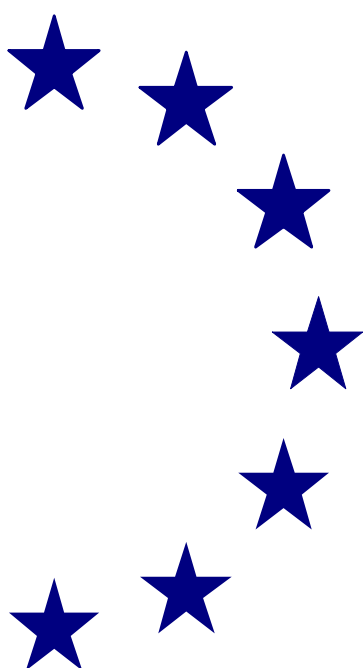


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**The Portuguese economy after the
boom**

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Editorial

The European Commission's Directorate-General for Economic and Financial Affairs regularly monitors economic developments in the Member States as part of its general duties. Out of this work, occasionally a more in-depth analysis of an individual country is published. The study on Portugal presented here takes the form of a working paper. This means that it does not reflect the official position of the European Commission but mirrors exclusively the views of DG ECFIN.

The study is subdivided into five chapters. A first chapter, written by J. Medeiros, presents stylised facts about economic developments in Portugal since the mid-1990s. The second chapter, written by K. Pichelmann, analyses developments in the Portuguese labour market. The issue of productivity growth, competitiveness and innovation is addressed in the third chapter, which was written by G. Garnier and A. Dierx. The fourth chapter deals with the Portuguese financial system and was written by M. Suardi. The final chapter, written by J. Medeiros, discusses options for economic policy. The executive summary was contributed by G. Busch and P. Weiss.

The overall co-ordination of the study lay with J. Kröger and P. Weiss. They are grateful to W. Roeger for various simulations with QUEST II, to S. Berrigan and M. Watson for helpful comments and to M. Van de Stadt for editorial assistance.

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Executive summary

Economic developments in Portugal have been uneven since the middle of the 1990s, when the country, having coped with the challenges of accession to the EU, set out to prepare for early membership in EMU. GDP growth in the latter part of the past decade, at almost 4% per year, was one of the highest in the Community, exceeding the average rate by 1.2 percentage points. Thereby, the catching-up process towards income and welfare levels of the more advanced EU economies gained fresh momentum, after having stalled in the years before. Simultaneously, inflation continued to decelerate swiftly towards the EU average, the remaining gap deemed warranted for an economy on the fast track of expansion, while unemployment kept its traditional moderate level. However, in the late 1990s large imbalances built up, notably a sharp rise in the net borrowing of the economy which became a major cause for concern.

Starting in early 2001, growth dwindled and the economy slipped into recession in late 2002. In 2003, GDP is estimated to have fallen by $\frac{3}{4}\%$, almost the weakest performance among EU Member States. Falling output growth has also brought Portugal's labour market into rough waters, taking its toll in the form of employment losses and a rapid increase of unemployment. Moreover, inflation remained significantly above the euro area average. Most seriously, however, the general government deficit rose to $4\frac{1}{4}\%$ of GDP in 2001, forcing the government to take a wide array of permanent and one-off measures to bring it down below the Treaty reference value of 3% in 2002.

The recent developments of the Portuguese economy seem to be in contrast with the expectations that were harboured at the start of EMU. Indeed, EMU is expected to have a significant positive level effect on economic welfare in Portugal, associated with the decline in interest rates (both nominal and real) and the effective elimination of liquidity constraints. On the supply side, this should be reflected by a more efficient long-term allocation of the resources of the economy, thereby raising its productive potential. However, in order to reap these permanent gains the economy needs to adjust to the regime change brought about by EMU which may take time to materialise. So far, while the adoption of the euro gave a significant boost to domestic demand, the supply side has not yet adjusted to the extent hoped for. As a result, the deficit in the external account saw a dramatic rise in the period between 1998 and 2002 and a reversal of this process has only recently set in.

This paper highlights the adjustment process in the early years of EMU. It argues that the easing of monetary conditions implied by the convergence of interest rates towards lower levels abroad and the imminent elimination of the exchange rate risk in the context of the run-up to EMU led to a sharp upward revision of expectations by private agents as to their permanent income and financing capacity. Both households and companies increased their spending by taking on new debt. As a result, over the period between the mid-1990s and 2002, the indebtedness of the

household sector and of the non-financial enterprise sector more than doubled in per cent of GDP. At the same time, the elimination of the exchange rate risk eased the constraints of the Portuguese banking sector with regard to the external financing of its domestic credit operations. In order to bridge the gap between credit demand and domestic supply the commercial banking sector availed of this option extensively, bringing its net asset position from near-balance in 1995 to a debtor position amounting to about one-third of GDP in 2002.

For a long time, the non-sustainability of the path of debt accumulation of households and non-financial enterprises was masked by lively economic activity and the sharp fall in interest rates, keeping the debt service burden as a proportion of incomes down. Partly for this reason, domestic stabilisation policy (both incomes and fiscal policies) did not properly counteract the easing of monetary conditions. On the contrary, these policies were markedly pro-cyclical. Particularly, in an already tight labour market, wage pressures mounted. Over the period 1995-2002, nominal wages per capita rose by 6 ¼ % p.a., twice as fast as the EU average. Moreover, rapidly rising public expenditure, facilitated by lively tax revenues and falling debt service cost, stimulated employment creation and wage increases in the government sector. Combined, these two factors drove up the government wage bill, which reached a staggering 15% of GDP in 2002, compared with an EU average of around 10%.

The sharp rise in labour costs was not supported by equivalent advances in labour productivity. Since the mid-1990s labour productivity growth in Portugal has been on a declining trend, falling behind the EU average from 2000 onwards. While the sharp drop in labour productivity from 2000 onwards is partly due to the cyclical downturn, its rather moderate longer-term performance can be explained partly also by sectoral developments in the economy. In particular, the agricultural sector, which retains a comparatively high share in the total economy, has been characterised by low productivity growth. Moreover, due to its declining share in the economy the manufacturing sector, which has exhibited relatively high productivity growth, contributed relatively little to overall productivity growth. Conversely, the services sector, which increased its share in the overall economy markedly, showed very moderate increases in labour productivity.

More crucial underlying causes of the slow productivity growth of the total economy are various structural characteristics. In particular, the level of education of the labour force, investment in R&D/innovation and ICT penetration remains low in comparison with other EU Member states. For this reason, and in spite of a gradual shift towards more ICT producing activities, Portugal remains still highly specialised in low intensive ICT using industries where productivity growth is relatively slow.

High wage increases and low productivity growth resulted in a sharp increase in unit labour costs and, together with the shift of productive resources from the private to the government sector, undermined the external competitiveness of the Portuguese economy. In combination with the buoyancy of domestic demand this resulted in a weakening of the external account from a balanced position in the mid-1990s to a

deficit of around 10% of GDP in 2000, leading to a sharp increase in external indebtedness of the financial sector.

Increased private-sector demand for credit was a predictable response to expectations of higher permanent income, which derived from progress in convergence and the new macro-economic framework in EMU. However, the accumulation of positive financial and real shocks to the Portuguese economy within a relatively short period may well have taken this process too far. At the end of the 1990s, both household and corporate borrowers were induced to reassess their financial position. By this time, the stock of private-sector debt had vastly increased, the effect of falling interest rates had waned and the adjustment in the stock of housing and durable goods was well advanced.

The adjustment of financial imbalances began in 1999/2000 via a retrenchment of private sector expenditure and higher savings. This private-sector adjustment combined with a substantial public-sector consolidation led to a sharp deceleration of domestic demand growth and, by late 2002, the economy slipped into recession. However, there seems little immediate risk to the financial system, with the banks profitable and having sound solvency ratios. Despite the existence of a number of factors adding to banks' risk exposure, notably the concentration of lending in the real-estate sector, the buffers accumulated by banks during the 1990s in combination with the tightening of regulatory and supervisory standards in recent years contributed to the stability of the financial system.

The financial sector has thus played a pivotal role in the evolution of the Portuguese economy over the review period, fuelling the initial acceleration in growth. Being well-capitalised and having been progressively liberalised since the mid-1980s, the banking system was equipped to support the sharp expansion in private-sector credit which accompanied the process of nominal and real convergence associated with euro adoption.

Looking ahead, for the imbalances to unwind and sustainability to be restored, private agents and public authorities alike have to re-adjust their balance sheets, bringing spending more in line with current revenues. On both accounts, the process of consolidation is under way, to the effect that the deceleration of growth in the last three years has been sharper than elsewhere. Domestic demand will trail output growth for still some time, such that the recovery relies heavily on stronger activity abroad and the revival of export growth.

As a consequence, in order to speed up the adjustment process it is necessary to enhance efforts to boost external competitiveness, most importantly via wage moderation. The chances for progress in this regard are favourable, as the labour market and wage formation have been shown to be rather flexible and responsive to market forces and constraints. Even in the government sector, the widespread use of fixed-term work contracts allows employment to be adjusted rather quickly. Moreover, since the role of wage leadership seems to be with the public sector,

restraint in government wage rises will be crucial. More generally, there can be little doubt that supply side flexibility, in particular in the labour market, will have to lie at the core of a successful recovery process and a medium term increase in potential growth.

More fundamentally and in a longer-term perspective, Portugal should not seek its comparative advantage by betting on a low-cost strategy. First, with the accession of the central and eastern European Member States to the EU, prospects for being successful in this regard are poor. Second, such a strategy would run counter to Portugal's key economic policy goal of catching up towards the most advanced economies.

Economic policy, therefore, needs to concentrate on efforts aimed at boosting the structural competitiveness of the economy. In this regard, an improvement of the country's human capital base is paramount. This study has pointed to serious shortcomings in the education system. While Portugal spends rather more on public education than countries of comparable level of development, such spending is inefficient to a considerable degree, as the sector is over-staffed and, in spite of some progress achieved, the educational attainment of the population remains comparatively low. If better-qualified labour in greater number became available, Portugal would also regain its former attractiveness with foreign investors who have turned away somewhat from the country over the last years. As a consequence, efforts must continue on a wide front to improve education and training systems and, in particular, to increase the quality of schooling and tertiary education programmes. The number of early school-leavers with insufficient levels of schooling or training should be substantially reduced. In parallel, a broad-based upgrading of skills and competencies of the workforce appears indispensable as well.

Finally, in order to underpin the necessary budgetary consolidation and enhance the growth potential of the economy, Portugal needs to embrace structural reform on a broad front. To this end, the government has adopted an ambitious programme of structural reform covering all major policy areas and taking up many recommendations addressed by the Commission in the context of the Broad Economic Policy Guidelines. The programme addresses the major requirements for Portugal to become a dynamic economy resilient to external shocks. It should be implemented with determination and vigour.

Failure to complete the process of fiscal consolidation is one of the major risks facing the Portuguese economy. The necessary reduction of the government deficit will require major efforts. Since interest rates in Portugal have converged to the lower levels abroad, no additional gains on nominal convergence can be expected. These gains were instrumental for the reduction of the deficit in the 1990s as witnessed by the dramatic decline in interest expenditure from 8.6% of GDP in 1990 to 3.0% in 2002. Moreover, the debt-to-GDP ratio in 2002 was at a level similar to that registered in 1990 (58.1% and 58.3% respectively), meaning that a golden

opportunity has been lost to reduce significantly the debt ratio before the impact of demographics sets in, which is expected to occur already in the present decade.

Given the present general government deficit and the limited progress accomplished so far in curtailing growth in current expenditure through the implementation of structural reforms, especially the absence of progress on curbing growth in pension expenditure, the intertemporal sustainability of public finances in the face of the oncoming demographic shock is yet far from being secured. This means that public pension schemes will very likely be subject to further reforms.

Chapter 1: Overview of the Portuguese economy

1.1 Introduction

1.1.1 Progress in real and nominal convergence since the 1960s

Since the 1960s, the Portuguese economy has made significant strides in terms of real convergence. This has coincided with its membership of major international organisations (EFTA in 1959, and the GATT in 1962), reflecting the strategic option of opening-up the economy, thereby bringing to an end a period of economic stagnation characterised by autarkic policies and limited competition (Freitas, 2002).

This opening-up of the economy has accelerated with EU accession in 1986 and the decision to join EMU from its outset in 1999. Adoption of the *acquis communautaire* and the decision to join the ERM represented a significant disciplinary device (Cunha and Martins, 2001) by exerting "virtuous pressure" on domestic policies.

These changes in the policy framework have contributed to a remarkable process of real and nominal convergence. Indeed, since joining the European Union in 1986, Portugal has enjoyed one of the highest growth rates in the EU. Using purchasing power standards (PPS), GDP per head increased steadily from 55.4 % of the EU average in 1986 to an estimated 68.8 % in 2002. This corresponds to an annual rate of convergence of 1.3%, compared with 3½ % for Ireland, 0.9 % for Spain, and 0.1% for Greece (Table 1.1). What is more, this process of real convergence has been accompanied by a successful disinflationary process (Table 1.2).

Table 1.1: Real convergence

	Greece	Spain	Ireland	Portugal
GDP per capita in 1960 in PPS (a) relative to EU-15	44.8	60.8	64.7	40.5
Annual rate of real convergence in 1960-2002	0.9	0.8	1.5	1.3
Annual rate of real convergence in 1986-2002	0.1	0.9	3.5	1.4
GDP per capita in 2002 in PPS relative to the EU-15 (b)	66.4	84.6	123.1	68.8

(a) PPS (purchasing power standard) is a measure of purchasing power parity calculated by Eurostat using the methodology established by the UN International Comparison Project.
 (b) Preliminary data for 2002.

Source: Ameco.

Table 1.2: Private consumption deflator (% p.a.)

	Greece	Spain	Ireland	Portugal	EU-14 (a)
1970-79	12.0	14.0	13.4	15.4	10.7
1980-89	19.3	10.1	8.7	18.2	8.2
1990-99	10.8	4.5	2.8	6.0	3.6
2000	3.3	3.2	4.3	3.5	2.1
2001	3.3	3.3	4.3	3.5	2.5
2002	3.6	3.5	6.6	3.6	2.3

(a) EU-15, excluding Germany on account of the break in series caused by unification.

Source: Ameco.

Economic growth in Portugal has been sustained by the rapid accumulation of capital, reflecting high levels of investment in the public and private sectors. The ratio of total gross fixed capital formation to GDP remained high throughout the pre- and post-

accession period, exceeding that of the other cohesion countries (Table 1.3). Moreover, between the periods 1970-85 and 1986-2002 the ratio of government fixed capital formation to GDP increased from 3.2% to 3.7%. This development was facilitated by EU net transfers averaging about 3 % of GDP per year, which assisted in the upgrading of the infrastructures and the formation of human capital. Furthermore, substantial FDI inflows, particularly during the first ten years after accession, which were channelled predominantly into plant investment, acted as an important catalyst in the process of industrial transformation (see below).

Table 1.3: Gross fixed capital formation (% of GDP)

	Greece	Spain	Ireland	Portugal
	Total			
1970-85	26.6	24.1	24.5	27.9
1986-02	21.6	23.4	19.2	25.2
	General government			
1970-85	2.8	2.6	4.5	3.2
1986-02	3.3	3.8	2.7	3.7

Source: Ameco.

1.1.2 Emergence of macroeconomic imbalances in recent years and slowdown in growth

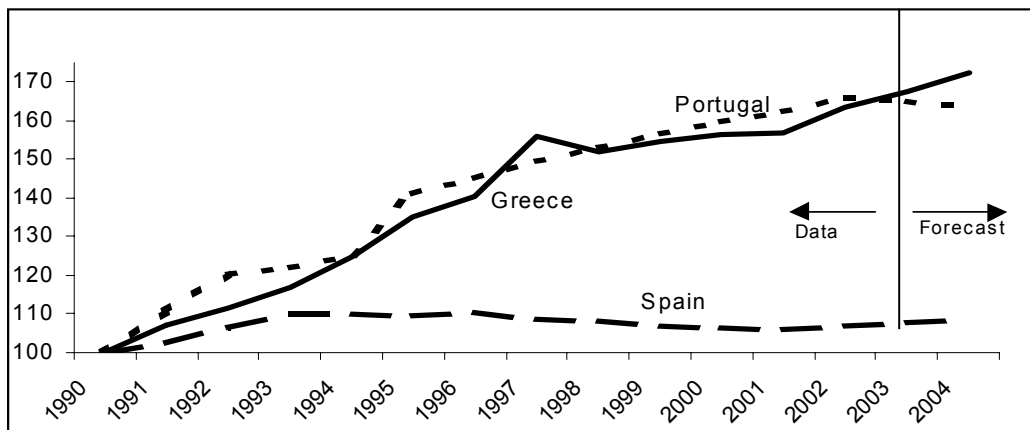
Real and nominal convergence faltered in the more recent period. A sustained slowdown started in late 2000, leading to an economic recession by the second half of the year 2002. While the downturn in economic activity is partly related to general cyclical developments in the European economy, it also reflects a significant downward adjustment of expenditure patterns in the Portuguese economy, following a prolonged period of rapid expansion in the second half of the 1990s.

Between 1995 and 2000 economic growth averaged 4 % which is about 1½ percentage points above the EU average. This growth differential basically reflects the strength of domestic demand in Portugal (4½ % in Portugal as against 2½ % in the EU), which was driven by all of its major components.

At the same time, a significant deterioration in price-competitiveness indicators emerged. This was caused by a widening divergence in nominal compensations per employee relative to competitors, which was not supported by equivalent improvements in relative labour productivity. As a result, relative unit labour costs registered a significant and steady deterioration (Figures 1.1-3).

The real appreciation of the currency contributed to the strengthening of domestic demand relative to exports as a source of growth, leading to a build-up of macroeconomic imbalances. The cumulative loss in export market shares amounted to more than 8 % between 1995 and 2000 (see Figure 1.4). Although an improvement was recorded in the following years, the available evidence suggests that this was achieved at the cost of a reduction in export profit margins, in an attempt by enterprises to respond to the faltering domestic demand.

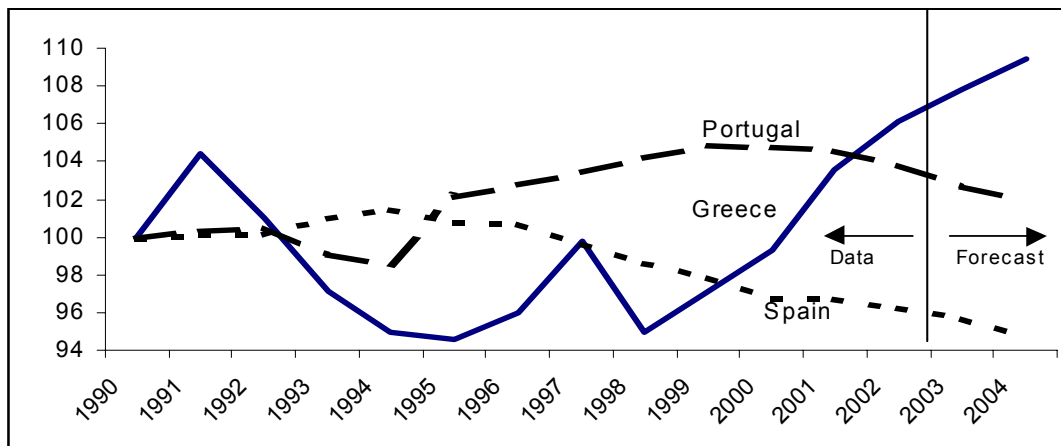
Figure 1.1: Nominal compensation per employee¹⁾ (1990=100)



1) relative to 23 industrialised countries; double export weights

Source: Ameco.

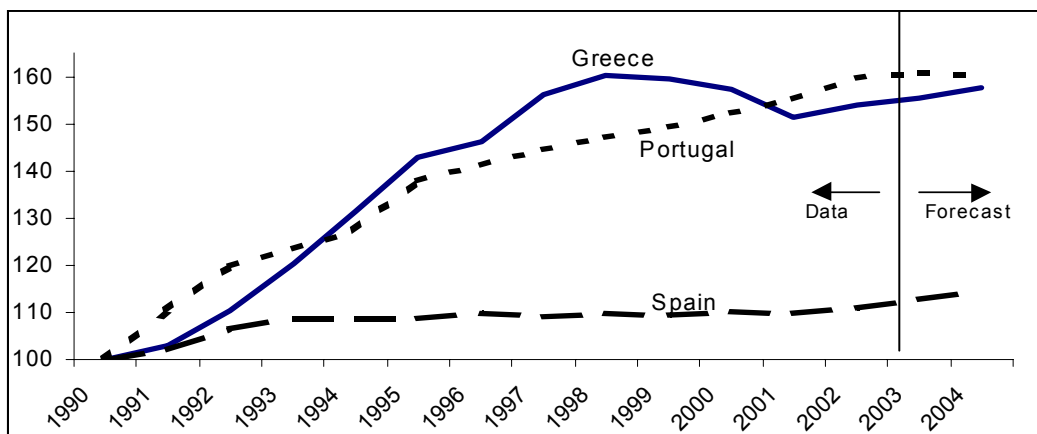
Figure 1.2: GDP at constant prices per person employed¹⁾ (1990=100)



1) relative to 23 industrialised countries; double export weights

Source: Ameco.

Figure 1.3: Nominal unit labour costs¹⁾ (1990=100)

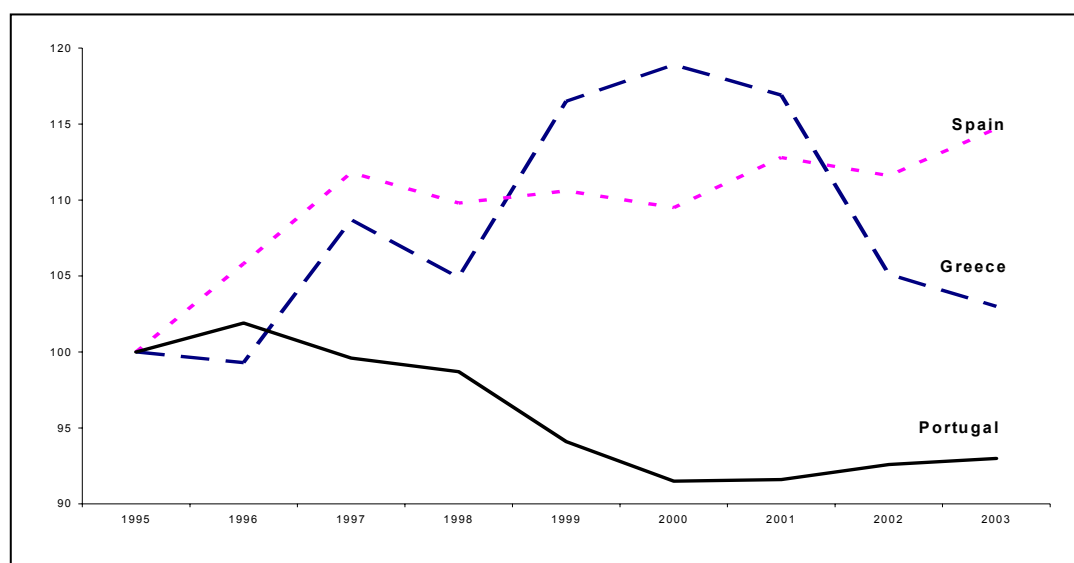


1) relative to 23 industrialised countries; double export weights

Source: Ameco.

Partly as a consequence of these developments, the external balance moved from an equilibrium position in 1995 to a deficit of 9 % of GDP in 2000, leading at the same time to a rapid accumulation of net external liabilities. The growth of output/supply did not match the rise in demand mainly for two reasons. First, the labour market was fairly tight already from 1997 onwards (see chapter 2). Second, average total factor productivity growth registered a moderate rate of 1½ % per year between 1995 and 2000, starting to lag behind that of the EU as a whole from 1998 on (Table 1.4).

Figure 1.4: Market performance of exports of goods and services¹⁾ (1995=100)



1) relative to 23 industrialised countries.

Source: Ameco.

Table 1.4: Total factor productivity growth (% p.a.)

