industry specialization reflects the gains from dynamic developments in the country's comparative advantage. The latter is determined by technology, human capital accumulation, new investment, and the development of new products. As the evolution of the trade pattern (Table 6) indicates Greece does not appear to be competitive in these respects, and this is an issue for concern. Greece's comparative disadvantage in these sectors is a sign of technological backwardness and lack of market power. Since these products are highly income elastic, it is possible that the country will not benefit to any substantial extent from the completion of the internal market. If the trends of the 1980s are not reversed it is possible that Greece's specialization along its traditional comparative advantage will lead to its marginalization in a larger trading Community.

A key factor behind these developments is the dismal investment performance of the last ten years, itself associated, among the other things, with misallocation of resources within the public sector. Investment spending is correlated with innovation and superior supply performance, and it is an important contributor to the strength of a country's external trade; Greece is no exception to this. However, domestic private investment expenditure has been clearly inadequate to accelerate the pace of modernization, and foreign direct investment has been very small. The distortions in the allocation of resources and the disincentives introduced by the variety of regulations and government interventions have reduced the country's potential to innovate and have reinforced the traditional pattern of specialization. Finally, it is possible that the country's educational and technical competence is not commensurate to the requirements of a changing competitive world. If these trends are not reversed, Greece will likely not be able to catch up with the rest of the Community, continuing to depend on Community transfers to finance its balance of payments deficits.

Greece's balance of payments difficulties of the 1980s are closely related to the unsustainable financial policies pursued during this period. The fundamental determinant of a smooth external adjustment is prudent financial policies; these have been absent from Greece's macroeconomic policy choices in the 1980s. The stylized facts indicate that inflationary trends since the early 1970s explain a major part of the pressure on the country's international reserves; these trends characterized Greece's macroeconomic performance since the failure to adjust to the first oil shock followed by the fiscal expansion of the 1980s. It is clear that no balance of payments assistance will be adequate if the fundamental policy divergence of Greece from the rest of the Community is not contained and reversed. In the absence of adjustment, Greece's external financial relations will continue to be characterized by vulnerability to shifts in expectations, particularly with respect to invisibles flows. In addition, as financial integration proceeds, Greece will need to maintain high interest rates and wide differentials against the rest of the international community simply to offset the incipient depreciation of the drachma associated with divergent policies. Finally, under these circumstances, the process of financial adjustment to the European area will continue to encounter difficulties, and participation in the ERM and in the monetary union would not be possible.

Country Studies

See also Economic Papers No.79 (The United Kingdom), No.81 (The Netherlands) and No.82 (Belgium).

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