	Greece	Spain	Ireland	Portugal	EU-14 (a)
1961-70	6.3	5.2	2.5	5.5	3.3
1971-80	1.8	2.1	2.1	2.9	1.5
1981-90	-1.0	1.2	2.4	1.7	1.2
1991-02	1.2	0.4	3.4	0.7	1.0
1961-02	2.0	2.1	2.6	2.6	1.7
1995-00	1.6	0.5	4.5	1.5	1.3
1998	-2.3	0.4	1.2	1.1	1.2
1999	2.2	0.4	5.1	0.8	1.2
2000	3.0	0.4	4.8	0.6	1.6
2001	3.0	-0.1	2.3	-0.7	0.2
2002	2.4	-0.3	4.2	-0.9	0.2

(a) EU-15, excluding Germany.

Source: Ameco

Since 2001, private agents and public authorities alike have started to readjust their balance sheets, bringing spending more in line with incomes/revenues (Table 1.5). The unavoidable slowdown in domestic demand was first discernible in late-2000, leading to a sharp deceleration of activity. While the start of the downturn coincided largely with that of the EU economy at large, the amplitude of the downswing was much more pronounced in Portugal.

By 2003, the Portuguese economy went into recession. For the years 2004-05, although both private consumption and investment are expected to strengthen, domestic demand is projected to continue growing below output, because of the continued efforts by private sector agents to redress their balance sheets, combined with the re-orientation of production towards exports, which is supported by a high degree of wage moderation and the projected pick-up in foreign demand. Consequently, the net borrowing of the economy is expected to come down to below 2% of GDP by 2005 (Table 1.6).

Table 1.5: Demand and output 1995-2002

(Annual growth as %)										
	1995	1996	1997	1998	1999	2000	Avg. 95-00	2001	2002	Avg. 01-02
Private consumption	0.6	3.0	3.3	5.0	5.1	2.6	3.3	1.2	0.6	0.9
Government consumption	1.0	3.4	2.2	4.1	5.6	4.0	3.4	3.4	2.9	3.1
Gross fixed capital formation	6.6	5.7	13.9	11.5	6.4	4.4	8.0	0.1	-5.1	-2.6
Domestic demand ^a	4.1	3.0	5.1	6.7	5.9	3.1	4.6	1.3	-0.5	0.4
Exports	8.8	7.1	7.1	9.1	2.9	8.0	7.2	1.9	2.1	2.0
Imports	7.4	4.9	10.0	14.2	8.5	5.4	8.3	0.9	-0.5	0.2
GDP	4.3	3.5	4.0	4.6	3.8	3.7	4.0	1.6	0.4	1.0
Output gap ^b	-2.2	-1.3	-0.2	1.2	2.1	3.1	0.4	1.9	0.0	1.0
Private consumption deflator	4.3	3.7	2.9	2.8	2.1	3.5	3.2	3.5	3.6	3.6
Net lending of the economy ^c	0.0	-1.3	-3.0	-4.5	-6.1	-9.0	-4.0	-8.4	-5.6	-7.0
Underlying government primary balance ^d	1.6	1.1	0.3	-0.1	-0.3	-1.0	0.3	-1.9	-1.3	-1.6
Underlying government balance ^d	-4.7	-4.3	-3.9	-3.6	-3.5	-4.3	-4.0	-5.1	-4.3	-4.7

a) Including stocks.

b) As % of GDP, using the production function method.

c) As % of GDP.

d) Cyclically adjusted and excluding one-off operations as % of GDP.

Source: Ameco.

The worsening of labour market conditions at the end of 2002, together with a policy of wage moderation in the government sector introduced in 2003, is expected to exert a favourable impact on wage settlements in the private sector throughout the period 2003-05. Consequently, the growth rate of total wages per employee is expected to decelerate significantly in the years 2003-05, such that the trend decline in price competitiveness looks set to come to a halt.

1.1.3 Factors behind the imbalances that emerged in the late 1990s

A number of factors contributed to the current imbalances, most notably the advanced cyclical position of the Portuguese economy in relation to other EU Member States,

the sharp decline in nominal and real interest rates in the run-up to EMU, and the impact of financial deregulation and innovation on credit markets.

Table 1.6: Demand and output 2003-05 (EU Commission Autumn 2003 forecast)

(Annual growth as %)					
	Avg. 01-02	2003	2004	2005	Avg. 03-05
Private consumption	0.9	-0.9	0.8	0.9	0.3
Government consumption	3.1	-9	-0.2	0.1	-0.3
Gross fixed capital formation	-2.6	-9.2	1.0	5.2	-1.0
Domestic demand ^a	0.4	-2.9	0.7	1.7	-0.2
Exports	2.0	3.1	5.1	7.1	5.1
Imports	0.2	-2.9	3.9	5.5	2.2
GDP	1.0	-0.8	1.0	2.0	0.7
Output gap ^b	1.0	-2.5	-3.4	-3.5	-3.1
Private consumption deflator	3.6	3.4	2.6	2.5	2.8
Net lending of the economy ^c	-7.0	-2.5	-2.1	-1.5	-2.1
Underlying government primary balance ^d	-1.6	-1.2	-0.4	0.3	-0.5
Underlying government balance ^d	-4.7	-4.1	-3.2	-2.6	-3.3

a) Including stocks.

b) As % of GDP, using the production function method.

c) As % of GDP.

d) Cyclically adjusted and excluding one-off operations as % of GDP.

Source: Ameco.

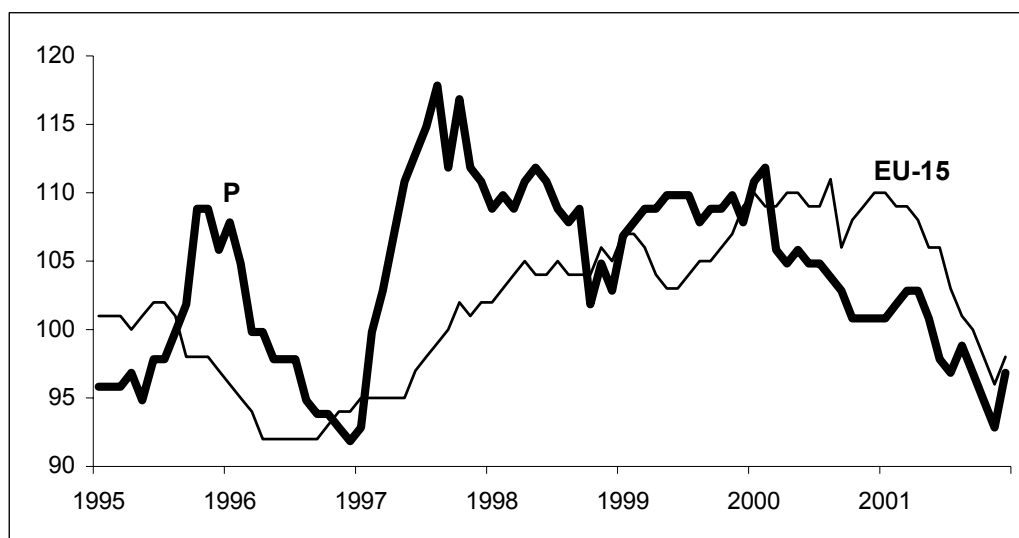
By 1996 interest-rate differentials had started to converge rapidly to the lowest levels abroad, signalling a high probability that Portugal would participate in EMU from the outset. This had a dramatic impact on the expectations of households, which revised their permanent income estimates upwards, shifting outwards their credit demand function. The reasoning that monetary union was widely perceived by households as raising significantly their level of permanent income is also suggested by the strong improvement in both consumer confidence and share price indicators in Portugal around 1997, which was more marked than elsewhere in the EU (Figures 1.5 and 1.6). Enterprises, too, significantly increased their investment levels, largely on the back of credit, in response to the improved demand prospects.

On the supply side, the effective elimination of the exchange-rate risk among the currencies of the future euro area allowed the Portuguese banking sector to refinance its domestic credit operations abroad¹. Moreover, the financial liberalisation policies carried out in the 1990s and the in-depth restructuring of the financial sector produced

¹ In the European inter-banking market and/or by issuing euro bonds.

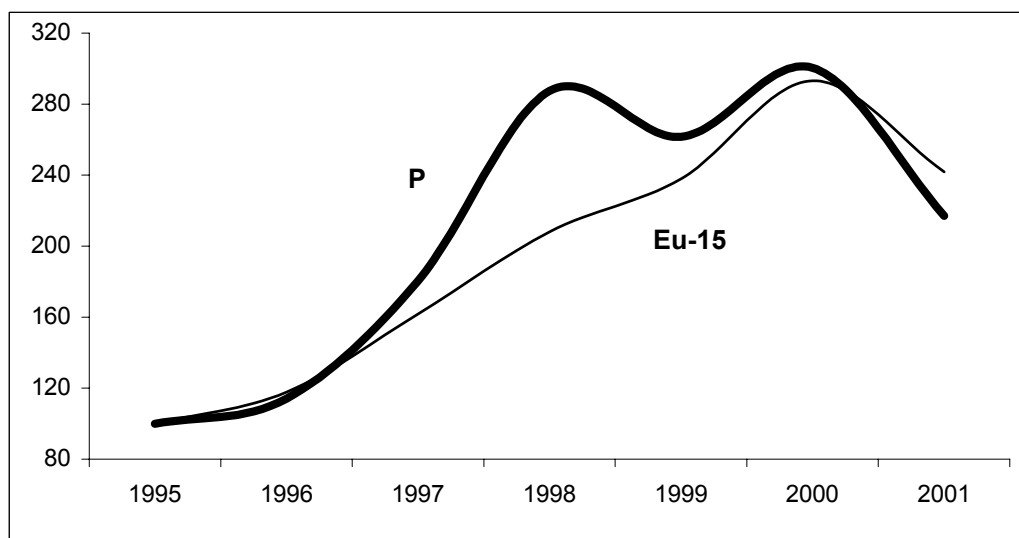
a very competitive and innovative market highly suitable for absorbing the rapid increase in credit demand and for sustaining its dynamism.

Figure 1.5: Consumer confidence indicators (s.a.; 1995=100)



Source: Eurostat.

Figure 1.6: Share price index (1995=100)



Source: Eurostat.

The upward revision in permanent income perceptions combined with the easing of liquidity constraints caused by the outward shift in the credit supply function shifted the expenditure of households and firms to a higher equilibrium level, as witnessed by the rapid growth of private consumption and investment in the second half of the 1990s. As a counterpart, indebtedness of the household sector and non-financial sector in terms of GDP more than doubled between 1995 and 2002 (see Chapter 4). At the same time, the refinancing of the domestic banking sector abroad led to a rapid accumulation of net liabilities vis-à-vis the rest of the world. As a result, the net asset position of the banking sector (excluding the central bank) moved from a nearly

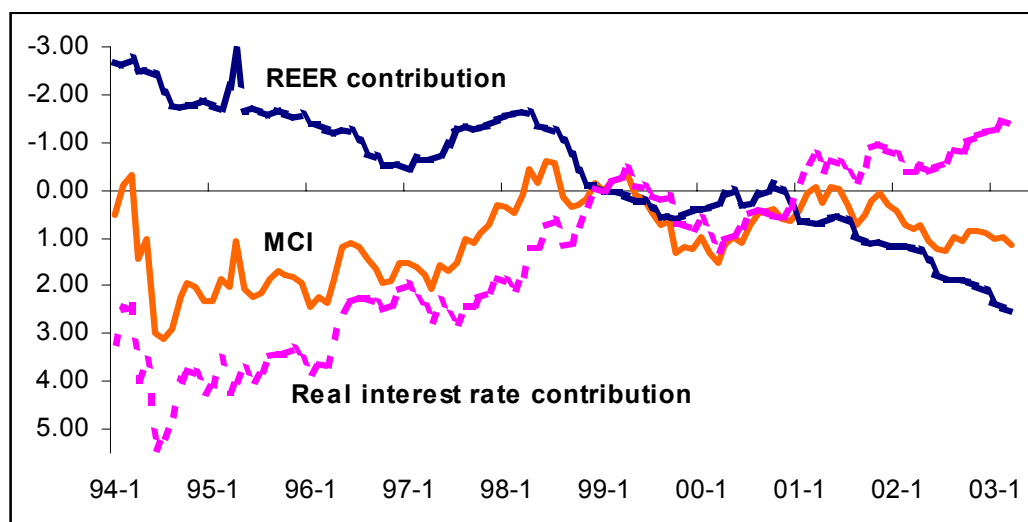
balanced position in 1995 to a debtor position equivalent to an estimated 33 % of GDP in 2002.

Indebtedness ratios in both the household and the non-financial enterprise sectors have only recently started to decline. However, the adjustment remains fairly gradual, with the growth rate of credit aggregates in the third quarter of 2003 still outpacing the growth of disposable income and nominal GDP. However, the upward trend in debt ratios has been virtually offset by the reduction in interest rates, so that the burden of interest payments has remained relatively stable.

1.1.4 The (lack of an adequate) fiscal policy response

According to the real interest rate component of the Monetary Conditions Indicator (MCI)², monetary conditions loosened significantly after 1995, following the rapid convergence of domestic interest rates towards the lower levels abroad. The resulting buoyancy of domestic demand caused, given Portugal's ERM membership, a real appreciation of the effective exchange-rate through inflation differentials that can be viewed as an aftershock of the decline in the interest rate. Overall, monetary conditions have remained loose since 1995 (Figure 1.7).

Figure 1.7: Monetary Conditions Indicator



Source: DG ECFIN.

As regards fiscal policy, and using as a measure the cyclically adjusted government balance net of one-off-operations and interest expenditure, Table 7.1 shows that the government position worsened throughout the period 1995-2001. On average, the deterioration amounted to more than ½ % of GDP per year, and this conclusion does not differ much when the primary balance (i.e. disregarding the impact of the cycle and of one-off-measures on the government balance) is used as an alternative measure. These figures strongly suggest that budgetary policy added further to the overall expansionary conditions triggered by the EMU convergence process.

² The MCI combines a real interest rate component and a real effective exchange-rate component, with weights of 2/3 and 1/3 respectively. In Graph 1.7 a rise in the curves represents a loosening of the overall monetary conditions.

Table 1.7: Budgetary developments 1995-05^{*)}

(as percentage of potential GDP)	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005
Cyclically adjusted balance ^{**)} (1)	-4.7	-4.3	-3.5	-3.6	-3.5	-3.9	-5.1	-2.8	-2.1	-2.1	-2.6
One-off operations (2)	0.0	0.0	0.4	0.0	0.0	0.4	0.0	1.5	2.0	1.1	0.0
Underlying government balance (3)=(1)-(2)	-4.7	-4.3	-3.9	-3.6	-3.5	-4.3	-5.1	-4.3	-4.1	-3.2	-2.6
Interest expenditure (4)	6.3	5.4	4.2	3.5	3.2	3.3	3.2	3.0	2.9	2.8	2.9
Underlying government primary balance (5)=(3)+(4)	1.6	1.1	0.3	-0.1	-0.3	-1.0	-1.9	-1.3	-1.2	-0.4	0.3
<i>p.m.</i> (in % of GDP)											
Total government revenue	39.6	41.0	41.2	41.0	42.4	42.3	42.1	43.3	44.2	42.8	42.6
Government primary expenditure	38.8	40.4	40.6	40.7	42.0	41.9	43.2	43.0	44.2	43.4	43.6
Government primary balance	0.8	0.6	0.7	0.3	0.4	0.4	-1.1	0.3	0.0	-0.6	-1.0

^{*)} For the years 2003-05: Commission Autumn 2003 forecast

^{**)} Using the potential output method.

Source: Ameco

Much of the rapid expansion of the government sector occurred in the area of employment. In fact, already since the early 1990s, employment in the general government sector moved in parallel with the economic cycle. Periods of economic slowdown/recession were accompanied by a significant reduction in the number of fixed-term labour contracts, while periods of economic prosperity were accompanied by a rapid expansion in government employment (Figure 1.8). Moreover, the cumulative rise in wages per employee in the general government sector exceeded that in the private sector by about 25% between 1990 and 2002 (Figure 1.9), fuelling the already high wage demands in the private sector caused by the tightness in the labour market³.

1.1.5 Possible risks and costs associated with the imbalances

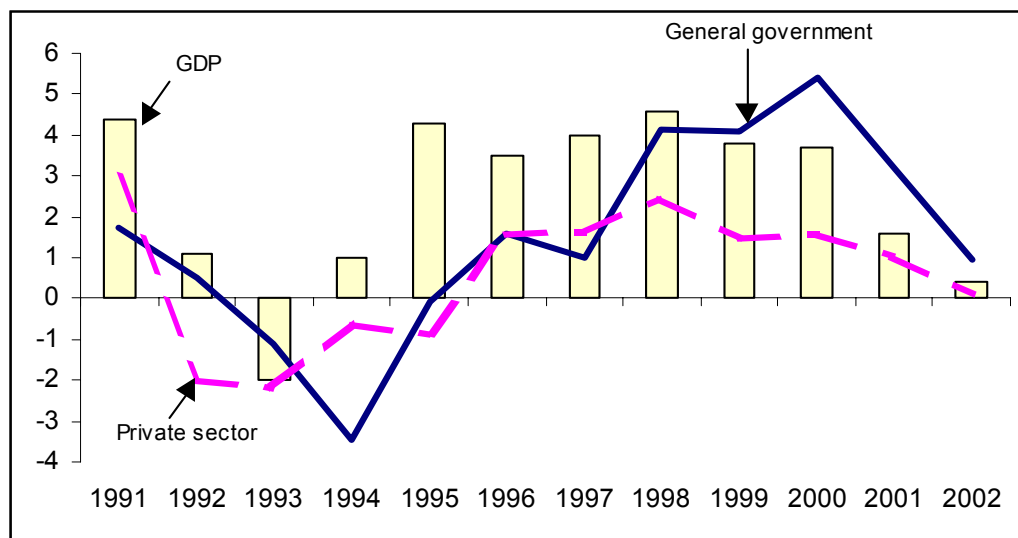
It is clear that, with Portugal belonging to a monetary union, a payments imbalance does not by itself constitute a problem in the sense that it may trigger an exchange-rate crisis. At the same time, the external account remains a very useful, albeit less proximate indicator of fundamental economic imbalances.

In a country with its own currency, a rapid rise in external indebtedness associated with a high and persistent external account deficit is likely to trigger adjustments via a currency depreciation/devaluation. For a small country inside a monetary union, such a trigger mechanism does not exist. Overall indebtedness is basically limited by the individual capacity of economic agents to service their debt. This does not mean, however, that there are no limits to the aggregate indebtedness of the country or that deficits on the external balance can rise at any rate. As long as interest rates are

³ See Chapter 2 on the labour market.

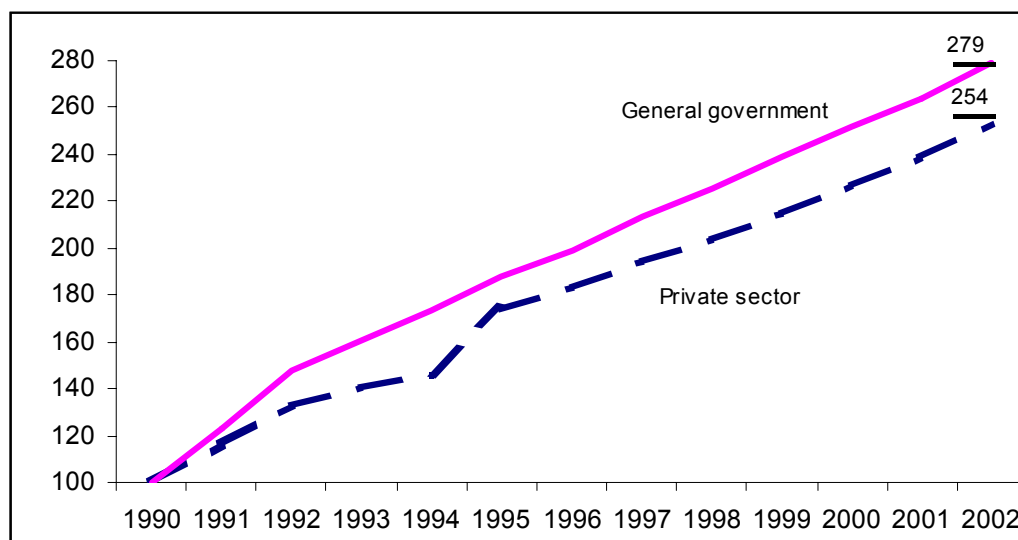
falling, debt servicing by households and enterprises might not increase and might even decline despite an increasing debt level (see Chapter 4).

Figure 1.8: General government and private sector employment growth (% p.a.)



Source: Ameco and Caixa Geral de Aposentações.

Figure 1.9: Indices of nominal wages per employee (1990=100)



Source: Ameco.

However, the situation might quickly change as a result of a reversal in the trend of interest rates or supply shocks to the economy such as an oil price hike. Under such adverse conditions, an ever-increasing share of national income might be needed to service the external debt, thereby exerting a drag on domestic demand and, hence, on output and employment. In fact, with the gradual recovery of economic activity in Europe, interest rates are likely to increase from their current, exceptionally low levels entailing the risk that rising interest expenditure will act to dampen domestic growth in Portugal.

This could imply that growth in Portugal could be subdued for some time until the debt overhang is worn off. The situation is aggravated by the fact that the necessary restoration of competitiveness of the economy requires a period of low inflation rates and, consequently, of higher real interest rates. Thus even under the assumption of a continuation of low nominal interest rates, a situation which is unlikely to prevail for very long, this factor is bound to exert a drag on domestic demand.

A prolonged period of low growth would inevitably lead to an increase in the share of non-performing loans, increasing the risk of instability in the financial sector. However, as the separate analysis of the Portuguese financial market shows, financial market indicators continue to show a fairly robust picture (see Chapter 4). In particular, it seems that Portugal has avoided extreme versions of speculative bubbles, particularly in the housing market, which often herald financial market distress.

Apart from the macro-economic aspects one could raise the question about the allocative effects of the expenditure boom of the late 1990s. Economic theory suggests that a non-optimal allocation of resources entails welfare losses, but the empirical quantification of such losses is a difficult task. However, the point can be illustrated with the help of a simulation exercise using DG ECFIN's Quest II model. The exercise consists in a counterfactual analysis which assumes that, over the period 1998-2005, government expenditure had followed a smoother path⁴ than what was actually observed, i.e. the sharp expansion between 1998 and 2001 and the retrenchment from 2002 onwards (for more details see the Appendix to this chapter). The aim of the exercise is to quantify the effects of the unwarranted expansionary fiscal stance during the years 1998-2001 on output growth. The results are given in Table 1.8 and in the Appendix of this chapter.

Table 1.8: Actual and simulated output growth path (1997-2005)

	GDP growth (%)	Difference*) (simulated) (p.p.)	GDP growth (simulated) (%)
1997	4.0	-	4.0
1998	4.6	-0.2	4.4
1999	3.8	-0.6	3.2
2000	3.7	-0.4	3.2
2001	1.6	0.7	2.3
2002	0.4	0.4	0.8
2003	-0.8	0.1	-0.7
2004	1.0	1.0	2.0
2005	2.0	0.1	2.1
1997-2005	20.3	1.1	21.4

*) The difference in the GDP growth rate that would have resulted if government expenditure had followed the same growth path as that for the euro area on average.

Source: Ameco; own calculations

⁴ The assumption made is that, between 1998 and 2003, the growth rate of government expenditure followed the same path as that observed for the euro area as a whole.

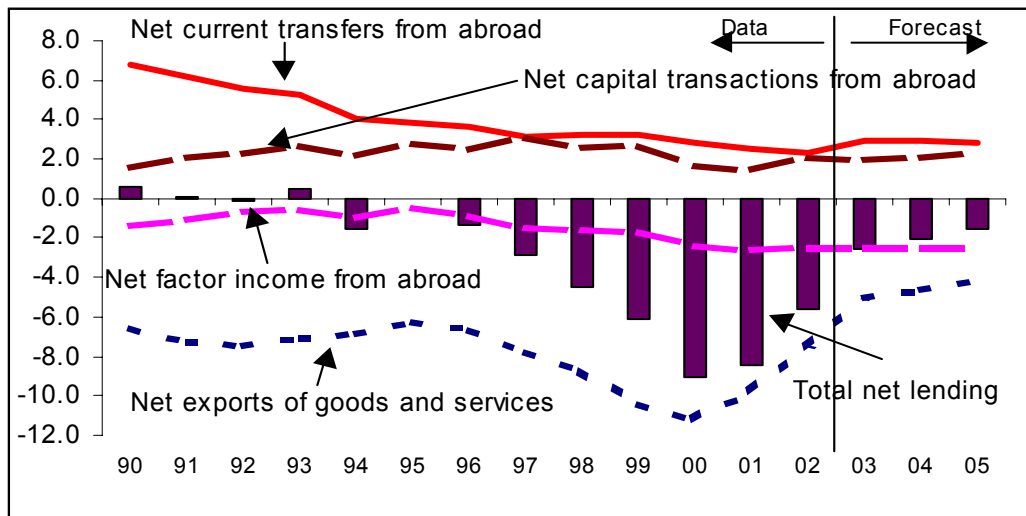
Table 1.8 shows that while output growth would have been somewhat lower in the beginning of the period it would have exceeded actual growth from 2001 onwards. As a result, by 2005 the level of GDP would have been higher by about 1% compared to the actual forecast. This outcome is almost entirely due to the resulting difference in potential output (see Appendix). It is important to note that the simulation assumes that government expenditure in 2005 is roughly equal in both scenarios. It is thus the change in the profile of government outlays and not a change in their average growth rate which is behind the different outcomes regarding output and other macro-economic variables.

1.1.6 Ongoing adjustment process in the Portuguese economy

There are basically two in-built mechanisms in the economy which can address the above-mentioned imbalances. First, economic agents regularly reassess their financial position in the light of economic prospects, adjusting expenditure plans accordingly, with a view to maximising an objective function subject to an intertemporal budgetary constraint. Since 2001 the deterioration in economic prospects due to the cyclical downturn in Europe has contributed to the slowdown in domestic demand. Second, wage restraint is necessary to achieve an adequate level of price competitiveness, thereby helping to secure an appropriate balance between domestic demand and exports. The renewed efforts at fiscal consolidation since the spring of 2002 led to a near freeze in wages per employee in the government sector for 2003, sending important signals to the private sector as regards the need for wage moderation. In fact, the pace of growth of contractual wages in the private sector slackened significantly after the third quarter of 2002.

The ongoing adjustment process among households and firms, which has been assisted since the spring of 2002 by the tightening of fiscal policy, has undoubtedly contributed to the narrowing of the major macroeconomic imbalances described above. In fact, both the growth of credit aggregates (deflated by the GDP price index) and the net borrowing of the economy have slowed considerably in the years 2001-02 (Figure 1.10). The unwinding of the current imbalances is likely to delay the period of economic recovery beyond what would normally be expected given the developments in the external environment.

Figure 1.10: External balances (as % of GDP)



Source: Ameco.

1.2 Demand factors affecting the economy in the 1990s

1.2.1 The regime shifts of the 1990s

Following accession to the EU in 1986, significant steps were taken during the 1990s towards nominal convergence, leading to EMU participation from the outset. In April 1992 Portugal joined the ERM, signalling the demise of its long standing crawling-peg regime against a trade-weighted basket of currencies. This represented a major policy change in the direction of nominal convergence, paving the way for rapid disinflation in exchange for a real appreciation of the currency on the back of persistent, although narrowing price differentials. Over time, participation in the ERM represented a tightening of monetary conditions. At the beginning of 1993 capital movements were fully liberalised, creating the conditions for the convergence of domestic interest rates towards the lower levels abroad, a movement which gathered pace in the run-up to EMU and represented a loosening of the stance of economic policy.

Economic data suggest that a fairly significant reduction in the amplitude of economic fluctuations took place in the 1990s compared with the 1980s that can be partly attributed to changes in the macroeconomic framework (Figure 1.11).

1.2.2 The expansionary nature of fiscal policy⁵

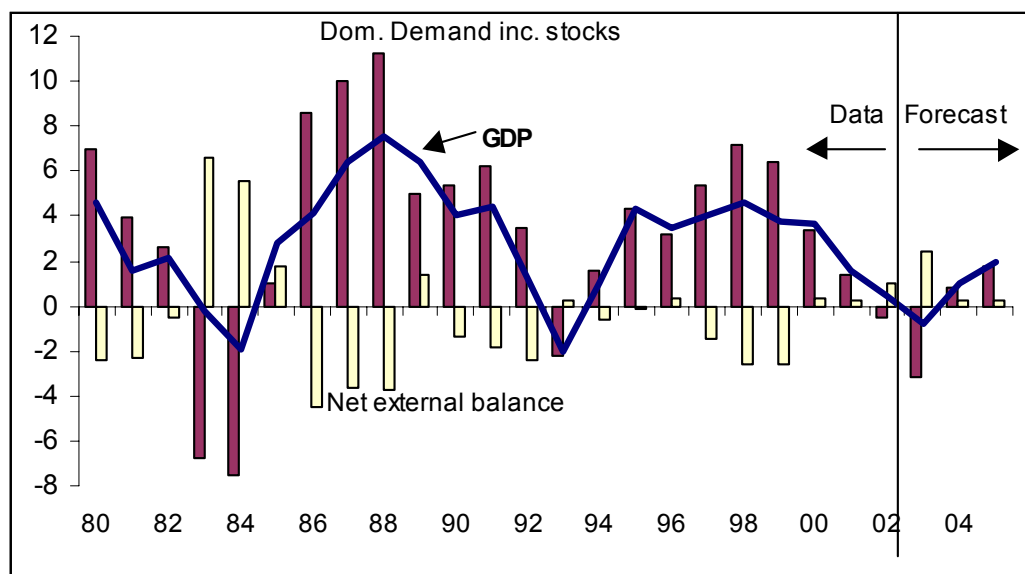
In the second half of the 1990s – a period for which data are available on an ESA 95 basis - the stance of budgetary policy was supportive of economic activity. The underlying primary balance⁶ deteriorated by a cumulative 3½ percentage points of GDP between 1995 and 2001 (Table 1.7). In 2002, following tax increases, notably

⁵ In this paper, fiscal policy is analysed exclusively in terms of macroeconomic stabilisation. Its compliance with the relevant EU legislation is assessed within the framework of the customary surveillance mechanisms.

⁶ The cyclically-adjusted primary balance, excluding one-off measures.

the rise of the standard VAT rate from 17% to 19% and spending cutbacks resulting from the approval of a supplementary budget in May, the underlying primary deficit declined by about ½ % of GDP.⁷

Figure 1.11: Growth and major contributions to growth



Source: Ameco.

Between 1995 and 2002 public finance was characterised by significant rises in total revenue and total primary expenditure of 3.7 and 4.2 percentage points of GDP respectively. The former was possible given the buoyancy of domestic demand and the rapid growth of the wage bill, which broadened the respective tax bases, while the latter was caused mainly by the rapid expansion of public consumption, in particular the compensation of government employees, and healthcare spending. Transfers to households also rose strongly, reflecting *inter alia* a rapid increase in expenditure in pensions (Table 1.9).

For a number of years no significant pressure was exerted to curb primary expenditure growth because of the offsetting impact of the fall in interest expenditure and the exceptional strength of tax revenue attributed to the buoyancy of economy activity. Clearly, the pace of expansion of primary current expenditure in the second half of the 1990s was unsustainable over the medium term.

1.2.3 Inflationary pressures and the net borrowing of the economy

In the 1990s Portugal made considerable progress in closing the inflation differential vis-à-vis the EU average, particularly after its decision to join the ERM in April 1992

⁷ It should be recalled that, according to the Commission communication to the Council and to the European Parliament of 27 November 2002 on strengthening the coordination of budgetary policies (COM (2002) 668 final, 27.11.2002), countries which have not yet attained a fiscal position close to balance or in surplus should envisage annual reductions in the underlying deficit of at least ½ percentage point of GDP.

(Figure 1.12). However, after the years 1997-98, when the inflation differential had almost vanished, a gap has re-emerged.

Table 1.9: Breakdown of total government expenditure 1995-05

(as % of GDP)	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005
Collective consumption (1)	7.6	7.3	7.8	7.6	7.9	8.4	8.5	8.6	8.7	8.5	8.3
Social transfers in kind (2)	11.0	11.7	11.3	11.3	11.8	12.1	12.3	12.5	12.6	12.4	12.1
Government final consumption (3)=(1)+(2)	18.6	18.9	19.0	18.9	19.7	20.5	20.8	21.1	21.2	20.9	20.4
Social transfers other than in kind (4)	11.8	11.8	11.7	11.7	11.9	12.4	12.5	13.0	13.8	14.0	14.1
Interest expenditure (5)	6.3	5.4	4.2	3.5	3.2	3.3	3.2	3.0	2.9	2.8	2.9
Subsidies (6)	1.3	1.5	1.2	1.5	1.7	1.1	1.3	1.5	1.5	1.5	1.5
Other current expenditure (7)	1.6	1.9	2.0	2.1	2.2	2.4	2.2	2.3	2.3	2.4	2.4
Gross fixed capital formation (8)	3.7	4.2	4.4	3.9	4.1	3.8	4.1	3.4	3.4	2.6	3.2
Other capital expenditure (9)	1.7	2.1	2.3	2.5	2.5	1.7	2.2	1.8	2.0	2.0	2.0
Total expenditure (3+4+5+6+7+8+9)	45.0	45.8	44.8	44.1	45.3	45.2	46.3	46.1	47.1	46.2	46.5
For information:											
Total expenditure excluding interest payments	38.8	40.4	40.6	40.7	42.0	41.9	43.2	43.0	44.2	43.4	43.6
Total current expenditure excluding interest payments	33.4	34.2	33.9	34.2	35.4	36.3	36.8	37.9	38.8	38.8	38.4
Compensation of employees	13.6	13.7	13.8	14.0	14.4	15.0	15.2	15.4	15.1	14.7	14.3
Total social transfers (2+4)	22.8	23.5	23.0	23.0	23.7	24.5	24.8	25.5	26.4	26.4	26.2

Source: Ameco.

Part of this inflation differential can be explained by temporary factors, such as the hike in fuel prices in 2000 and the rise of 2 percentage points in the standard VAT rate in June 2002. Nevertheless, the continued tightness of the labour market in recent years, combined with the advanced state of the economic cycle in Portugal, has undoubtedly contributed to restoring the inflationary differential.

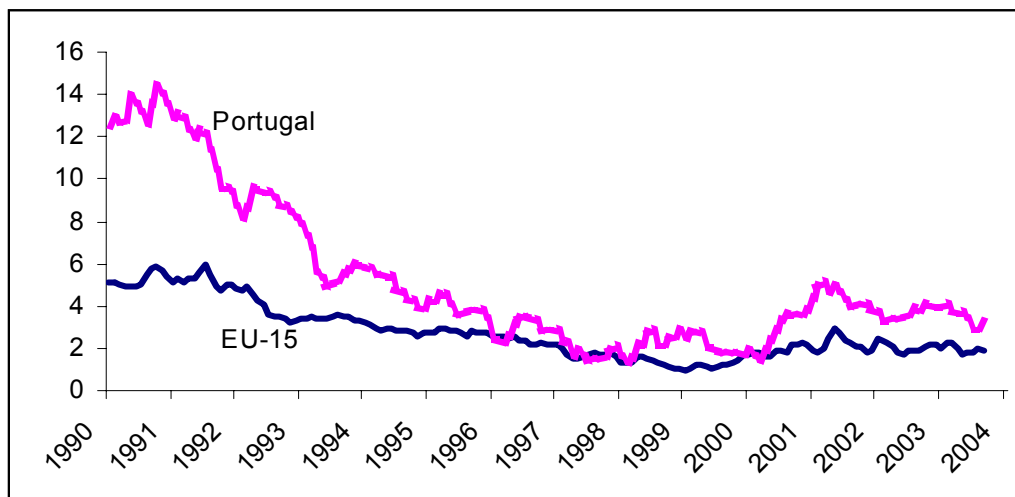
At the end of 2002, with the onset of economic recession in Portugal, the core⁸ inflation differential narrowed significantly, from 2.7 percentage points in October 2002 to 1.1 percentage point in September 2003 (Figure 1.13). This reflects a loosening in conditions on the labour market as well as a deceleration in wage inflation in the private sector that was partly induced by signalling effects coming from the strict wage moderation imposed on the civil service for 2003.

In a country that is engaged in a catching-up process, a persistent positive inflation differential can, to some extent, reflect the process of convergence itself. Such countries start with low price levels, particularly in the non-tradable goods sector. With convergence, they register higher productivity growth rates in the

⁸ The overall index, excluding energy and unprocessed food.

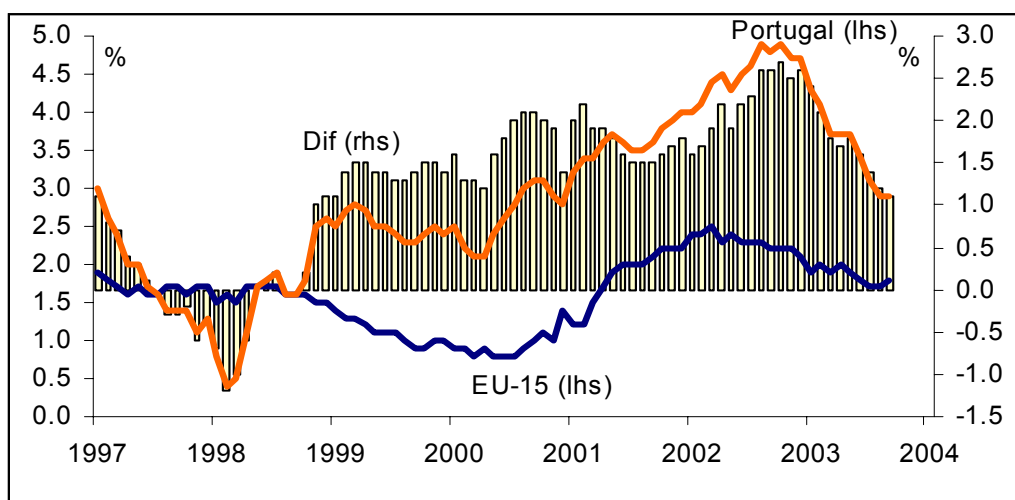
manufacturing/tradable goods sector, raising wages in the whole economy and leading to higher inflation, especially in the lower-productivity non-tradable goods sector. However, a sustained inflation differential in the tradables sector vis-à-vis their main trading partners could lead to an erosion of external competitiveness.

Figure 1.12: HICP inflation (year-on-year percentage change)



Source: Eurostat

Figure 1.13: Core inflation (year-on-year percentage change)



Source: Eurostat.

The deterioration in price competitiveness coupled with strong domestic demand, triggered a significant increase in the net borrowing of the economy (balance of current transactions plus capital transfers). The near balance recorded in 1995 became a deficit of 9.0 % by 2000 (Table 1.10). This roughly mirrors the change in the merchandise goods deficit, which is estimated to have increased from 8.5 % of GDP in 1995 to 13.1 % in 2000.

In the years 2001-03, the balance of current transactions improved significantly thanks to the slowdown in import demand induced by cyclical conditions. In addition, export market shares rose slightly because of some narrowing in profit margins as

producers, facing a rapid contraction in domestic demand, redirected part of their output to foreign markets. At the same time, the surplus on the capital balance rose on account of the implementation of the third *Community Support Framework*.

Table 1.10: Net borrowing of the economy

(as % of GDP)	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005
Merchandise goods (1)	-8.5	-8.3	-9.4	-10.7	-12.0	-13.1	-11.8	-9.5	-7.9	-7.8	-7.5
Services (2)	2.3	1.7	1.7	1.9	1.6	1.9	2.0	2.0	2.9	3.2	3.4
Income (3)	-0.4	-0.8	-1.4	-1.5	-1.6	-2.4	-2.6	-2.5	-2.5	-2.5	-2.5
Current transfers (4)	3.8	3.6	3.1	3.2	3.2	2.8	2.5	2.3	2.9	2.9	2.8
<i>Current transactions</i> (5=1+2+3+4)	-2.9	-3.8	-6.1	-7.1	-8.7	-10.8	-9.9	-7.7	-4.5	-4.2	-3.8
Capital transfers (6)	2.8	2.5	3.1	2.6	2.7	1.7	1.5	2.1	2.0	2.1	2.3
<i>Net lending of the economy</i> (5+6)	0.0	-1.3	-3.0	-4.5	-6.1	-9.0	-8.4	-5.6	-2.5	-2.1	-1.5
<i>p.m.:</i> <i>Total terms of trade</i> (% change)	1.6	-3.2	-0.1	2.0	0.5	-3.0	2.0	2.7	0.3	0.2	0.2

Notes: Values for the years 2003-05 are EU Commission projections

Source: Ameco.

According to the Commission's autumn 2003 forecast, in the years 2004-05 the net borrowing of the economy is projected to narrow further, on account of the pick-up in foreign demand and a high degree of wage moderation, such that the trend decline in price competitiveness looks set to come to a halt.

1.3 Supply factors shaping the economy

1.3.1 Labour market developments, productivity and unit labour costs

Since the second half of the 1990s, the pace of employment creation in Portugal has been similar to that in the EU (Table 1.11). However, the unemployment rate in Portugal has on average been about 3½ percentage points lower than in the EU⁹. The low rate of unemployment, together with the rapid growth of wages, suggests a high degree of tightness on the labour market in Portugal in the second half of the 1990s that began to loosen only at the end of 2002, in line with cyclical developments.

Reflecting the tightness on the labour market, wage developments were quite dynamic in the second half of the 1990s, with nominal wages per employee rising on average by about 5½ % per year, which is about 2 percentage points above the average for the EU (Table 1.12). At the same time, labour productivity grew at a rate slightly above the EU average. Consequently, growth in unit labour costs in Portugal was about 2½% per year higher than the EU average, inducing a deterioration in price

⁹ See Chapter 2 on the labour market.

competitiveness and accounting for the significant cumulative loss in export market shares.

Table 1.11: Employment and unemployment

		95	96	97	98	99	00	01	02	Avg. 95- 02	03	04	05
Employment (annual growth as %)	P	-0.7	1.6	1.6	2.7	1.9	2.1	1.3	0.3	1.5	-1.0	-0.1	0.6
	EU	0.8	0.7	0.9	1.8	1.7	1.9	1.2	0.4	1.2	0.0	0.3	0.8
Unemployment (as % of the labour force)	P	7.3	7.3	6.8	5.1	4.5	4.1	4.1	5.1	5.5	6.6	7.2	7.3
	EU	10	10	10	9.4	8.7	7.8	7.4	7.7	8.9	8.1	8.2	8.1
NAWRU^{a)} (as % of the labour force)	P	5.3	5.2	5.3	5.2	5.2	5.3	5.4	5.5	5.3	5.7	5.8	6.0
	EU	9.3	9.4	9.4	9.2	9.0	8.7	8.4	8.3	9.0	8.2	8.0	7.8

a) Non-accelerating wage rate of unemployment.

Source: Ameco.

Developments in the labour market conceal a relatively sharp disparity between general government and the private sector of the economy. In the period 1995-02, employment creation in general government is estimated to have averaged about 2½ % per year, which compares with some 1.1 % in the private sector (Table 1.13). In addition, the fluctuations in general government employment had a tendency to move in parallel with the economic cycle during the 1990s, fluctuating more markedly than employment in the private sector (see Figure 1.8 above).

Table 1.12: Labour costs and productivity

(Annual growth rate as %)		96	97	98	99	00	01	02	Avg. 95- 02	03	04	05
Nominal compensation per employee	P	6.1	6.0	5.3	5.4	5.6	5.5	5.3	5.6	2.7	2.3	2.5
	EU	3.7	3.5	2.0	3.6	5.2	2.6	2.9	3.4	1.2	2.7	2.9
Labour productivity	P	1.9	2.4	1.8	1.9	1.5	0.3	0.2	1.4	0.2	1.1	1.5
	EU	1.1	1.6	1.1	1.2	1.6	0.5	0.7	1.1	0.7	1.6	1.6
Unit labour costs	P	4.1	3.6	3.4	3.4	4.1	5.2	5.1	4.1	2.5	1.3	1.0
	EU	1.7	0.9	0.9	1.4	1.8	2.8	2.3	1.7	2.3	1.2	1.3

Source: Ameco.

This pro-cyclical behaviour of the general government sector on the labour market is striking, implying that many fixed-term contracts are not renewed during budgetary/economic crises. The macroeconomic effects of such a policy could be even stronger than is suggested by the employment figures because it is reasonable to assume that dismissals tend to affect disproportionately low-wage earners with a low propensity to save.

Moreover, since the early 1990s the cumulative increase in wages in general government easily exceeded that in the private sector. The combined dynamism of employment and real wage increases in general government led to a considerable increase in the ratio of general government compensation to GDP, which rose from 11.8 % in 1990 to 15.4 % in 2002, compared with 10.4 % in the EU in 2002.

Table 1.13: Breakdown of employment growth

(annual growth as %)	1995	1996	1997	1998	1999	2000	2001	2002	Number in 2002 ^{b)}	Avg. 95-02
Total economy	-0.8	1.6	1.6	2.7	1.9	2.1	1.4	0.3	5023	1.3
General government ^{a)}	-0.1	1.6	1.0	4.1	4.1	5.4	3.2	1.0	779	2.5
Private sector	-0.9	1.6	1.7	2.5	1.5	1.6	1.0	0.1	4244	1.1

a) Number of subscribers to the *Caixa Geral de Aposentações* (the civil servants' social security scheme).

b) In '000.

Source: Ameco.

Portugal and Centeno (2001) estimate that the wage premium in general government (relative to the private sector and after adjustment for a number of variables) is the highest in the EU. The apparent generosity of wage policy in the general government sector, combined with the rapid pace of employment creation, is likely to be diverting a significant amount of resources away from more productive sectors of the economy.

1.3.2 Infrastructures and FDI

One of the fundamentals which for a long time held back the rapid convergence of the Portuguese economy towards the EU average was a lack of modern infrastructures. A sub optimal level of infrastructures can trap an economy in a vicious circle because, on the one hand, economic growth calls for a modern infrastructure but, on the other, its financing requires a broad tax base. The main priority of the policy of upgrading infrastructures has been the development of a modern transport infrastructure.

According to Pereira and Andraz (2002), the strategy of development in Portugal has, over the last decade, been centred largely on the development of transport infrastructure. Using *variable auto-regressive* econometric techniques, these authors argue that government investment in transport infrastructures has had a positive effect on output as well as on private investment and employment. However, they point out that the existence of a historical statistical link between government investment and economic growth does not necessarily mean that the link will continue in the future, and it might well be the case that government investment in transport infrastructures will be confronted with decreasing marginal returns.

While assistance from Structural Funds helped to upgrade the infrastructure, modernisation of the productive capacity is generally fostered by inflows of foreign direct investment (FDI). In the first half of the 1990s inflows of FDI were channelled predominantly to the manufacturing sector, involving some emblematic projects such as a large car plant. In terms of GDP, inflows of FDI into Portugal were higher than the weighted average for the EU (Table 1.14).

Table 1.14: Inflows of FDI (as % of GDP)

	1990-1994	1995-1999	2000-2002
Denmark	1.5	3.5	10.7
Germany	0.1 ¹	1.0	4.8
Greece	1.1	0.7 ²	0.7
Spain	2.2	1.6	4.8
France	1.4	2.0	3.6
Ireland	2.1	9.1	16.4
Italy	0.3	0.4	1.4
Netherlands	2.2	5.9	11.9
Austria	0.6	1.5	2.8
Portugal	2.3	1.7	5.0
Finland	0.6	3.3	6.0
Sweden	1.6	8.6	5.0 ³
United Kingdom	1.8	3.8	7.2
Weighted average a)	1.1	2.3	5.1

1) 1991-94

2) 1995-97 and 99

3) 2000-2001

a) Weighted by nominal GDP in 2000

Source: IMF IFS database, Ameco, own calculations.

However, in the second half of the 1990s inflows of FDI into Portugal fell below the EU weighted average. This seems to indicate that the attractiveness of Portugal as a target for FDI declined significantly, probably because of a loss in overall competitiveness coupled with the prospect of EU enlargement. In the years 2000-02, inflows of FDI into Portugal rose as a percentage of GDP drawing level with those to the EU. During this period, FDI was redirected from the industrial sector to the service sector, especially financial services and telecommunication. Furthermore, as the internationalisation of the Portuguese economy gathered pace, outflows of FDI exceeded inflows in the years 1998-2001 (Table 1.15).

Table 1.15: Flows of FDI (as % of GDP)

	Inflows	Outflows	Balance
1996	1.3	0.7	0.6
1997	2.3	1.8	0.5
1998	2.8	3.4	-0.6
1999	1.1	2.8	-1.7
2000	6.4	7.1	-0.7
2001	5.4	6.9	-1.5
2002	3.5	2.9	0.6
1996-1999	1.9	2.2	-0.3
2000-2002	5.1	5.6	-0.5

Source: Bank of Portugal and Ameco.

1.3.3 Efficiency of expenditure on education

In Portugal government expenditure on education has been growing at a rapid pace in the last decade. At the end of the 1990s this category of expenditure, expressed as a percentage of GDP, was above the EU average but roughly equivalent to the OECD average¹⁰.

¹⁰ See Chapter 3 on productivity.

One of the major weaknesses of the Portuguese economy is the low educational attainment of the population (St. Aubyn, 2002). In this regard, Portugal lags behind other countries at a similar stage of development. Given the low level of human capital, it is of paramount importance to assess the efficiency of the education system. When evaluating the performance of the education system, both "quantitative" and "qualitative" indicators can be used (St. Aubyn, 2002). The latter refer to direct measures of educational attainment obtained by carrying out international tests for a number of subjects, such as reading, science and mathematics. Examples of these international tests are the TIMMS (1995) and PISA studies (2000).

This type of "qualitative" indicator can be used to assess the efficiency of the education sector. Using the production frontier method known as *free disposable hull technique*, St. Aubyn (2002) relates "qualitative" measures of educational attainment like the PISA to the inputs/resources used in the education process. The results strongly suggest that the provision of education in Portugal is inefficient¹¹.

¹¹ The Portuguese education system operates inside the production frontier. This means that the same educational outcome could potentially be obtained with fewer resources or that a better outcome could be attained with the same resources.

Appendix to Chapter 1: Fiscal policy simulation

The simulation assumes that government expenditure in Portugal during the period 1998-2003 had followed the growth rate of government expenditure in the euro area on average. Thereafter, government outlays are calibrated such that at the end of 2005 their level equals the estimate of the Commission's Autumn 2003 forecast. The average growth rate of government expenditure over the period 1998-2003 is thus assumed to be equal to the one observed/forecast by the Commission's Autumn 2003 forecast.

The table below gives results in the form of deviations from levels. A value of 1.11 for GDP in 2005, for instance, means that under the assumed profile of government expenditure the level of GDP in 2005 would have been 1.1% higher than estimated by the Commission's Autumn 2003 forecast. Note that the higher level of GDP is almost entirely due to a higher level of potential GDP which, in turn, is related to the path of private investment. Note also that due to the fact that the simulated level of GDP is higher at the end of the period the value of the government expenditure-to-GDP ratio (EXP.TO.GDP) in 2005 is lower by 0.5 percentage points than the estimate in the Commission's Autumn forecast, despite the fact that in this year the *level* of expenditure was assumed identical.

Table: Macroeconomic effects of a smoothed government expenditure profile

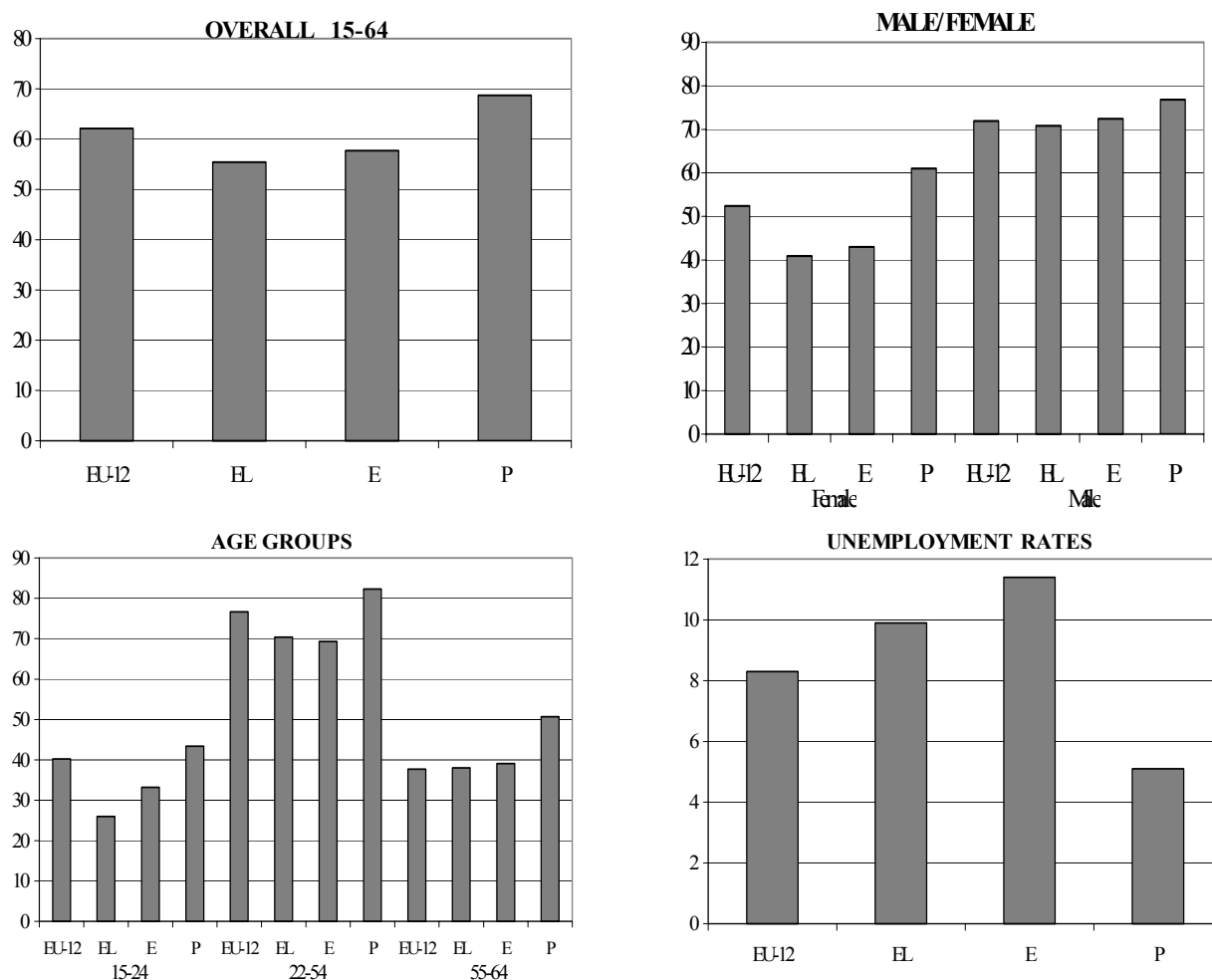
	1998	1999	2000	2001	2002	2003	2004	2005
GDP	-0.18	-0.76	-1.20	-0.46	-0.04	0.06	1.04	1.11
GDP-POT	0.02	0.31	0.84	1.44	1.83	1.73	1.39	1.03
PRIV. CONS	0.03	-0.30	-0.63	-0.32	-0.20	-0.00	0.96	1.01
PRIV. INV	-0.63	0.15	1.57	2.27	2.53	3.27	2.76	1.79
EXPORTS	0.06	0.25	0.58	0.76	0.77	0.91	0.85	0.62
IMPORTS	-0.07	0.02	0.33	1.19	1.63	1.42	1.67	1.37
EMPLOYMENT	0.04	-0.34	-0.67	-0.49	-0.27	0.13	0.38	0.35
REAL.WAGE.COSTS	-0.43	-1.70	-2.56	-2.13	-1.39	-0.21	1.09	1.48
CONS.PRICE.LEVEL	-0.09	-0.37	-0.85	-1.02	-1.02	-1.30	-1.10	-0.78
REAL.EXCH.RATE	0.15	0.55	1.22	1.43	1.43	1.78	1.50	1.07
CAPITAL.STOCK	-0.05	-0.07	0.06	0.29	0.51	0.77	1.00	1.12
LAB.PROD	-0.19	0.21	0.83	1.78	2.08	1.21	1.39	1.11
SHORT.RATE	0.03	0.01	-0.02	0.01	0.00	-0.04	-0.01	-0.00
REAL.SHORT.RATE	0.31	0.65	0.44	-0.05	0.28	0.01	-0.48	-0.35
UNEMPL.RATE	-0.04	0.32	0.65	0.47	0.25	-0.12	-0.36	-0.33
DEFG.TO.GDP	-0.04	-0.82	-2.27	-2.05	-1.90	-2.83	-1.36	-0.59
REV.TO.GDP	0.01	0.01	0.02	-0.03	-0.03	0.08	0.08	0.07
EXP.TO.GDP	-0.02	-0.81	-2.25	-2.08	-1.92	-2.75	-1.28	-0.52
TRADE.BAL.TO.GDP	0.06	0.07	0.09	-0.11	-0.23	0.01	-0.10	-0.12

Chapter 2: The Portuguese Labour Market

2.1. Introduction

The overall performance of the Portuguese labour market exhibits several notably positive features. Labour force participation is relatively high by EU standards, supported by an upward trend of female participation and, in recent years, inflows of migrant workers. The total employment rate has increased by some 5 percentage points since 1995, reaching a level of 68.7 % in 2001, significantly above the values in countries such as Spain and Greece; and, in fact, the second highest in the euro area. In the same year, the employment rates of females and of older workers already met the medium-term target values set for 2010 at the EU level to 60 % and 50 %, respectively. The overall unemployment rate had been well below the EU average, hovering around 4 % at the turn of the century, and long-term unemployment had come down to fairly low levels as well.

Figure 2.1: Employment and unemployment rates

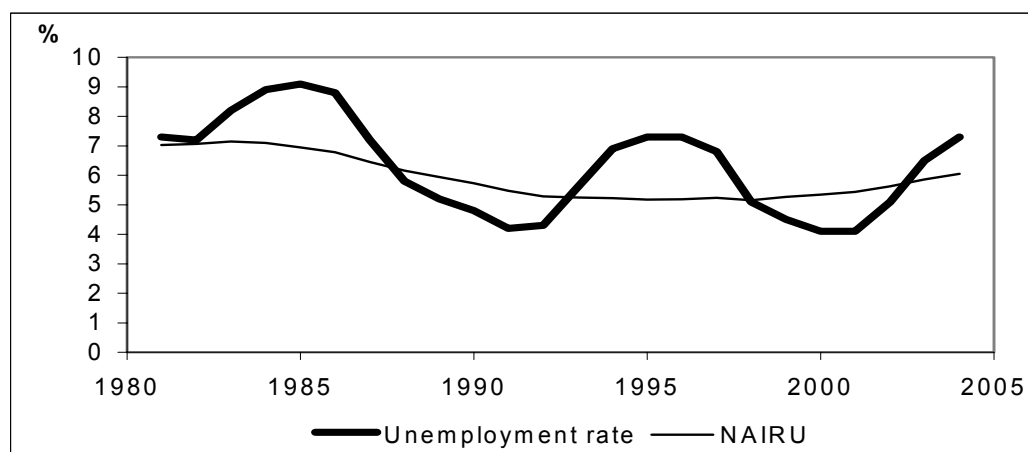


Source: Labour Force Survey, EUROSTAT

The recent downturn of the Portuguese economy, however, has been taking its toll on the labour market in the form of declining employment and a marked increase in unemployment. The unemployment rate is forecast to reach 7 % in 2004, up by 3

percentage points from its trough in 2000, and a further increase is projected in 2005. However, almost all of the deterioration in labour market conditions appears to be attributable to the cyclical downturn and the process of economic adjustment, which the Portuguese economy is undergoing. Structural unemployment, on the other hand, as identified using DG ECFIN's NAIRU estimates, shows very little trend increase, if any at all. Thus, despite the current negative developments, the underlying Portuguese labour market situation still compares relatively favourable with many other EU Member States.

Figure 2.2: Unemployment rate and the NAIRU



Source: Commission Services

With Portuguese labour market conditions relatively tight over the past couple of years, as indicated by actual unemployment rates falling below the NAIRU, significant wage pressures have built up, eroding competitiveness and damaging employment prospects. Over the period 1998-2002, nominal unit labour cost in the whole economy increased by a cumulated 27 %, compared to a cumulated rise of only around 8 % in the euro area as a whole; with nominal labour costs increasing somewhat faster than the GDP deflator, real unit labour cost have risen as well.

At the present juncture, wage pressures can be expected to attenuate in the face of slow growth and the emergence of significantly negative output gaps. However, while wage settlements start reflecting weaker overall activity and efforts to limit pay rises in the public sector, the necessary adjustment process is likely to stretch over the next few years. Thus, containing wage pressures in both the private and the public sector will be crucial over the medium term to reverse the deterioration of cost competitiveness and to bring the rise of unemployment to a halt.

Against this background, this chapter will discuss selected features of the Portuguese labour market from two different perspectives. It will review basic institutional settings and their developments in recent years, first by analysing the mechanisms that may have contributed to the recent imbalances and/or that may have amplified the boom-and-bust cycle. Second, it will take a look at labour market mechanisms from a slightly different angle focussing on the adjustment capacity to absorb the current macroeconomic imbalances. Obviously, supply side flexibility, in particular in the labour market, will have to lie at the core of a successful adjustment process.

2. 2. Labour market mechanisms and macroeconomic imbalances

Labour market developments are driven, broadly speaking, by the interaction of macroeconomic shocks with labour market institutions and regulations. The design of these institutions, such as wage bargaining systems, the flexibility of work organisation and the nature of contractual arrangements, tax-benefit systems, the degree of labour mobility, the education and training system and the adaptability of the workforce, determines not only the level of structural unemployment in the economy, but also the capacity to swiftly absorb emerging imbalances and to adjust to changes in a competitive environment. And, quite obviously, unfavourable shifts in institutional labour market characteristics may themselves be a source of instability and weak growth dynamics.

2.2.1 Wage bargaining systems

Wage formation in Portugal is predominantly characterised by sectoral wage bargaining with limited co-ordination between bargaining unions. In general, bargaining can take place at three different levels. First, a company can negotiate its own collective agreement with one or several unions. Second, several companies may form a coalition and strike a multi-employer bargain (but not signed by an employers' association) with the trade unions. Third, employers' associations, usually at the industry level, negotiate with trade unions over sectoral contracts.

Table 2.1: Types of wage agreements

	2000	2001	2002
Branch-level agreements	217	236	230
Multi-employer agreements	20	20	19
Company-level agreements	94	97	88

Source: DGCT

In Portugal, the representation of trade unions and their bargaining power depends on union membership (Bover et al. 2000). According to figures provided by Ebbinghaus and Visser (2000), union density is relatively low in Portugal, exhibiting a marked falling trend since the 1980s. While statutory extension of wage agreements to all workers in the sector undermines the incentives to join a union, it increases overall coverage rates and, thus, may tend to increase union bargaining power. However, given a rather dispersed union structure, the potential for co-ordination among unions is fairly low, often creating a competitive environment among unions with employers' associations being able to reach agreements with the least demanding unions while waiting for the Ministry of Employment to extend them nationwide (Addison and Teixeira 1999).

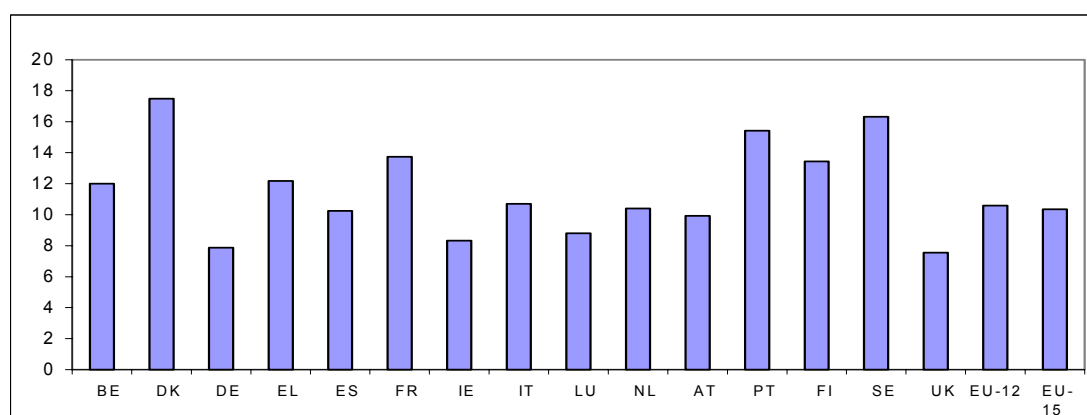
Collective bargaining agreements usually determine wage floors for each category or groups of workers, giving employers considerable room for manoeuvre to set wages above this minimum. Indeed, actual wages tend to be significantly higher than wages accorded in collective industry based agreements with, for example, effective wages

of low-skilled workers exceeding collective agreements by around 10 % (Carneiro and Portugal, 2002). The drift between actual and contractual wages tends to exhibit strong co-variation with fluctuations in economic activity, introducing an additional element of wage flexibility. Indeed, given deteriorating labour market conditions, wage drift might all but vanish at the present conjuncture, while running at 1-2 percentage points in previous years (OECD 2003).

Mandatory minimum wages were introduced in Portugal in 1974. The minimum wage, which is defined as a monthly wage, is updated annually by government decree. Decisions on the level of the minimum wage are taken on a discretionary basis, usually taking into account past and predicted inflation and after consulting the social partners. According to Banco de Portugal (1999), the ratio between minimum wages and average wages fell between 1986 and 1997 from about 52 % to 42.5 %. Since then, the annual increase of minimum wages has continued to be lower than average effective wage growth (OECD 2003), implying a further decline of the minimum wage in relative terms.

An important factor generating wage pressures in recent years has been the development of public sector wages and salaries. In Portugal, general government compensation of employees has been growing faster than nominal output over most of the past decade, with the general government wage bill exceeding 15 % of GDP in 2002. This was the combined result of, on the one hand, the trend increase of the share of employment in general government, education and health, in overall employment, and, on the other hand, of public sector wage increases outpacing those in the private sector of the economy. Public sector employment increased at an average of 3.3 % per year between 1995 and 2001, almost twice the growth rate of total economy-wide employment. In the same period, the average compensation of public sector employees increased by over 20 % in real terms, compared to 14 % in the private sector. As a result, while the relative size of the public sector workforce in Portugal is now close to the EU average, only Sweden and Denmark spend a higher share of GDP on the general government wage bill.

Figure 2.3: General government wage bill in 2002 (as a % of GDP)



Source: AMECO

Indeed, in Portugal, the wages of general government employees are significantly higher than wages of private sector workers with identical characteristics, with the wage gap between public sector and private sector workers being the largest in the

EU. Controlling for a number of observable workers' characteristics, such as education, professional experience and seniority in the job, the public sector wage premium relative to the private sector was estimated at around 27 % for women, and 13 % for men. While there are several reasons for the existence of a positive wage differential, it is probably fair to conclude that the public sector wage premium reflects a considerable element of rent extraction, given the close to zero quit rates and significant queuing of job applicants when work opportunities in the general government arise (Portugal and Centeno, 2001).

Wage agreements in the public sector provide important signals for wage bargaining in general. Indeed, there is a presumption that spill-over effects from public sector wage developments into the private sector have contributed to overall wage pressures in recent years. Thus, containing wage increases in the public sector is of utmost importance not only in view of the general budgetary situation but also with respect to ensuring the necessary overall wage discipline.

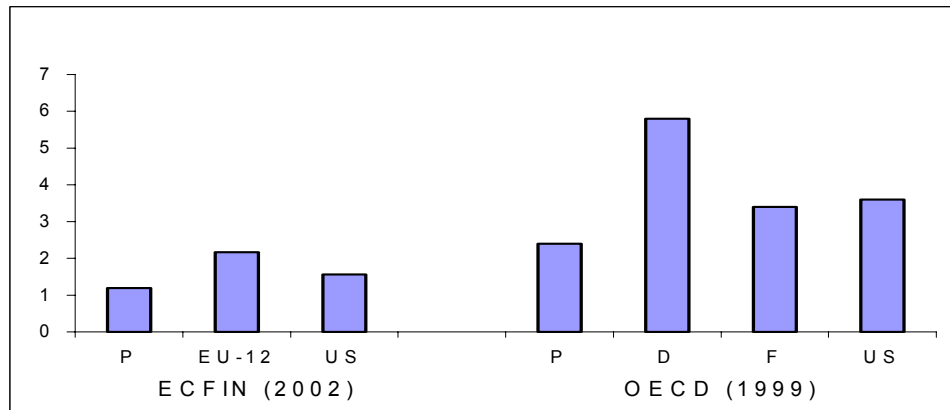
Against such a background, it bodes well that the government decided to freeze public salaries above € 1,000 per month in 2003 and increase salaries below that threshold by a mere 1 ½ %. In addition, the government has announced that it will use projected inflation in the EU as the new benchmark for wage negotiations. Given that domestic inflation is expected to be above the EU average in 2003, real wages in the public sector are likely to fall this year. An additional factor which will exert downward pressure on public sector wages is the petering out of the impact of a number of financial costly career reforms, which were implemented in recent years. Overall, for the economy as a whole, the growth rate of total wages per employee is expected to decelerate from 5 ½ % in 2002 to about 2 ¼ - 2 ½ % on average in the 2004-2005 period.

In summary, the Portuguese labour market appears to be still characterised by a relatively high degree of wage flexibility. Available empirical estimates suggest that nominal wages respond significantly to changes in unemployment; the so-called sacrifice ratio, i.e. the additional unemployment required to bring down inflation by one percentage point, is estimated to be fairly low in Portugal in international comparison. Moreover, the relatively high inter-industry wage dispersion may support labour cost flexibility and rein in the employment/unemployment cost of the ongoing adjustment process. However, given the sheer size of the required adjustment in view of the cumulated losses in competitiveness, the flexibility of wage setting in Portugal will definitely face a tough test over the next few years.

2.2.2 Work organisation and employment protection legislation

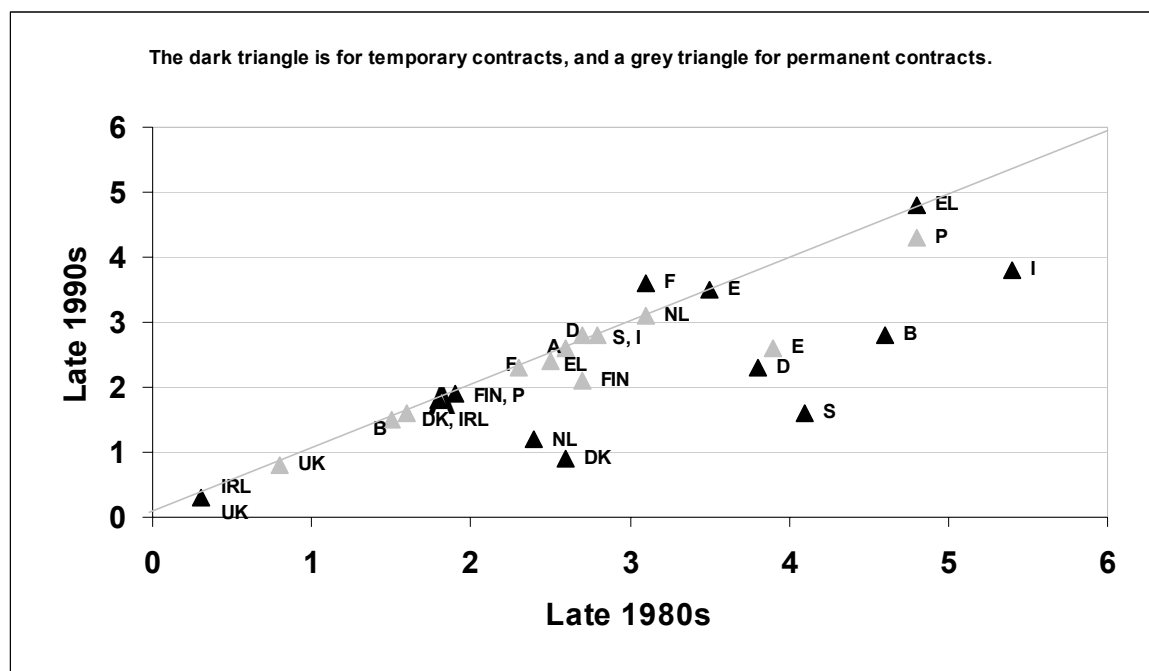
In international comparisons, Portugal is usually classified as a country with rather restrictive employment protection legislation (EPL), restraining the ability of firms to react quickly to shocks. Despite some easing during the 1990s, an OECD ranking in 1999 still listed EPL in Portugal among the strictest of all OECD countries. In particular, dismissal procedures for workers with permanent contracts are complex and cumbersome, and the advance notification and severance pay requirements impose relatively high costs on employers. The strictness of EPL has been shown to affect job and worker flows in Portugal, reducing turnover, limiting job creation and increasing unemployment duration (Blanchard and Portugal 2001).

Figure 2.4: Estimated sacrifice ratios



Source: Commission Services, OECD (1999)

Figure 2.5: Strictness of employment protection legislation



Note: OECD summary indicators covering adjudged strictness of various elements. For regular employment: regular procedural inconveniences, notice and severance pay for no-fault individual dismissals and difficulty of dismissal. For temporary employment: fixed-term contracts and temporary work agencies. Summary scores can range from 0 for no restrictions to 6 for the strictest regulation.

Source: OECD (1999)

Fixed-term contracts, which were first regulated in 1976, were conceived as an instrument to introduce flexibility at the margin. Indeed, as a consequence of high dismissal costs for regular workers, fixed-term contracts have gained more and more importance in the Portuguese labour market, reaching more than 20 % of total

employment in 2001, a share almost twice as high as in 1995. 3 out of 4 jobs additionally created between 1997 and 2002 were based on fixed-term contracts.

Temporary jobs are an important pathway of labour market (re-)integration in Portugal. Transitions from unemployment into employment are clearly dominated by moves into temporary jobs; similarly, transition rates from workers on temporary contracts into permanent jobs are relatively high in Portugal, clearly exceeding those in countries such as France or Spain (EU Commission 2002). Varejão and Portugal (2001) argue that fixed-term contracts are often used as a screening device by firms to ensure a productive job-worker match and, thus, provide indispensable stepping stones to wider labour market opportunities.

However, the empirical evidence also points to a substantial proportion of workers remaining in a persistent precarious situation of temporary contracting with low pay, often associated with frequent moves into and out of unemployment. Maintaining restrictive EPL for permanent contracts may indeed lead to an inefficient segmentation of the labour market, artificially forcing up the number of temporary workers above optimal levels and reducing the incentives for on-the-job training and general productivity upgrading of workplaces. However, imposing additional regulatory burden on fixed-term contracts, as has happened occasionally in the past, is not an appropriate policy response; obviously, considerate efforts to ease EPL for permanent jobs would represent a superior solution.

Another mechanism frequently used by Portuguese firms to introduce flexibility into employment relations has been out-contracting of services to individuals with independent worker contracts (Centeno 2000, 2002); this creates an additional bias in favour of self-employment and helps to explain a relatively high share of self-employed in total non-agricultural employment in Portugal, where this proportion amounts to almost 17 %. Part-time work, on the other hand, is less widespread in Portugal than in the EU as a whole; in particular among Portuguese females, with a share of around 16 %, part-time work is no more common than in countries such as Spain and Italy, despite much higher overall employment rates.

2.2.3 Recent changes in industrial relations legislation

In April 2003, the Portuguese Parliament approved a new Labour Code (Código do Trabalho). The Code will replace most current individual and collective labour legislation in Portugal by bringing existing provisions together in a single text. At the same time, current provisions are amended in a variety of areas, including employee representative structures, collective bargaining mechanisms and dispute-resolution procedures. Main new features include the following:

- An extension of the duration of fixed-term contracts to six years
- Enabling geographical mobility clauses in employment contracts
- A right for employers to oppose the reinstatement of workers in dismissal clauses
- A new possibility for individuals to sign up to a collective agreement
- The introduction of expiry clauses in collective agreements

- The possibility of compulsory arbitration being determined by the Ministry of Social Security and Labour if a collective agreement expires without being replaced by another
- Introducing “social peace” clauses, under which trade unions would renounce the right to strike over issues that have already been negotiated

The new Labour Code represents a major change to Portuguese industrial relations and, in particular, bargaining systems, comprising several elements to make labour law and collective bargaining more flexible and to relax job-protection-legislation. Overall, the new Code appears to be a useful step to enhance the flexibility of the Portuguese labour market, thereby generating more and better jobs.

2.2.4 Tax-benefit system and active labour market policies

The design of the tax-benefit system is of crucial importance for providing the appropriate incentives in order to make work pay and to facilitate job creation. As regards labour taxes, the available summary indicators do not suggest a particularly heavy tax burden on labour in Portugal. Over the period 1997-2001, the total tax wedge on labour fell by 1.4 per cent in Portugal, somewhat less than in several other EU Member States. But the overall level is low: In 2001, the average tax wedge on labour for a single worker at the average production wage level stood at 32.5 % in Portugal, compared to 43.1 % for the EU as a whole; only the UK and Ireland could account a lower average tax wedge on labour. The same picture in qualitative terms emerges for the tax rate on low-wage earners. In consequence, labour taxes are typically not mentioned among possible prime suspects inhibiting the capacity of the Portuguese labour market to generate jobs.

On the benefit side, the generosity of the unemployment protection system in Portugal is now considerably higher than two decades ago, when it was hardly existing at all. Coverage, replacement rates and the duration of benefit entitlements have risen; however, eligibility conditions are relatively strict, with a required qualification period of 18 months of contributions during the past two years. Flat-rate unemployment assistance (up to 100 % of the minimum wage) is available for those unemployed who do not (no longer) qualify for regular benefits and live in households with a per-capita income below 80 % of the minimum wage. In 1997, a minimum guaranteed income scheme has been introduced. Beneficiaries must follow a programme of social and professional integration; operational rules of the scheme, now called social insertion income, have been tightened recently so as to minimise the risk of creating work disincentives.

In general, access to benefits can be denied following a refusal to accept a suitable work or to undertake training. However, the effectiveness of the public employment service in Portugal is considered as relatively low (OECD 2003), mainly in terms of its job-brokerage function. This hampers tight benefit administration and, in further consequence, the current unemployment benefit system was found to increase unemployment duration, especially for old workers (Addison and Portugal 2003). Thus, while the overall disincentive effects of the unemployment protection system may have remained fairly limited during periods of low unemployment, the recent rise in joblessness could well put current provisions under strain. Experience in other

countries has shown that mechanisms generating persistence in unemployment can quickly take root in a low activity environment.

Against this background, it appears important to ensure a focus on activation strategies for the unemployed, to monitor closely benefit administration and to improve upon the job-worker matching capabilities of the public employment service. Obviously, cost-effective use of active labour market policies (ALMP) should rank important on the agenda as well. The share of ALMP in total spending on labour market policies has been relatively high in Portugal in recent years; however, the inevitable spending pressures associated with rising unemployment suggest a systematic monitoring and evaluation of the numerous active labour market programmes currently in place.

2.2.5 Labour mobility and migration

Labour mobility is relatively low in Portugal. As already argued, rather restrictive employment protection legislation impedes job turnover and worker mobility. Moreover, the low educational level of the labour force can get in the way of a smooth reallocation of labour across occupations, sectors and industries. Housing market restrictions and inefficient job-brokerage systems have also been mentioned as additional hindrances for the mobility of workers.

However, in recent years immigration has contributed an additional element of flexibility in the Portuguese labour market. Portugal has long been a country of emigration, but in the 1990s this trend has been reversed and the country has seen an enormous growth in the number of foreign residents. In October 2002, according to SEF data, over 400,000 foreigners were legally resident in Portugal, corresponding to approximately 6 % of the working-age population. A decade ago, in 1990, the number of foreign residents in Portugal had reached just about 100,000.

In parallel, the foreign labour force has increased rapidly as well. In 2000, the foreign labour force amounted to around 100,000 workers, five times the number 5 years ago, reaching a share of 2.2 % of the total labour force. However, when the government launched an amnesty programme for undocumented foreigners with employment contracts in 2001, some 130,000 annual residence permits were issued (OECD 2003B). Non-EEA immigrants are mainly Eastern Europeans (mostly from Ukraine, the Republic of Moldavia, Romania and Russia), Brazilians, and people from the Portuguese speaking African countries. As a result, for the first time, the majority of immigrants did not speak Portuguese. Some anecdotal evidence suggests that the skill level of immigrants from Eastern European countries is high relative to other groups of immigrants.

Table 2.2: Non-EEA immigrants with residence permits, January-May 2002

Country of origin	No. of residents	Country of origin	No. of residents
Ukraine	65,148	Angola	6,810
Brazil	33,053	Guinea Bissau	4,618
Moldavia	13,616	Lithuania	883
Romania	10,994	Mozambique	447
Cape Verde	7,618	Latvia	249
Russia	7,069		

Source: Foreigners and Border Department (SEF)

The inflow of migrants has certainly helped to alleviate bottlenecks and to ease the pressures stemming from overall tight labour market conditions in the past boom period. Immigration policy in Portugal now aims at implementing a better “managed system” that is more responsive to Portugal’s labour market needs. Legislative changes provide for a periodical analysis of the Portuguese labour market as a fundamental factor in deciding the entry and residence of non-EEA foreign nationals. The new legislation also implements an EU directive on the smuggling of illegal immigrants, and seeks to improve the integration of immigrants and the conditions for families to be reunited.

2.2.6 Education and training system

The upgrading of human capital, skills and competencies is one of the most important labour market challenges in Portugal, representing a key factor to increase labour productivity and competitiveness. Despite some improvements in recent years, Portugal ranks very low in terms of education attainment of the working age population. In 2001, only one out of five people aged 25 to 64 had completed upper secondary education or better (compared to, on average, three out of five in the EU as a whole). More than two thirds of the population had attained only six years of schooling, and only 9 per cent had achieved tertiary education, the lowest proportion in the EU. Notwithstanding the significant progress made over the past couple of years, Portugal remains a laggard even among younger people: latest figures indicate that only about one third of people aged 25 to 34 had attained at least upper secondary education, compared with around three-quarters in the EU.

Although Portugal has increased spending on education substantially in recent years, comparing the level of spending with indicators for educational outcomes points to a relatively inefficient use of resources. Portuguese students were, on average, among the poor performers in international comparisons of educational achievements, such as the OECD PISA study. Moreover, the percentage of students graduating from upper secondary school continues to be relatively low, because of high failure and dropout rates. In 2002, 45.5 % of the Portuguese population aged 18 to 24 had left school with at most lower secondary education and did not participate in further education and training, by far the highest proportion in the EU. Despite recent progress, the level of vocational training is also significantly below the EU average. It has proved difficult to involve small enterprises in the national programmes designed to upgrade the skills of their staff.

The relatively poor educational and skill base of the population points to a scarcity of (highly) skilled labour, as reflected inter alia in high returns to formal education and experience (OECD 2003). In general, the low levels of human capital endowments of the Portuguese workforce can seriously impede the ability to narrow the technology gap and to increase productivity levels in the move towards an advanced, skill-based economy. Thus, as spelled out in the Broad Economic Policy Guidelines, efforts must continue on a wide front to improve education and training systems and, in particular, to increase the quality of schooling and tertiary education programmes. In parallel, a broad-based upgrading of skills and competencies of the workforce appears indispensable as well. However, data from recent labour force surveys indicates that in Portugal only around 3 % of people aged 25 to 64 participated in education and training over the four weeks prior to the survey, a fairly low proportion by EU standards. Clearly, an articulated lifelong learning strategy is required to raise the employability and adaptability of the work force to new job opportunities, and recent government efforts in that direction provide a solid basis upon which to build.

2. 3. Conclusions

In the wake of the serious macroeconomic imbalances accumulated in recent years, Portugal's labour market has been heading into rough waters as the adjustment process is taking its toll in forms of employment losses and a rapid increase of unemployment. However, given a relatively favourable initial position, labour market performance in Portugal in terms of employment and unemployment rates is still better than EU average. There can be little doubt, though, that supply side flexibility, in particular in the labour market, will have to lie at the core of a successful recovery process and a medium term increase in potential growth. In this context, the major labour market challenges facing Portugal are the following:

- A period of sustained wage moderation will be crucial to reverse the deterioration of cost competitiveness and to bring the rise of unemployment to a halt. In general, wage setting mechanisms in the private sector appear to be quite flexible and responsive to shocks; thus, securing wage moderation in the public sector is especially important, not only as a signal to the private sector, but also to contain public spending pressure.
- Work organisation and industrial relations in Portugal have been characterised, inter alia, by fairly uncoordinated wage bargaining mechanisms with sometimes unclear representation structures and a relatively tight set of employment protection regulations, in particular for workers on permanent contracts. The new labour code appears to be a good basis to enhance the flexibility of the Portuguese labour market. Strengthening the employability and adaptability of the workforce will be indispensable to avoid a harmful segmentation of the labour market and to support the creation of more and better jobs.
- The unemployment benefit system, while certainly not overly generous by EU standards, has been considerably extended and improved in the past decade. Close monitoring of benefit administration and delivery is required, especially in periods of rising unemployment, to minimise the risk of persistence mechanisms taking root. Cost-effective use of active labour market policies and, in particular,

improvements in the job brokerage function of the public employment service should rank high on the agenda as well.

- Efforts must continue on a wide front to improve education and training systems and, in particular, to increase the quality of schooling and tertiary education programmes. The number of early school-leavers with insufficient levels of schooling or training should be substantially reduced. In parallel, a broad-based upgrading of skills and competencies of the workforce appears indispensable as well.

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Chapter 3: Productivity, Competitiveness, and Innovation: challenges to foster required adjustments for recovery

3.1. Introduction

Since the early 1990s, the labour productivity gap between Portugal and the EU as a whole appears to have narrowed somewhat. While in 1992, GDP per person employed (in PPS) stood at 57% of the EU average, in 2003, it stood at 64% of the EU average. Hourly labour productivity has gone up as well, rising from 52% of the EU average in 1993 to 59% in 2003. The fact that hourly productivity figures are below the figures for labour productivity per person employed indicates that Portuguese workers make longer hours than their colleagues in other EU Member States.

Looking at annual percentage growth rates in GDP per person employed, we find that labour productivity growth in Portugal exceeded that in the EU during the period 1995-1999. Since then, however, productivity growth in Portugal has slowed down to levels below the EU average partly reflecting cyclical developments. This low productivity growth rate together with high wage growth has contributed to an erosion of the cost competitiveness of the Portuguese economy.

The aim of this chapter is to investigate the underlying causes of the disappointing labour productivity growth in Portugal. Section 3.2 analyses the evolution of productivity since 1990 at different levels of sectoral disaggregation. Section 3.3 identifies a number of possible explanations for the overall disappointing productivity performance of the Portuguese economy. Section 3.4 concludes.

3. 2. Evolution of Productivity

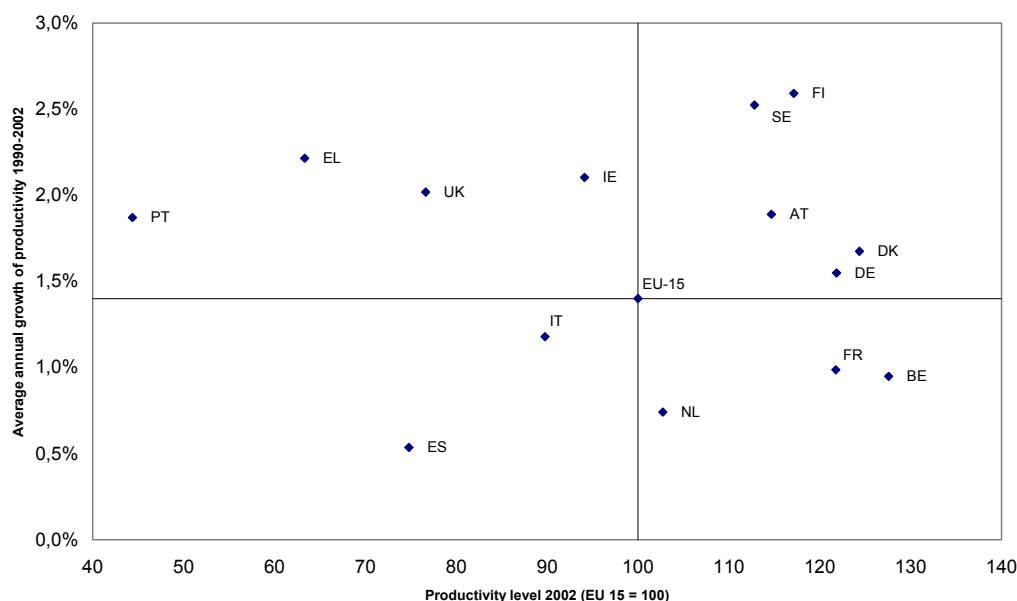
This section compares the Portuguese productivity level with that of the other EU Member States and describes its evolution since the early 1990s. In order to ensure comparability between the analyses at the aggregate ‘total economy’ level and the disaggregated ‘sectoral’ level, labour productivity is measured by Gross Value Added (GVA) per person employed at constant prices (expressed in euro).

3.2.1. Labour productivity for the total economy

In 2002, output per person employed in Portugal equalled 44% of the EU average, a value that was lowest amongst EU Member States and only slightly above the percentage observed in 1990 (42%)¹. Behind these figures is an annual average productivity growth rate of 1.9% between 1990 and 2002 in Portugal, which compares with 1.4% in the EU15 as a whole (see Figure 3.1). In comparison with the other cohesion countries, Portugal outperformed only Spain, which had a productivity growth well below the EU average, but fared worse than Greece and Ireland. Taking into account Portugal’s very low starting level, the small relative improvement between 1990 and 2002 must be considered as disappointing.

¹ The substantial difference between the labour productivity measures in PPS and current exchange rates can be attributed to the relatively low price levels in Portugal in comparison with the EU as a whole. Hourly productivity is not discussed here as the sectoral data appear to be unreliable.

Figure 3.1: Productivity levels and average annual growth of productivity



Source: Ameco-DG ECFIN.

A split-up of the period 1990-2002 into two sub-periods (1990-1995) and (1995-2002) shows furthermore that productivity growth has declined between these two periods. While over the period 1990-1995 annual average productivity growth in Portugal amounted to 2.2%, it decreased to 1.6% between 1995 and 2002, with the figures for the latter period strongly influenced by the years 2001-02, when the cyclical downturn triggered a sharp slowdown in labour productivity growth. Notwithstanding this, Portugal continued to catch up with the EU also during the second sub-period, as labour productivity saw an even stronger decline in the EU as a whole (see Table 3.1).

Table 3.1: Labour productivity per person employed (annual change)^{*)}

	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002
POR	1,5	3,6	1,3	0,3	4,5	1,7	2,9	1,9	1,9	1,9	1,5	-0,4
EU	1	2,6	1,3	2,7	1,7	1,1	1,6	1,2	1	1,7	0,6	0,5
Δ	0,5	1	0	-2,4	2,8	0,6	1,3	0,7	0,9	0,2	0,9	-0,9

*) GVA per person employed, at constant prices – total economy

Source: Ameco-DG ECFIN.

3.2.2 Total factor productivity (TFP) for the total economy

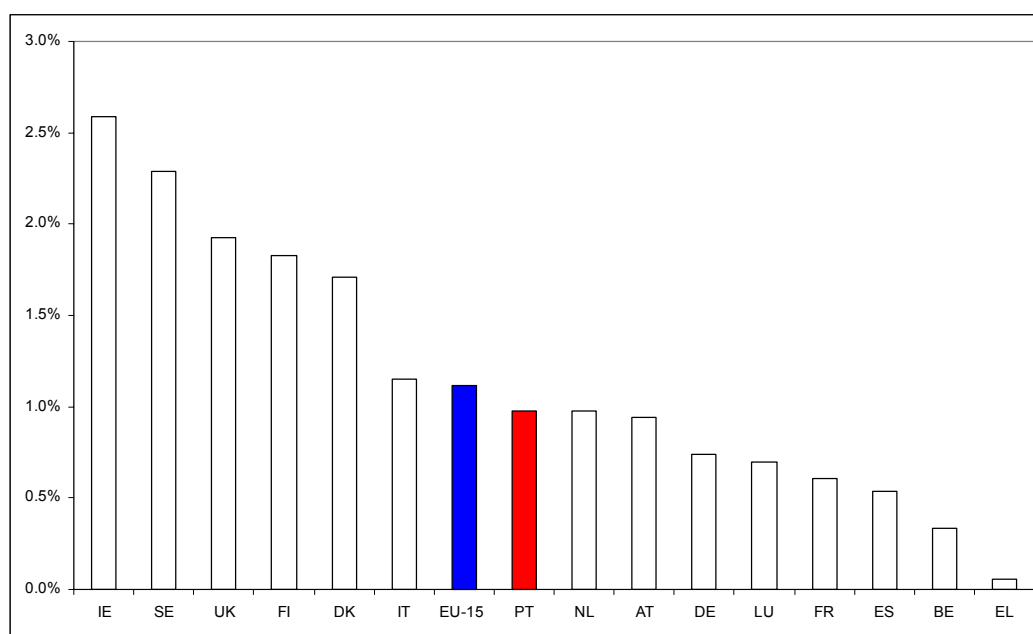
Labour productivity growth can be decomposed into capital deepening and total factor productivity growth. The degree of capital deepening is usually measured by gross fixed capital formation, which includes public and private investments in infrastructure and equipment. Total factor productivity is calculated as a residual reflecting the degree of

technological progress, the organisation of the production process as well as changes in the quality of capital and labour inputs not directly measured.

As gross fixed capital formation in Portugal represented a relatively large share of GDP over the period 1991-2000 (24.7% of GDP as opposed to 20.2% in the EU as a whole), it was the weak contribution of TFP that mainly explained the disappointing growth of labour productivity in Portugal over the period 1990-2002².

Over that period, Portugal experienced TFP growth slightly below the EU average. The average annual growth rate was around 0.8% in comparison to 0.9% for the EU15. Moreover, Portugal experienced a slowdown in TFP growth from 1% over the period 1990-1995 to 0.7% over the period 1995-2002. By comparison, the EU average annual growth rate fell from 1.1% over the first half of the 1990s to 0.7% over the period 1995-2002 (see Figures 3.2 and 3.3).

Figure 3.2: Total factor productivity growth (1990-1995)

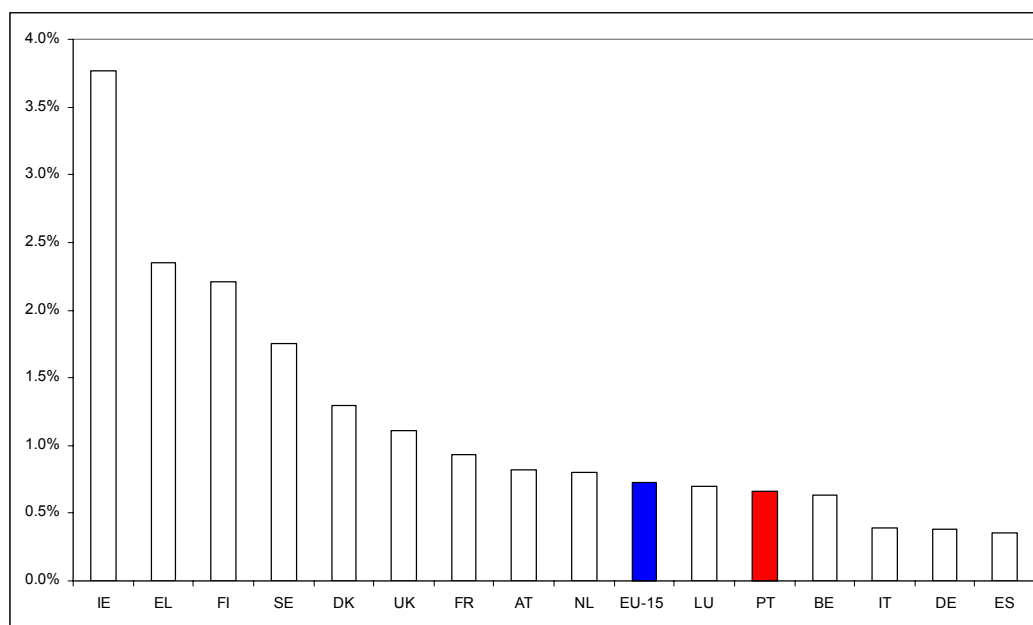


* EU-15 and DE 1995 / 1992.

Source: Ameco-DG ECFIN.

² The methodology used for calculating TFP growth is described in Cécile Denis, Kieran McMorow and Werner Röger, “Production function approach to calculating potential growth and output gaps – estimates for the EU Member States and the US”, DG ECFIN Economic Paper N° 176, September 2002.

Figure 3.3: Total factor productivity growth (1995-2002)



Source: Ameco-DG ECFIN

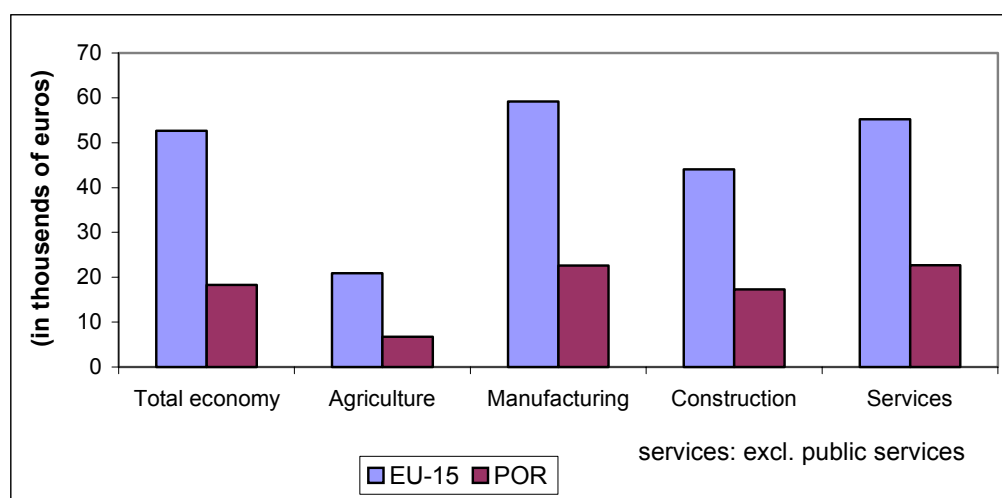
Summarising, TFP growth in Portugal has been below the EU average since the early 1990s. Moreover, TFP growth rate decreased in absolute terms during the time period under consideration. The disappointing growth of labour productivity in Portugal could be associated with the slow TFP growth observed. However, the poor productivity performance could not be explained by insufficient investment in infrastructure and equipment.

3.2.3 Labour productivity by main sectors

This section aims to determine whether the productivity growth figures at the aggregate level can be explained by developments in particular sectors of the economy, or whether productivity growth has been slow across the board. As a point of departure, one should say that labour productivity per person employed in Portugal is well below the EU average in all main sectors, that is agriculture, manufacturing, construction and services³. While in manufacturing, construction and services, Portuguese productivity levels in 2001 were around 40% of the EU average, in the agricultural sector productivity in Portugal was only 32% of the EU average (see Figure 3.4). This observation is particularly relevant in the case of Portugal as the employment share in agriculture (11%) is still relatively high.

³ The public sector has been excluded from the services sector in order to avoid a possible bias in the measurement of productivity in this sector. Public services include public administration and defence, education, health and social work, and finally other community social and personal services.

Figure 3.4: Level of labour productivity in 2001



Source: Groningen Growth and Development Centre

Over the last decade Portugal has been catching up with the EU average productivity levels in the manufacturing and the construction sectors. In the manufacturing, the average annual productivity growth was 3.7% for Portugal in comparison with 2.8% for the EU over the period 1990-2001. In the construction, the average annual productivity growth was 8.8% for Portugal in comparison with 3.4% for the EU as a whole. However, the macroeconomic impact of the productivity gains in the manufacturing sector has been limited by a sharp decline in the employment share of this sector. While in 1990 25% of employees were active in the manufacturing sector, by 2001 this percentage had dropped to 19% (see Table 3.2), which would seem to indicate that the productivity gains in the manufacturing sector had been achieved through labour shedding. The construction sector, on the other hand, witnessed a simultaneous increase in productivity and employment.

Table 3.2: Share of persons engaged in the total economy by sector
(% of total economy)

	1990	1995	2001
Agriculture	15,7	12,2	11,1
Manufacturing	24,5	22,5	18,9
construction	8,9	8,7	10,4
Services (excl. public services)	28,2	30,7	33,5
Public services	22,7	25,9	26,1

Source: Groningen Growth and Development Centre

While the productivity performance in manufacturing and construction was better than the EU average, Portugal did worse in agriculture and services. In agriculture, the average annual productivity growth over the period 1990-2001 was 2.8% for Portugal in comparison with 3.7% for the EU. This is somewhat of a concern, as agricultural employment in Portugal is still relatively important, even if its share of total employment went down from 16% in 1990 to 11% in 2001. Developments in the services sector are more worrying, however, as the employment share rose from 28% in 1990 to 34% in

2001. Average annual productivity growth in this key sector, which now employs one third of the working population in Portugal, was 0.2% for Portugal in comparison with 1.1% for the EU.

Comparing productivity growth rates in the two time periods under consideration (1990-1995 and 1995-2001), we find that the productivity growth accelerated in the manufacturing sector but slowed down in construction and agriculture while it remained very weak in services. One explanation for these findings may be that increased international competition in the more exposed manufacturing sector has forced firms to raise productivity through job cuts. The resulting excess labour supply appears to have been absorbed in sectors such as construction and services, which tend to be more protected from international competitive pressures.

3.2.4 Labour productivity growth in different manufacturing sectors

As explained above, productivity in Portugal's manufacturing sector has been catching up with the rest of the EU since the early 90s. Nevertheless, Portugal's industrial structure remains highly specialised in labour intensive industries, which offer limited potential for an acceleration of labour productivity growth. In 2001, the share of production in low-tech manufacturing sectors was 73% (see Table 3.3). The manufacture of food and beverages, for example represented 16% of total manufacturing production (as opposed to 13% in the EU15), while textile manufacturing made up 7% of the total production (as opposed to 2% in the EU as a whole).

Recently, there has been a shift from low-tech, labour intensive industries into ICT-producing and ICT-using manufacturing industries. Between 1995 and 2001, the share of production in ICT-producing manufacturing sectors more than doubled from 2% to 5% of total manufacturing production. Moreover, the share of production in ICT-using manufacturing sectors rose from 19% to 21% (see Table 3.3). This change was also reflected in the Portuguese trade figures, which showed a decline in exports of labour intensive products, an area where Portugal traditionally had benefited from a comparative advantage. At the same time, the relative importance of intra-industry trade with Portugal's partners within the EU rose as the Grubel-Lloyd index⁴ increased from 0.27 in 1996 to 0.32 in 2001, indicating that Portugal has started to find new niches of specialisation in sectors with a higher technological content.

Table 3.3: Percentage of the production in 1995 and by type of industry ^{*)}

	1995	2001
ICT – producing manufacturing sectors	2.0 %	5.4 %
ICT – using manufacturing sectors	18.8 %	21.2 %
Other manufacturing sectors	79.2 %	73.4 %

Source: Eurostat

*) The complete listing of all industries on this basis may be found in Cécile Denis, Kieran McMorrough and Werner Röger, 2003. As the authors explain the breakdown of the manufacturing industry according to ICT producing/using sectors, on the one hand, and other manufacturing sectors, on the other hand, can be used as a rough proxy for high/medium and low productivity sectors in the EU and US economies.

⁴ The closer the indicator is to one, the more Portugal's trade with its EU partners is intra-industry in nature, and so the more comparable to the rest of the EU is its industrial structure.

3.2.5 Labour productivity trends in services sectors

As explained above productivity growth in Portugal's services sector continued to lag behind that of the rest of the EU during the 90s. This observation may be associated with a negative average annual productivity growth in a number of important sub-sectors.

Labour productivity trends in the different sub-sectors show a mixed pattern. While average annual productivity growth in the 1990s fluctuated between 0.5% and 2% in wholesale and retail trade as well as in repairs, it was negative in water transport, hotels and restaurants, insurance and pension funding, real estate activities, and certain business services. In the real estate and business services sectors the decline in productivity was accompanied by rapid job creation: between 1990 and 2001 the employment share of these two sectors more than doubled. These two services sectors as well as wholesale and retail trade make up the bulk of the employment gains in the services sector since 1990.

3.3. Main elements behind the slow productivity growth

This section aims to identify the main underlying causes of the slow growth of labour productivity and total factor productivity in Portugal. Section 3.3.1 focuses on the role of FDI as a stimulus for productivity growth, while Section 3.3.2 treats the different structural factors that have acted as a constraint on productivity growth in Portugal.

3.3.1 The role of FDI

The important role of Foreign Direct Investment in fostering technological diffusion and stimulating the emergence of modern sectors has been well documented in the case of Ireland⁵. For Portugal less evidence is available. FDI inflows into Portugal equalled 2.3% of GDP over the period 1990-1994, a level that was well above the EU average of 1.1%. Over the period 1995-1999, FDI inflows into Portugal fell to 1.7% of GDP while FDI inflows into the EU as a whole rose to 2.3% of GDP. This decline in FDI inflows in the second half of the 1990s may help explain the recent slowdown in productivity growth in Portugal, considering that it takes time for the effects of changes in FDI flows to be felt. During the period 2000-2002, FDI inflows into Portugal surged to 5.0% of GDP, a level that was not that different from the EU average of 5.1% of GDP. This resurgence of FDI inflows may be associated with the speculative bubble on the financial market in 2000.

The decline of FDI inflows into Portugal in the second half of the 1990s was mostly due to disinvestment by foreign investors in the manufacturing sector between 1996 and 2000. Most manufacturing sub-sectors experienced important disinvestments during this period which may help explain the employment losses observed in this sector.

In the light of the slowdown of FDI, the Portuguese government adopted a number of measures to stimulate FDI. Within the framework of the Programme for Productivity and Economic growth (PPCE) which was aimed at a sustainable increase of national productivity and competitiveness, the Portuguese government created an investment code that simplified and better organised the legal framework supporting national and foreign investment. In addition, the Portuguese agency for investment was given the task to

⁵ See Griffith R. et al (2002), Felisberto C.(2003) or Salavisa I (2002).

identify investment opportunities in the country and provide administrative support. Finally, tax relief aimed at promoting investments projects was provided⁶.

3.3.2 Other structural constraints

Investment in knowledge is a key determinant of technological progress, which itself is a main component of total factor productivity growth (Scarpetta and Tressel, 2002; European Competitiveness report, 2002). Section 3.2 has shown that the relatively slow growth of TFP in Portugal is a main factor explaining the disappointing growth rate in labour productivity. This section investigates to what extent lagging investments in the education system, in R&D and innovation, and in information and communication technologies (ICT) have contributed to the low TFP growth in Portugal (see Table 3.4).

Table 3.4: Structural indicators related to TFP growth

	PORTUGAL				EU 15			
	2000	2001	2002	2003	2000	2001	2002	2003
R&D expenditure (1)	:	0,84	:	:	1,95	1,98	1,99	:
Public expenditure on education (1)	5,7	5,9	:	:	4,9	:	:	:
S&T graduates (2)	6,3	6,4	:	:	:	:	:	:
Internet access at home (3)	8,4	:	15,9	21,7	18,3	36,1	38,9	46,8
Patent applications (4)	4,0	5,0	:	:	159,0	161,0	:	:

1 - as a % of GDP 2. - per 1000 inhabitants aged 20-29. 3 - % of households who have internet access at home. 4 - per million inhabitants, EPO.

Source: Eurostat

- *Low efficiency of the education system*

Effective human resource strategies involving education and training contribute to an increase in productivity (Barro and Sala-I-Martin, 1992; Lebre de Freitas M., 2002). The low efficiency of the education and training system has contributed to a relatively low-skilled workforce, which is a limiting factor on the potential for more rapid TFP growth.

⁶ Firms that produce tradable goods and services are offered a 20% reduction in corporate tax payments.

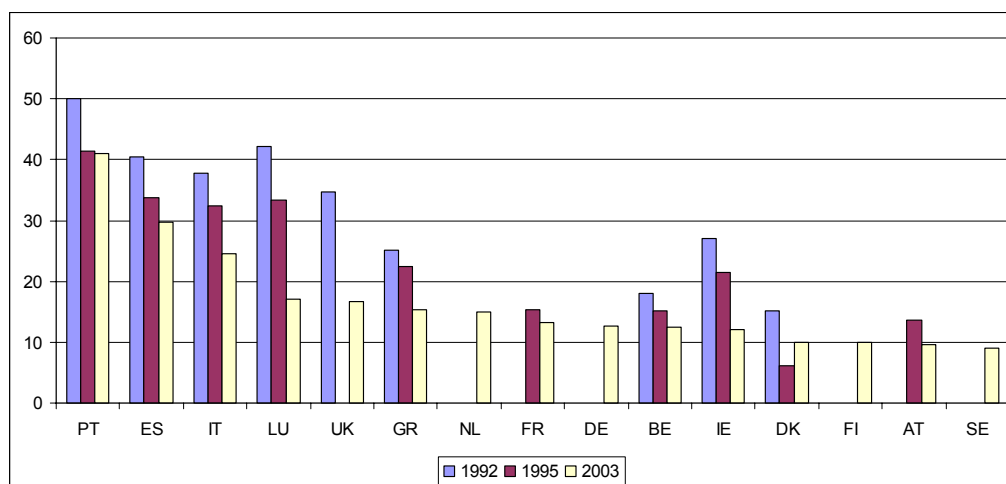
Table 3.5: Total public expenditure in education as a percentage of GDP

	1995	1996	1997	1998	1999	2000
P	5,4	5,5	5,6	5,6	5,7	5,7
EU-15	5,2	5,2	5,1	5,0	5,0	5,1

Source: Eurostat

Despite above EU average spending on education as a percentage of GDP (see Table 3.5), the educational attainment of the Portuguese population remains relatively poor (St. Aubyn, 2002). The share of the working-age population with at least an upper-secondary education in 2001 was the lowest in the EU and Portugal performed far below average even for younger age groups. Moreover, the share of early school-leavers remains very high. Following a decline in the early 1990s, it remained stable afterwards at a level that is highest amongst EU Member States (see Figure 3.4). In addition, the shares of science and technology graduates⁷ and PhDs⁸ in the relevant age groups were amongst the lowest in the EU. Finally, involvement in lifelong learning is relatively low and has not improved in comparison with the early 1990s: the percentage of the population aged 25-64 participating in education and training was the lowest amongst EU Member States in 2003, which was not the case in 1992 (see Figure 3.5). In order to boost the structural competitiveness of the economy, an improvement of the country's human capital base is therefore paramount. Portugal would also regain its former attractiveness with foreign investors who turned away from the country in the second half of the 1990s.

Figure 3.4: Early school-leavers*



*) Percentage of the population aged 18-24 with at most lower secondary education and not in further education or training

Source: Eurostat

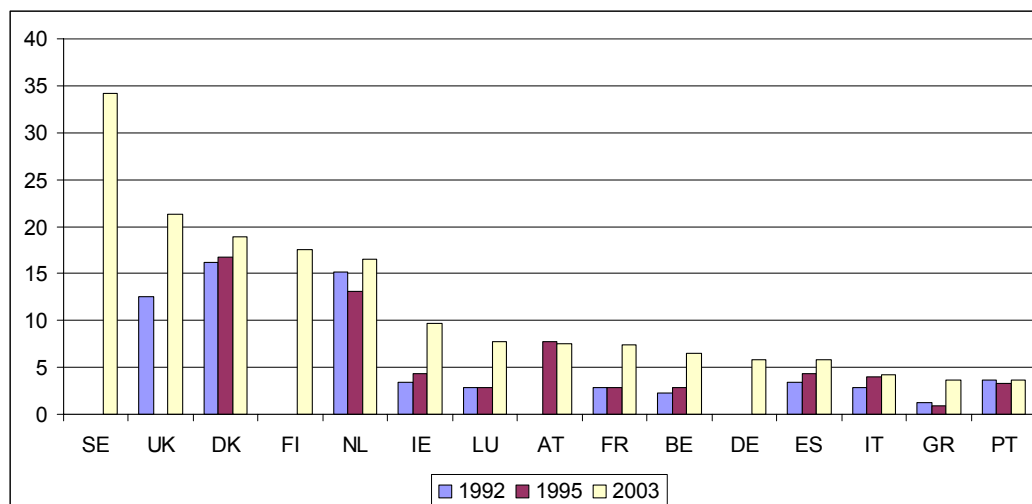
The Portuguese authorities are addressing these different problems by developing a lifelong learning strategy which aims to reduce the school drop-out rate, better prepare young persons for the transition to work and improve the employability of adults. For example, government and social partners agreed to bring at least 10% of the workers of

⁷ Age group 20-29 year-olds, data for the year 2000.

⁸ Age group 25-34 year-olds, data for the year 1999.

each enterprise into continuous training actions. In addition, all workers must have a minimum of 20 hours' certified training by 2003 and 35 hours by 2006. Finally a programme to provide training for 300 micro and small enterprises in trade, industry, services and construction has been launched.

Figure 3.5: Life-long learning-total



*) Percentage of the population aged 25-64 participating in education and training over the four weeks prior to the survey

Source: Eurostat

- *Low levels of R&D / innovation*

R&D drives TFP directly by the stream of innovation it produces⁹ and indirectly by the adoption of existing technologies developed elsewhere (“absorptive capacity”) (Bassanini A., Scarpetta S., and Visco I., 2000). The low levels of R&D and innovation may therefore partly explain the slow productivity growth in Portugal.

The level of R&D expenditure in Portugal (0.8% of GDP in 2001) was well below the EU average (2.0%). The relatively low level of R&D spending was particularly evident in the business sector which accounted for 32% of total R&D expenditure as opposed to more than 56% on average for the EU 15.

Several measures have been taken by the Portuguese government to promote business involvement in R&D and innovation within the framework of the “Integrated Programme for the Support of Innovation”. The *IDEA* programme promotes the creation of R&D consortia, bringing together firms and universities or research institutes. The *Pro-Inno* programme aims to promote innovation around clusters of industries. Support for technology-based start-ups linked to universities and research institutes is also given. Finally, Portugal has provided tax incentives for R&D for industrial SMEs.

- *Weak ICT penetration*

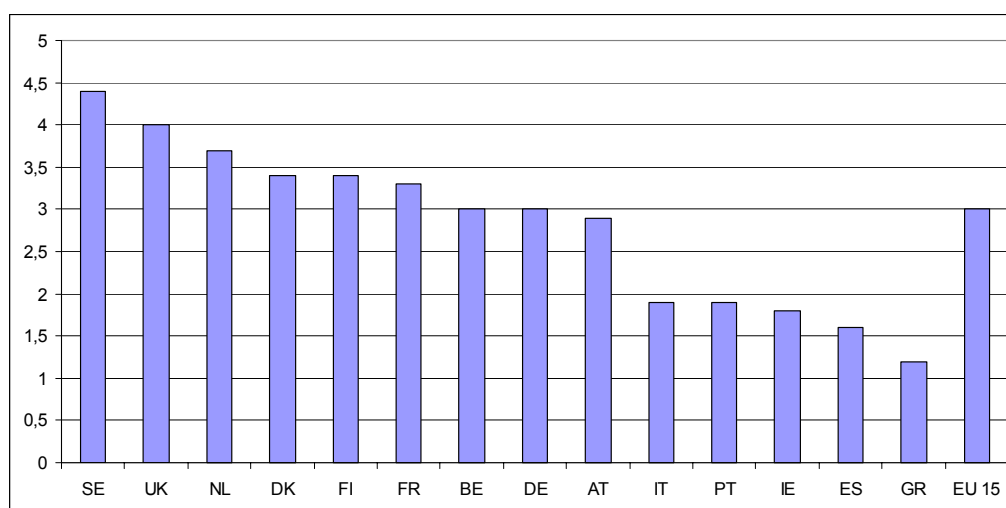
When combined with quality human resources, the diffusion of ICT contributes to raising TFP growth. Van Ark, Inklaar and Mc Guckin (2003) show that it is the slower diffusion

⁹ High R&D expenditure may not result in high productivity growth in markets with highly differentiated products and when there are different technology trajectories. Nevertheless this is not the case in the manufacturing industry in Portugal.

of ICT that is the principal factor in explaining the lower European growth compared to the US. The fact that Portugal is still lagging behind the EU both in terms of quality of human resources (as explained above) and in terms of investment in ICT limits the scope for a more rapid productivity growth, also because a well educated workforce is better capable of using these new technologies in the production process.

A relatively large share of ICT spending in Portugal is devoted to the purchase of telecommunication services: IC spending as a percentage of GDP in 2003 (4.4%) was above the EU average of 3.2%. However, much of this spending appears to be for consumptive purposes, while investments in communications technologies are more limited. IT expenditures (1.9%), on the other hand, were well below the EU average of 3.0% (see graph 3.6). Moreover, the percentages of enterprises households and schools having internet access were very low in comparison to other EU Member States. Finally, the percentages of companies selling or buying online were the lowest in the EU.

Graph 3.6: Expenditure on Information Technology as a percentage of GDP in 2003



Source: Eurostat

In order to stimulate ICT use measures to strengthen training in ICT skills have been taken by the Portuguese government both in the education system and within enterprises.

3.4. Conclusions

Labour productivity in Portugal is the lowest amongst current EU Member States. Labour productivity growth in the 1990s was above the EU average, but in recent years it has slowed down. However, given the overall decline of productivity growth rates at the EU level this should not be overemphasised.

Sectoral shifts appear to have played a major role in the observed slowdown of productivity growth in Portugal. The continued importance of the agricultural sector, which is characterised by low productivity growth, and the evolution of the manufacturing sector, where the impact of relatively high productivity growth was mitigated by its declining share in the overall economy, help explain developments in productivity at the more aggregate level. Moreover, the services sector, which increased

its share in the overall economy markedly, showed very moderate increases in labour productivity.

The slow growth of total factor productivity is a second important explanatory factor for the disappointing labour productivity growth. Structural constraints limiting the efficiency of the education system and holding back investments in R&D, innovation and ICT need to be addressed in order to increase productivity growth rates. Finally, FDI inflows, which could have provided an impulse to more rapid productivity growth, actually declined in the second half of the 1990s.

Portugal has taken a number of measures to stimulate productivity growth. It has implemented structural reforms that should facilitate the transition to a knowledge based economy. Efforts in this direction should be intensified and special attention should be given to raising the efficiency of the education and training system¹⁰.

¹⁰ See the BEPG implementation report.

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Chapter 4: The financial system

4.1 A financial system in rapid transition

At the time of accession to the EU in 1986, Portugal had a relatively underdeveloped financial sector. A process of liberalisation had already begun in the early 1980s, with a range of important reforms being implemented progressively. Notable among these reforms were the privatisation of State-owned financial institutions and the removal of administrative controls on interest rates and credit growth.¹ The reform process accelerated in the context of the Single Market Programme 1985-92, with the adoption of EU banking legislation, the lifting of all controls on international capital flows and the removal of any remaining quantitative controls on interest rates and credit growth.

The process of financial-sector reform was accompanied by declining inflation rates and exchange-rate stabilisation in the context of ERM participation after 1992, which in turn led to a gradual reduction in the exchange-rate risk premium and lower interest rates. From 1996, interest rates converged more rapidly to the lowest levels in the EU as financial markets increasingly discounted Portugal's adoption of the euro in 1999. Interest-rate convergence and the prospect of early euro adoption had a dramatic impact on private-sector behaviour. As households revised upwards their estimates of permanent income and came to anticipate durably lower interest rates, there was a consequent shift outwards in their credit demand function. Similarly, low funding costs and improved earning prospects induced an increase in the demand for investment financing within the corporate sector. On the supply side, meanwhile, the liberalised and restructured financial sector proved to be both competitive and innovative, and so could sustain the rapid increase in credit demand.

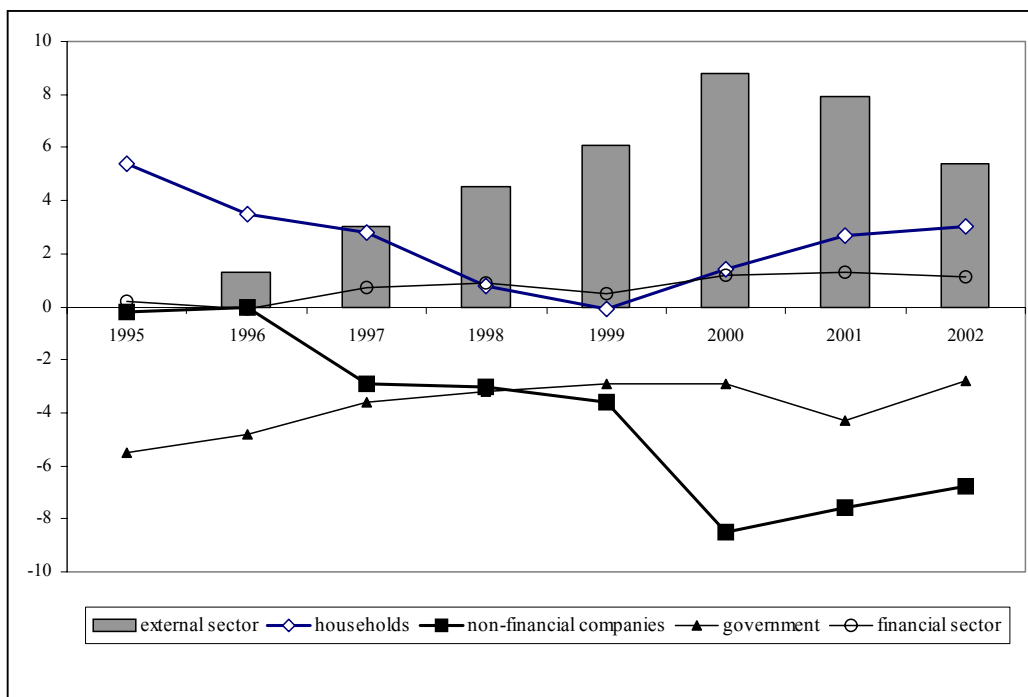
A crucial factor supporting the rise in supply and demand for private-sector credit was the elimination of exchange-rate risk among the currencies of the future euro area. As investment demand increasingly outstripped the available domestic savings, the absence of exchange-rate risk allowed the banking sector to refinance its domestic credit operations abroad.² Accordingly, a rising share of domestic funding needs was met by foreign lenders and Portugal's net external borrowing rose from practically nil in 1995 to a peak of 8.6% of GDP in 2000, before declining to 5.4% of GDP in 2002 (Figure 4.1). The net international debtor position for the economy as a whole reached a sizeable 45.5% of GDP in 2002, of which some 33% of GDP was net external debt of the banking sector.

Despite the major changes of the past two decades, Portugal's financial sector remains predominantly bank-centred (Figure 4.2). Although, five large groups dominate the Portuguese banking system, such a high level of concentration is not unusual in small EU economies and the available evidence does not suggest a lack of competition in the credit market (see below).

¹ At the time, the Portuguese financial system was regulated mainly via direct control measures.

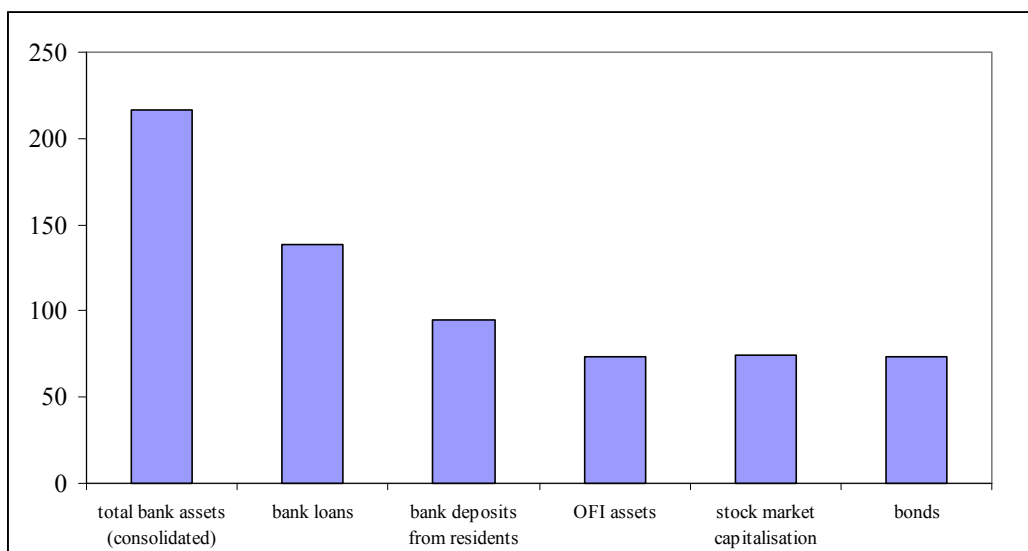
² In the European inter-banking market and/or by issuing international bonds.

Figure 4.1: Net lending by institutional sector (percentage of GDP)



Source: Banco de Portugal

Figure 4.2: Structure of the Portuguese financial system at the end of 2000 (percentage of GDP)

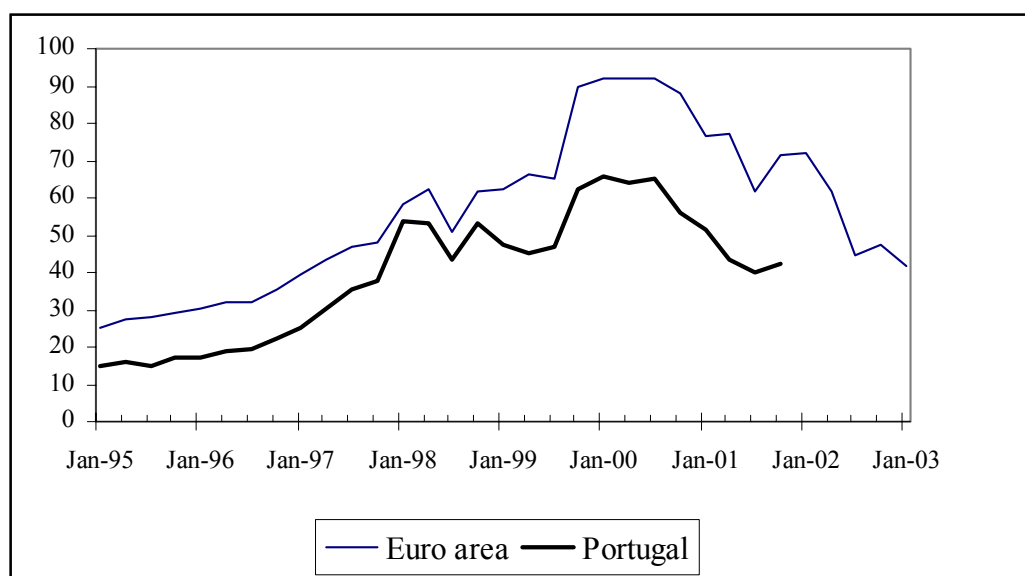


Source: Banco de Portugal (2002); ECB (2003)

The Portuguese stock market is relatively small, with market capitalisation having peaked at 62.5% of GDP in the first quarter of 2000 before declining in line with the global trend in equity prices (Figure 4.3). At the end of 2002, stock market

capitalisation was 32% of GDP, lower than the euro-area average (48% of GDP) but not much below the level in some other euro-area Member States (Germany and Italy, for instance). Portuguese equity prices outperformed the euro-area average in 1997 and early-1998, but lost ground in 1999 when sentiment in the domestic market deteriorated as prices in other equity markets continued to rise strongly. In line with global trends, Portuguese equity prices fell sharply between spring 2000 and early-2003. Despite bouncing back during the summer 2003, the PSI 20 index was still about 60% below its peak (March 2000) in October 2003. Meanwhile, the number of listed companies on the Portuguese market has declined steadily since 1994 (from 195 to 91 in 2002), mainly as a result of increasing concentration in the corporate sector. The main sectors represented in the listing are financials and telecoms. The merging of the Portuguese stock market into Euronext (February 2002) is expected to increase local liquidity.

Figure 4.3: Stock market capitalisation (percentage of GDP)



Source: Eurostat

The bond market is dominated by the public sector. Government bonds account for more than 60% of the outstanding stock of debt securities and of gross issuance, though the issuance of debt securities by private companies has also risen in the 1990s, in line with trends in the rest of the EU. A large proportion of government bonds (more than 60% in 2000) are held by foreigners.³

Institutional investors have been intermediating increasing amounts of savings. The assets of pension funds and insurance corporations increased rapidly in the 1990s, reaching 33.3% of GDP in 2000⁴. As for mutual funds, in spite of the drop in equity

³ ECB (2002) "Report on financial structures".

⁴ Idem.

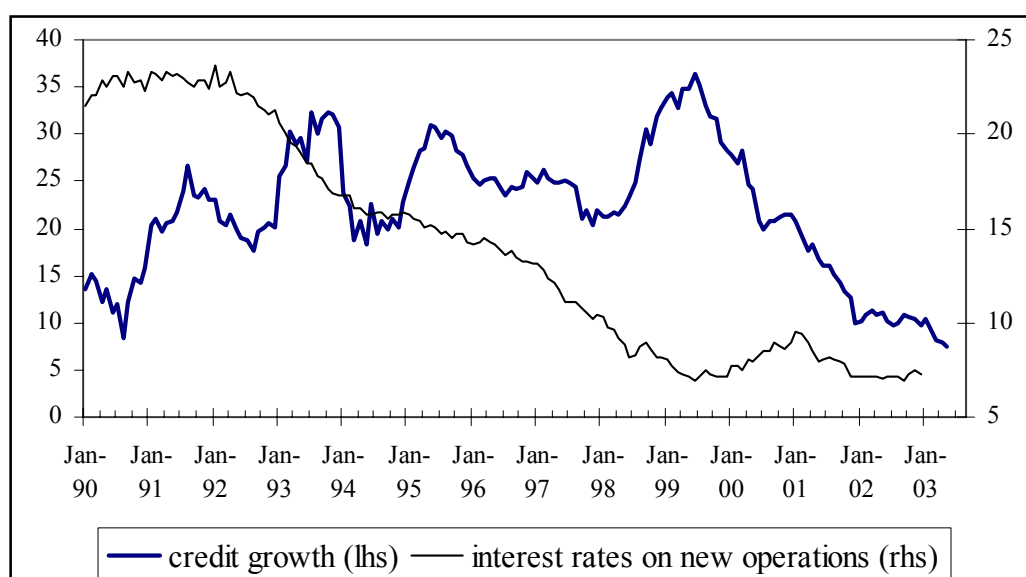
values since 2000, households' holdings of mutual fund shares accounted for 16% of GDP in 2001, compared to 12% of GDP in 1995.

4.2 An accumulation of private-sector debt

4.2.1 The household sector

Portuguese households expanded their borrowing at a very rapid rate during the 1990s. During the period 1995-99, in particular, household borrowing grew at an average annual rate above 27% (Figure 4.4). Even more striking was the evolution in real rates of credit growth (Figure 4.5), accelerating from nearly flat in 1990 to above 25% in 1998, before decelerating sharply in the following years. In consequence, household debt surged from 15% of GDP in 1990 to 71% of GDP (103% of disposable income) in 2002 – which is high relative to the average (around 50% of GDP) in the euro-area (Figure 4.6).⁵

Figure 4.4: Loans to individuals (annual growth rate and interest rates)



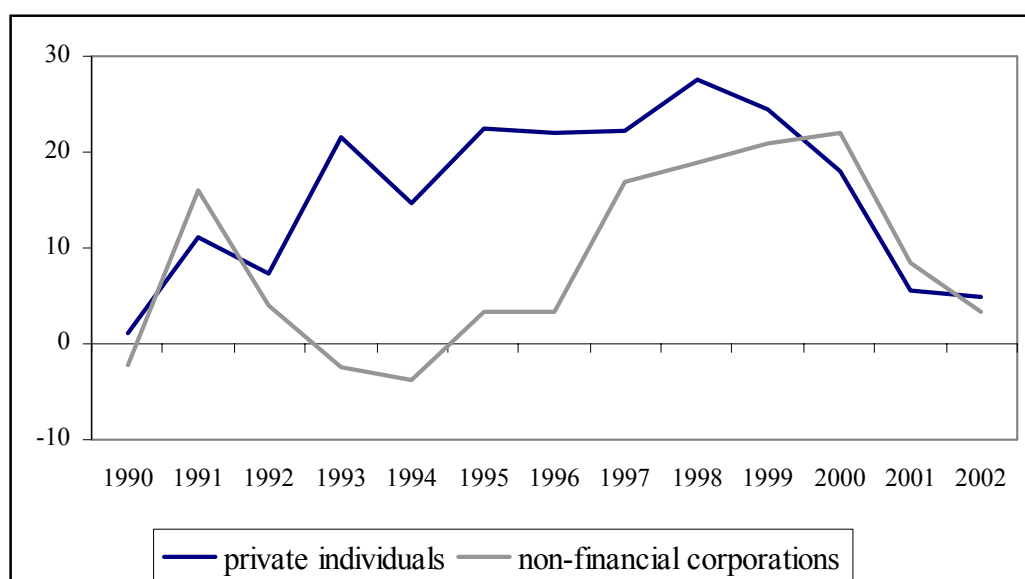
Source: Banco de Portugal

Households were encouraged to increase their liabilities by the favourable changes in economic conditions and policies – namely, disinflation and budgetary consolidation ahead of adopting the euro, lower nominal and real interest rates, and rapidly rising income levels. Moreover, the trend toward increased household borrowing was reinforced by the expectation that these positive developments would be durable. As the three-month money-market rate fell by almost 14 percentage points between 1990 and 1999 (to 3%), there was a corresponding fall in the average rate on new loans to

⁵ In 2000, it was well above the average in the euro area and surpassed only by Germany and the Netherlands (see ECB (2002) “Report on financial structures”).

households (see Figure 4.4). In real terms (adjusted using the private consumption deflator), the decline in interest rates was around 4 percentage points. Meanwhile, wage growth averaged nearly 11% per year in nominal terms (4.5% in real terms) over the same period in a context of rising employment. Household credit demand was further stimulated by government intervention in the housing market in the form of subsidised housing credit programmes, (in 1997-99, subsidised loans accounted for nearly 60% of new housing loans).⁶ Credit supply expanded readily to meet demand, as strong competition in the liberalised credit market meant that the banking sector was eager to meet the growing borrowing needs of households.

Figure 4.5: Real credit growth (annual growth rates)



Source: Banco de Portugal

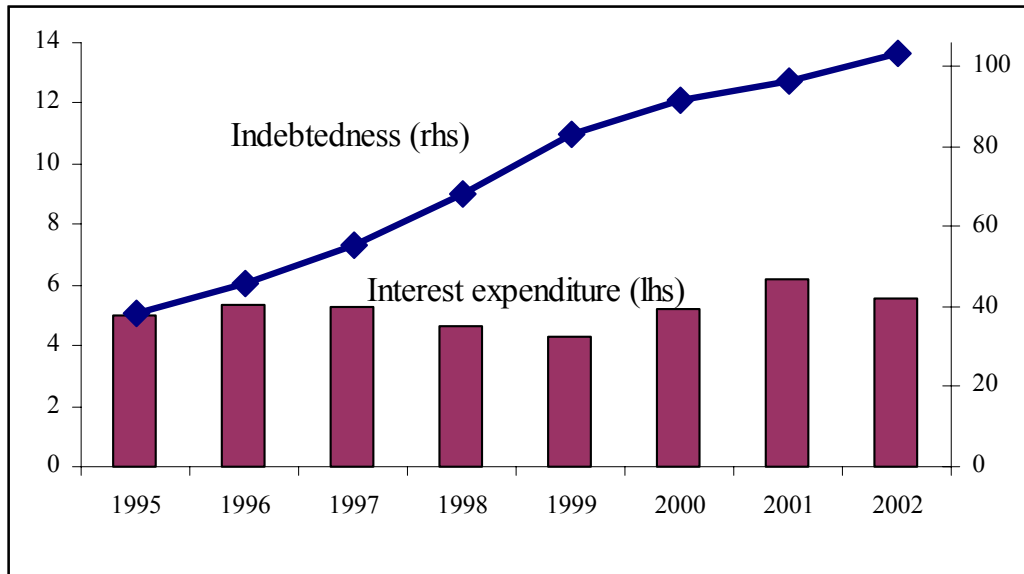
Since 1999 and in a context of slowing economic activity, household consumption and credit demand has retrenched. The household savings rate increased from a low of 8.6% of disposable income in 1999 to 11.9% in 2002.⁷ In spite of a sharp deceleration in borrowing, however, the pace of accumulation in the liabilities of households has remained brisk and debt levels have continued to rise faster than disposable income⁸. However, the deterioration in the disposable income of households has not been proportionate to the rise in debt levels, because the decline in interest rates has limited that rise in the debt-servicing burden (see Figures 4.6 and 4.7).

⁶ L. Farinha, “The effect of demographic and socio-economic factors on households’ indebtedness”, in Bank of Portugal’s Economic Bulletin of June 2003.

⁷ Data from OECD, Economic Outlook 73, June 2003. The Bank of Portugal reports different figures for the savings ratio: 8.5% for 1999 and 12.4% for 2002 (2002 Annual Report).

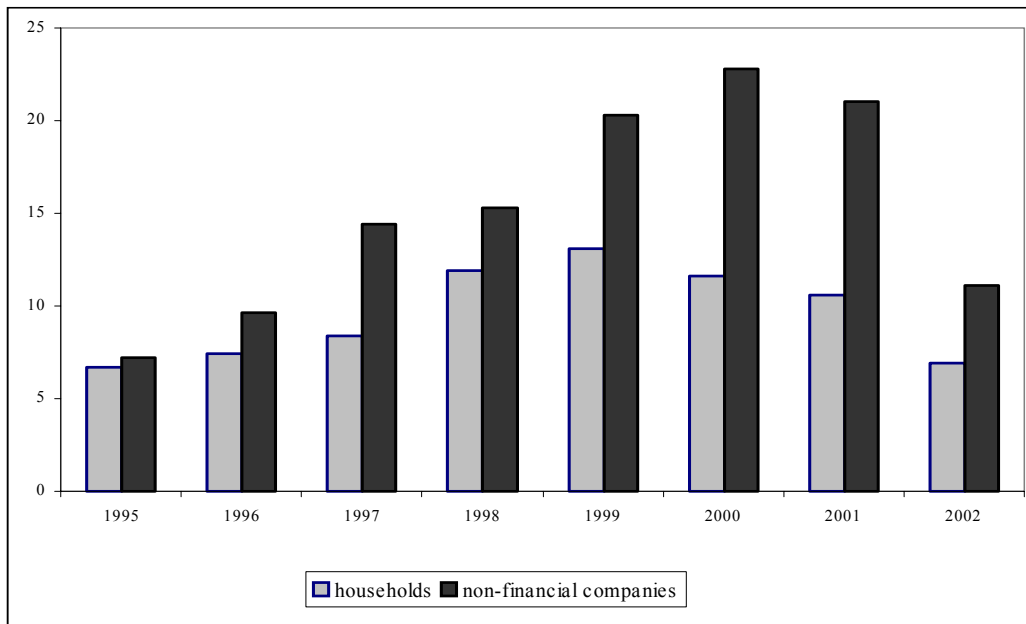
⁸ Loans to individuals for housing purposes would probably have decelerated more rapidly in the absence of calendar effects due to the expiration of the subsidy to mortgage interest payments in September 2002.

Figure 4.6: Household debt and interest payments (percentage of disposable income)



Source: Bank of Portugal, Economic Bulletin of March 2003

Figure 4.7: Net incurrence of liabilities (percentage of GDP)



Source: Banco de Portugal

The counterpart to the rapid rise in indebtedness has been an abrupt fall in households' net financial worth (Table 4.1), to levels well below the euro area average.⁹

⁹ The euro area average was 159% of GDP in 2000.

Nevertheless, in aggregate terms, net financial worth remains comfortably high (111% of GDP in 2001).¹⁰ Although data on real wealth are not available, a rough estimation based on information on the housing market suggests that real wealth might have risen by some 30-40% in 1995-2000¹¹, offsetting the decline in net financial wealth.

Table 4.1: Household sector balance-sheets (percentage of GDP)

	1995	1996	1997	1998	1999	2000	2001
STOCKS							
Financial assets	190	188	185	192	194	193	192
Currency and deposits	93	94	89	88	89	90	91
Securities other than shares	2	2	2	4	7	9	12
Loans	2	2	0	0	0	0	0
Shares and other equity	70	67	66	71	67	61	57
<i>Shares and other equity, excluding mutual funds shares</i>	58	54	50	53	50	45	41
<i>Mutual funds shares</i>	12	13	16	18	17	16	16
Insurance technical reserves	20	22	25	27	29	30	31
Other accounts receivable/payable	4	2	2	2	2	2	2
Liabilities	43	46	51	60	70	77	81
Loans	28	33	39	47	57	64	67
<i>Short-term - Loans</i>	6	6	6	6	7	7	6
<i>Long-term - Loans</i>	23	27	33	41	50	57	61
Other accounts receivable/payable	15	13	12	13	13	14	14
Net financial assets	147	142	134	132	124	115	111
FLOWS							
net acquisition of financial assets	12.1	11.0	11.2	12.7	13.0	13.0	13.3
net incurrence of liabilities	6.7	7.4	8.4	11.9	13.1	11.6	10.6
financial savings	5.4	3.6	2.8	0.8	-0.1	1.4	2.7
MEMO ITEMS							
debt/financial assets	0.23	0.24	0.28	0.31	0.36	0.40	0.42
saving ratio (% of disposable income)	13.6	11.8	10.3	9.9	8.6	9.5	10.7

Source: Banco de Portugal; Eurostat; European Commission AMECO database; OECD; own calculations and estimates. Note: The household sector includes non-profit institutions serving households

In this regard, it is remarkable that in spite of the household credit boom (largely linked to mortgage financing), Portugal does not appear to have experienced sharp increases in residential property prices as other small open economies in the euro area (see Box

¹⁰ It should be noted that the valuation approaches to non-quoted shares (the greatest part of shares, excluding mutual funds) vary widely among EU countries, so that value changes over time may be reflected very much differently in the balance sheets of the relevant sectors among countries. This blurs the cross-country comparability of debt/equity ratios for non-financial corporations and, though less significantly, the net financial position of households.

¹¹ In particular, between 1991 and 2000, the average nominal price of dwellings has increased by approximately (a cumulative) 50%, while the stock of dwellings has risen by some 20% over the same decade.¹¹ Housing completion was particularly intense in the second half of the 1990s. Data from European Mortgage Federation, Hypostat 1991-2001.

4.1). The atypical behaviour of the Portuguese housing market is probably explained by comparatively favourable housing supply conditions. At the beginning of the 1990s, there was a relatively large stock of vacant dwellings and construction activity also responded strongly to the increase in housing demand.

While the net financial position of households may be still relatively robust, high levels of debt leave the sector vulnerable to adverse changes in interest rates and/or income growth. If market interest rates were to rise sharply, the impact on household finances would be substantial, particularly as most mortgage contracts have interest rates indexed to a money-market rate. A sharp rise in money-market rates may appear a remote prospect in the current cyclical condition of the euro-area economy, but it is important to bear in mind that interest rates could begin to rise in conditions of a weak domestic economy, if the upturn in Portugal were to lag behind the rest of the euro area. Of more immediate concern for the assessment of households' finances is the ongoing deterioration in the labour market. In April 2003, the unemployment rate was three percentage points up from a low of 4% in 2000/01, while nominal and real wages are decelerating sharply.¹²

4.2.2 The non-financial corporate sector

In parallel with developments in the household sector, the liabilities of the non-financial corporate sector expanded substantially in the second half of the 1990s. The outstanding debt of non-financial companies grew from about 55% of GDP in 1995 to 92% of GDP in 2002, considerably above the euro-area average of 60% in the same year. Together with large internally-generated resources, external financing supported high and growing levels of real investment in the 1990s. Nevertheless, as large fractions of these new liabilities were used for financial investment, notably in equity, the overall net financial liabilities of the Portuguese corporate sector remained fairly stable (Table 4.2). Even so, as in the case of the household sector, high debt levels imply a significant exposure of companies to a future rise in interest rates and/or sustained weakness in the economy (net interest-bearing liabilities moved from around 30% of GDP in 1995 to more than 60% in 2002).

Most of the additional corporate liabilities were drawn from the banking sector. Bank loans rose sharply (see Figures 4.5 and 4.8), stimulated by lower interest rates and favourable earning prospects. Direct capital market financing - although generally less developed than elsewhere in the euro area - has accounted for a substantial and growing part of companies financing since 1998, reflecting a wave of restructuring in large industrial groups and the participation of private companies in big infrastructure projects. Direct international financing also assumed a bigger role in companies' financing, e.g. through recourse to international syndicated loans.

As a consequence of the much higher-than-average debt/GDP ratio, balance-sheet indicators for the Portuguese non-financial corporate sector compare badly with the rest of the euro area. Leverage, as measured by the debt/equity ratio or the debt/asset ratio,

¹² In the Spring 2003 forecasts real wages were expected to contract in 2003.

is substantially above the euro-area average. For instance, the debt/equity ratio in Portugal was 116% in 2001 (Table 4.2) compared to 61% in the euro area.¹³ However, debt-servicing costs remained relatively moderate due to low interest rates (Figure 4.9), with net interest payments declining to 4.2% of GDP in 2002, from 4.9% of GDP in 2001.

Table 4.2: Non-financial corporate balance-sheets (percentage of GDP)

	1995	1996	1997	1998	1999	2000	2001
STOCKS							
Financial assets	59	63	68	80	85	90	96
Currency and deposits	22	23	25	29	27	27	26
Securities other than shares	0	1	1	2	5	6	8
Loans	0	0	0	1	1	0	1
Shares and other equity	16	17	20	26	33	37	42
Insurance technical reserves	1	1	1	1	1	1	1
Other accounts receivable/payable	20	21	21	20	17	19	19
Liabilities	174	175	179	195	204	206	207
Securities other than shares	8	8	8	9	11	10	11
Loans	47	47	48	56	61	70	78
<i>Short-term - Loans</i>	23	21	23	27	29	30	31
<i>Long-term - Loans</i>	25	25	25	30	32	39	47
Shares and other equity	96	96	99	108	110	106	96
Insurance technical reserves	3	3	3	2	1	1	1
Other accounts receivable/payable	20	21	21	20	20	19	21
Net financial assets	-115	-112	-111	-115	-119	-116	-111
FLOWS							
net acquisition of financial assets	7.1	9.7	11.5	12.3	16.7	14.2	13.4
net incurrence of liabilities	7.2	9.6	14.4	15.3	20.3	22.8	21.0
financial savings	-0.1	0.1	-2.9	-3.0	-3.6	-8.6	-7.6
gross capital expenditures	13.0	12.7	14.2	15.7	16.0	16.5	15.7
MEMO ITEMS							
debt/equity	0.82	0.82	0.81	0.81	0.84	0.94	1.16
debt/assets	1.32	1.25	1.17	1.10	1.10	1.11	1.15

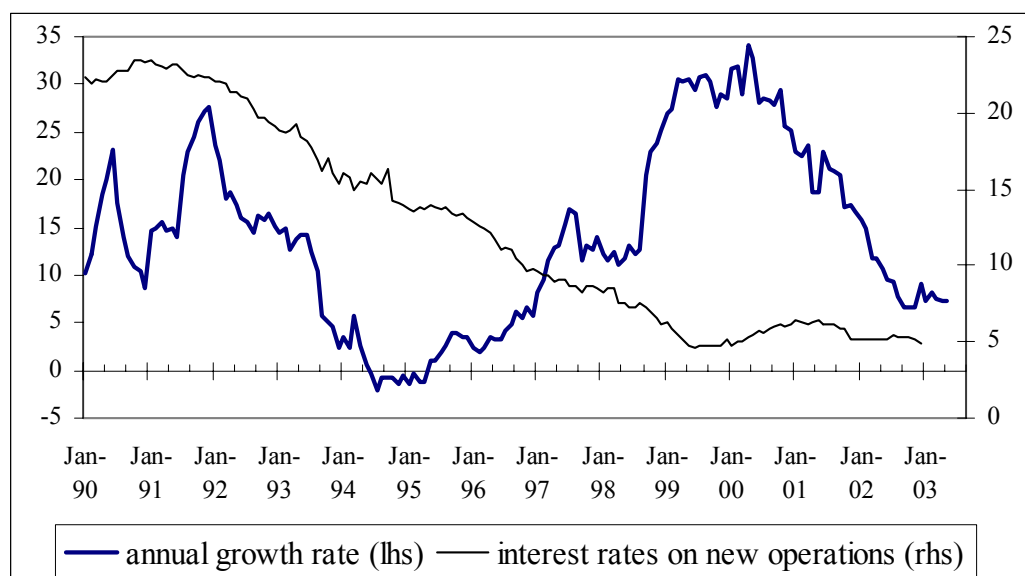
Source: Banco de Portugal; Eurostat; European Commission AMECO database; OECD; own calculations and estimates

The fall in global equity prices after the spring of 2000 induced a reassessment of earnings prospects and focused the attention - of both company management and investors - on the need to repair balance sheets. While strain on corporate finances in this period was a global phenomenon, the problem in Portugal was aggravated by a progressive loss of international competitiveness - largely due to earlier unfavourable developments in unit labour costs - which squeezed profit margins and limited the

¹³ Notwithstanding the comparability issues highlighted in footnote 10.

capacity of companies to generate internal funds. When the process of balance-sheet adjustment started, both real and financial investment decelerated sharply and net corporate borrowing was scaled down. Between 2001 and 2002, in particular, financial investment fell sharply from 13.4% to 4.3% of GDP, and the net incurrence of liabilities fell from 21.0% to 11.1% of GDP. More recent information points to an acceleration of the adjustment of the financial position of non-financial corporations in 2003, against the background of a drop in economic activity. In 2003, a significant recovery of the savings ratio of non-financial corporations, reflecting, *inter alia*, the slowdown of unit labour costs is estimated to have occurred, while net incurrence of interest-bearing liabilities is estimated to have been virtually nil in nominal terms (implying a slight reduction in the ratio of debt to GDP).¹⁴ As elsewhere, a sustained pick-up in corporate investment cannot be expected before the process of balance-sheet consolidation is completed.

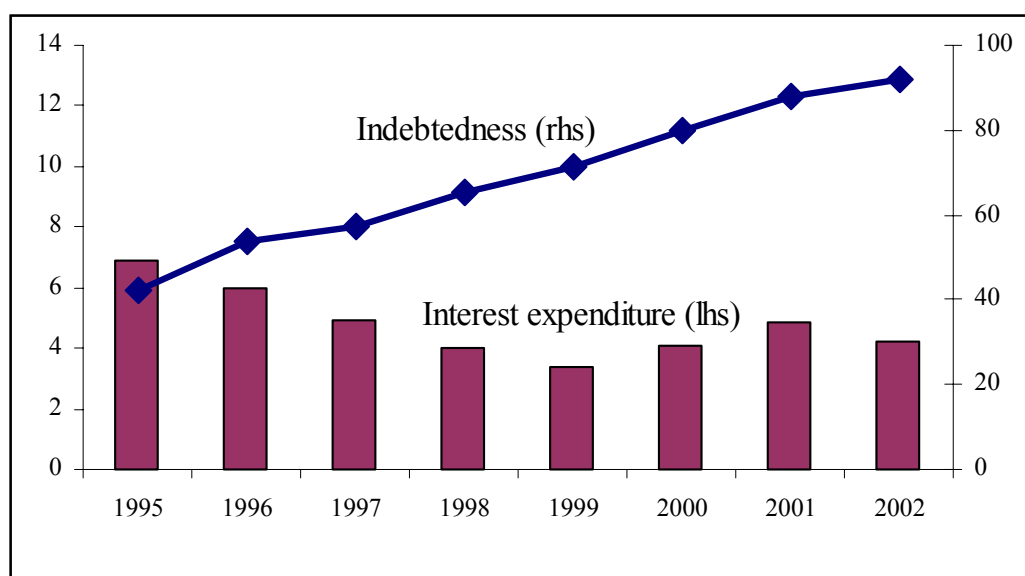
Figure 4.8: Loans to non-financial companies (annual growth rate and interest rates)



Source: Banco de Portugal

¹⁴ Information provided by Banco de Portugal.

Figure 4.9: Non-financial corporations' debt and interest payments (percentage of GDP)



Source: Bank of Portugal, *Economic Bulletin of March 2003*

4.3 A rapidly changing banking sector

Starting from conditions of heavy regulation, the Portuguese banking sector underwent a process of gradual liberalisation from the mid-1980s to the mid-1990s. Liberalisation was then accompanied by a sharp loosening in monetary and financial conditions in the run-up to the introduction of the euro. In general, the sector can be said to have adapted successfully to these changes in the economic and financial environment. As in the rest of the euro area, the banking sector has shown a tendency towards consolidation, with the total number of credit institutions falling from 232 in 1997 to 212 in 2001.¹⁵ Concentration has increased accordingly, with the five largest credit institutions accounting for about 80% of total assets in 2001, compared to about 60% in 1990. However, such a high level of concentration is not unusual in the smaller euro-area Member States, being similar or slightly below that in Belgium, Denmark, Greece, Finland, and Ireland. More importantly, narrowing interest margins, substantial investment in reorganisation and modernisation, and rising cost-efficiency levels all suggest that competition in the sector has not been stifled. Domestic banks still dominate the sector, but the market share of foreign-controlled banks is not negligible (17.1% of total bank assets in June 2003, up from 16.0% in December 2000).¹⁶

¹⁵ ECB (2002), "Structural Analysis of the EU Banking Sector". The Bank of Portugal's 2001 Annual Report specifies that at the end of 2001, there were 57 banks (30 domestic and 27 non-domestic), 5 savings banks and 137 mutual agricultural credit banks. The 57 banks accounted for more than 95% of net assets, credit to customers, and deposits.

¹⁶ ECB (2000), "Mergers and acquisitions involving the EU banking industry - facts and implications" and Bank of Portugal, 2001 Annual report.

The composition of bank assets has shifted towards loans to the private sector, which rose from 40% of total in 1993 to 69% in 2002.¹⁷ However, potential profits from higher lending volumes have been offset by a reduction in interest margins due to enhanced competition in the sector. Non-interest income has consequently emerged as a major source of banks' revenue. Overall, bank profitability compares favourably to that of euro-area competitors, with indicators such as net return on equity (ROE) or net return on assets (ROA) well above the average (see Table 4.1). Consolidation has been accompanied by cost-efficiency measures that have reduced staff and administrative costs to levels that are now amongst the lowest in the euro area. Banks' income has also been supported by capital gains on the fixed income assets in their portfolios, but only up to the adoption of the euro.

As elsewhere in the euro area, the profitability of Portuguese banks suffered from the downturn in the real economy and weak financial market conditions in 2000-2002, which affected adversely all main income components. Interest margins, commission and extraordinary income fell, while net provisions increased. Nevertheless, the ROE and ROA were still high in 2002 at 11.5% and 0.65%, respectively. The regulatory capital ratio stood comfortably above the 8% minimum at 9.5% at the end of 2002, unchanged from 2001 and slightly above the level in 2000. Loan-loss reserves were relatively large (e.g. overall provisions - including the general credit provisions¹⁸ - were equal to 121% of non-performing loans at the end of 2002), although the ratio of non-performing loans to gross loans remained low on the basis of historical and international comparisons (Table 4.3). On the other hand, liquidity indicators have shown a tendency to worsen until recently, when a reduced recourse to inter-bank financing and securitisation have led to an improvement in the liquidity situation of banks in 2002.

¹⁷ "The Portuguese Banking system: Developments and International Comparison", article in Bank of Portugal's Economic Bulletin, March 2003.

¹⁸ Until the regulatory changes introduced in January 2003, the general credit provision was equal to 1% (1.5% for consumer loans). This was higher than in most industrial countries.

Table 4.3: Key indicators for the banking system

	1999	2000	2001	2002
percentage of total average assets				
Financial margin	2.45	2.21	2.24	2.12
Other current income	1.33	1.30	1.17	1.14
Banking product	3.77	3.51	3.41	3.26
Administrative expenses	2.07	1.79	1.73	1.69
Extraordinary gains	0.40	0.27	0.01	0.06
Depreciation for the year	0.31	0.25	0.24	0.24
Net provisions	0.66	0.63	0.45	0.61
Taxes on profit for the year	0.20	0.19	0.16	0.13
Results	0.92	0.91	0.85	0.65
ratios				
Return on equity (ROE) - (before minority interest)	14.7	15.1	14.9	11.7
Administrative expenses (as a percentage of banking product)	54.8	58.2	57.6	59.1
Coverage of interbank liabilities by highly liquid assets (percentage)		88.6	91.5	88.2
Capital adequacy ratio (percentage)	10.8	9.2	9.5	9.6
Credit and interest overdue (as a percentage of gross credit)	n.a.	2.2	2.1	2.3
Specific provision of credit (as a percentage of gross credit)	1.8	1.5	1.4	1.4
Credit and interest overdue, net of specific provisions (as a percentage of credit net of specific provisions)	n.a.	0.7	0.7	0.9
rate of change				
Results	17.40	14.90	3.40	-18.40
(Gross) credit to customers (rate of change)	25.90	21.70	13.20	7.00
Resources from customers (rate of change)	9.30	9.90	7.00	1.40
memo items				
Average total assets (EUR million)	204,773	237,233	264,622	280,717
Employees	62,837	58,485	56,134	57,758
Branches	5,507	5,649	5,586	5,531

Source: Banco de Portugal

The rather favourable evidence on the profitability and solvency of Portuguese banks is partly the result of pre-emptive regulatory and supervisory measures which have helped to moderate the lending behaviour on the part of banks. Recent examples of such measures are: higher capital adequacy requirements for mortgage loans with high loan-to-value ratios (8% for loans with a loan-to-value ratio above 75%, rather than 4%); accelerated provisioning requirements for non-performing loans (introduced during 2003)¹⁹; guidance to banks by the banking supervisor (the Bank of Portugal) to raise

¹⁹ During 2003, the Bank of Portugal introduced changes to the general and specific loan loss provisioning rules, reducing the general provision requirements for residential mortgage credits (from 1.0 per cent to 0.5 per cent) and tightening the requirements for specific loan loss provisions (namely, reduction of the period of time after which the total provisioning of overdue loans is mandatory and increase in the provisioning requirements for other doubtful debts). Specific provisioning for credit risk shall be built up both for the coverage of overdue credit and other doubtful debts. In the first case, provisioning requirements depend on the type of loan, the existence of guarantees or collateral and the time elapsed since the first fallen due instalment. The main changes, related to other doubtful debts, only came into force in 30 August 2003, therefore impacting on banks' profits from the third quarter of 2003.

capital and extend funding maturities. The measures introduced during 2003 have also addressed some earlier criticisms of the accounting of non-performing loans in Portugal, which raised concerns with respect to the proper assessment of loan quality.²⁰ However, the large concentration of loans related to real estate activities, which at the end of 2002 accounted for more than 56.5% of all outstanding bank loans, is a possible source of concern.²¹

A particular feature of the Portuguese banking sector since the mid-1990s has been the change in its external exposure. In aggregate, Portuguese banks have relatively large external assets (16% of total - equivalent to about 35% of GDP - at the end of 2002, down from a peak of 24% in 1999). The largest part of this exposure is to developed countries and offshore centres. At the end of 2002, exposure to emerging markets was only around 10% of total external exposure (i.e., 1.8% of total assets), of which about 4% was to Latin America and 4% to Africa and the Middle East. The situation on the liabilities side is more remarkable. From the mid-1990s, domestic deposits failed to keep pace with demand for private-sector credit and Portuguese banks needed increasingly to finance themselves abroad. As a result, the inflow of foreign funds through the banking sector has accounted for a large part of the financing of the Portuguese current account deficit since 1996. The net international debtor position of financial institutions rose to approximately 40% of GDP in 2002 (equivalent to about 20% of total banking sector assets and a third of the outstanding stock of credit to the private sector), most of which is owed to creditors in other euro area countries

Such extensive reliance on foreign financing by Portuguese banks would certainly have been a cause for concern if Portugal had remained outside of the euro area. As euro-area lenders face no exchange-rate risk, they can be expected to behave largely as domestic lenders and should continue to lend to Portuguese banks so long as their credit risk does

²⁰ See IMF (2003), Staff report for the 2002 Article IV Consultation. Until 2003, non-performing loans included only overdue interest and principal payments and not the full loan amount after a certain period of delinquency. In periods of economic slowdown or recession, this backward-looking definition of non-performing loans could lead to underestimate the actual deterioration in the quality of the loan portfolio. In 2003, in addition to the new provisioning framework, the Bank of Portugal introduced a new non-performing loans/total credit granted ratio. Credit institutions should adopt this ratio whenever information related to credit quality is provided to the public. A non-performing loan is now defined as overdue principal and interest for more than 90 days (in accordance with the Basel definition of default), plus the remaining instalments of loans fallen due, whenever one of the following applies: capital and interest in arrears exceed 25% of outstanding capital plus interest fallen due; or, time in delinquency exceeds: 6 months on a loan with an original maturity less than 5 years; 12 months on a loan with an original maturity between 5 and 10 years; and 24 months on a loan with an original maturity of 10 years or more. As a matter of fact, information received from Bank of Portugal indicates that the old and the new accounting methods give similar results. For instance, in September 2003 the ratio of non-performing loans over total loans was 2.59 if calculated with the new rules, compared to 2.44 using the old definition. It should also be noted that the Bank of Portugal regulations on capital adequacy are stricter than the Basel guidelines in their definition of Tier 1 and Tier 2 capital.

²¹ Housing loans to private individuals accounted for 40.2% of total bank loans, loans to construction companies for 9.8%, and loans to services in real estate activities for an additional 6.5% (Source: Bank of Portugal, 2002 Annual report).

not become excessive. However, to the extent that foreign lenders may be less informed about conditions in the domestic conditions and consequently more sensitive to “bad news”, dependence on foreign lending could constitute a potential source of weakness for domestic banks. So far, there have been no indications of any retrenchment in foreign lending to Portuguese banks, but there is a potential risk that a period of prolonged economic stagnation could lead to a widespread decline in borrowers’ creditworthiness and thereby affect the creditworthiness of Portuguese banks. In this respect, however, it is noteworthy that the composition of foreign financing has evolved over time towards a greater weight of more stable and longer maturity instruments. While short-term financing in the international interbank market was initially prominent, in the last few years, Portuguese banks have been progressively reducing their recourse to short-term external financing, replacing it with increasing issuance of long-term securities via their foreign branches and subsidiaries. Such securities – mostly denominated in euro and at variable rates - do not carry exchange rate or market risk and reduce potential for maturity mismatch between banks’ assets and liabilities.²²

To sum up, it would appear that the Portuguese banking sector has taken advantage of favourable conditions in the 1990s to increase profitability and capitalisation, allowing them to weather the more difficult times since 2001. Pre-emptive regulatory and supervisory action has helped to rein in a perceived tendency toward excessive risk-taking by Portuguese banks. Nevertheless, the sectoral concentration of loans, the accumulation of large household and company debt, and the extensive recourse to foreign funding, all represent potential vulnerabilities in the case of a sharp rise in interest rates and/or a prolonged period of weakness in the real economy.

4.4 Conclusions

Financial liberalisation, nominal and real convergence, and the adoption of the euro, have all combined to loosen liquidity constraints within the Portuguese economy. Private sector agents have taken advantage of the new economic and financial environment by stepping up their borrowing. Households have borrowed to finance increased consumption and house purchases, while companies have increased real and financial investment. This has resulted in a surge in domestic demand during the second half of the 1990s, supported by a corresponding boom in private-sector credit. The credit boom was financed substantially from the external sector, as the growth in the loan portfolio of banks outpaced the growth in domestic deposits.

²² OECD (2003), *Economic Surveys 2002-2003– Portugal*, and Bank of Portugal (2003), *Economic Bulletin*, March. These changes in the composition of financing are not clearly visible in balance of payment statistics. As an increasing part of foreign financing has been obtained through the issuance of medium to long-term bonds by subsidiaries established abroad by Portuguese banks, the proceeds of these bond issues have appeared in the balance of payment statistics as interbank loans, reflecting the positions between these subsidiaries abroad and the corresponding parent banks headquartered in Portugal. However, the true composition of the banking system funding can be derived from the consolidated accounts.

The increased opportunities for inter-temporal smoothing are no doubt a welfare-enhancing development and the more modern and efficient financial sector promotes a better allocation of capital among alternative uses. To an extent, rising demand and expanding credit were the natural outcome of a rational adjustment in the expectations of the household and corporate sectors in response to a new monetary and financial regime. However, the accumulation of positive financial and real shocks to the Portuguese economy within a relatively short period has led to the emergence of large financial imbalances within the private sector toward the end of the 1990s. In particular, low nominal and real interest rates - which from the mid-1990s have been determined by the pattern towards early adoption of the euro rather than by domestic economic conditions - combined with inappropriately loose budgetary and income policies – have stimulated a rapid accumulation of private sector debt, to levels well above the euro area averages. In terms of the use that has been made of the borrowed funds, two comforting elements are that the growth of real estate prices has been moderate, and that most of the non-financial investment in the 1990s has been used for capital-deepening in equipment, which has been well-above the euro area average and other catching-up Member States in terms of GDP.

By the end of the 1990s - with the effect of the decline in interest rates waning, the stock of private-sector debt vastly increased and the adjustment in the stock of housing and durable goods well advanced - household and corporate borrowers were induced to reassess their financial position and to scale down expectations of output and income growth. Lenders engaged in a corresponding reassessment of their risk exposure, also as a result of supervisory intervention. The adjustment of these financial imbalances began in 1999/2000, via a retrenchment of private sector expenditure and higher savings, and subsequently combined with a substantial public-sector consolidation and weak external demand to push the economy into recession. Balance-sheet adjustment in a context of a weak economy is a difficult and protracted affair, which raises the likelihood of an extended period of domestic demand compression from this source in the future. It is a cause for concern that, despite the recent sharp deceleration, credit growth has continued to outpace the growth of income and deposits. In this respect, it is also particularly unfortunate that public sector savings declined in synch with private sector savings during the economic upturn, so that fiscal policy must now be pro-cyclical in the downturn.

In view of the predominantly bank-centred financial structure in Portugal, any possible implications for financial stability would likely come via the banking sector. Portuguese banks seem to have successfully adapted to the new competitive and macroeconomic environment, which emerged during the 1990s. Having consolidated and improved efficiency during the good times, Portuguese banks remain generally profitable and have sound solvency ratios, in spite of the deterioration in the asset quality related to the worsening economic conditions. While the concentration of exposure to the real-estate sector, the large external debt, and the high level of indebtedness of the private sector are potential causes for concern, the overall good health of the banking system, as well as pre-emptive tightening of regulatory and supervisory standards in recent years, greatly reduce the probability of risks to financial stability.

Box 4.1: Portugal's Housing Market

Since the beginning of the 1990s, Portugal has experienced only moderate increases in the real level of house prices (see table below). This applies also to the period 1995-2001, during which a number of other countries experiencing somewhat similar macro-economic developments saw very strong house price inflation. Real house prices in Portugal rose, on average, by 1.6% per year in 1995-2001, and are estimated to have even fallen by 2.5% in 2002, in spite of still robust mortgage lending activity. This is in stark contrast to what has happened, for instance, in Ireland, the Netherlands, Spain, the United Kingdom, Sweden and Greece.²³

What can explain the *prima facie* anomalous behaviour of house prices in Portugal? The demand for housing services depends on the number of households, expectations of future disposable income, interest rates on housing loans, credit availability and a host of other factors, including taxes and subsidies. Supply depends on the availability of land for construction purposes and on various factors affecting construction costs. Except for the increase in the number of households²⁴, all other demand factors would point to strong housing demand in Portugal in 1995-2001 (see table). GDP growth was robust, nominal and real interest rates fell by a substantial amount, residential investment was buoyant; most of all, mortgage lending expanded at the fastest rate in the EU. By the end of 2002, the outstanding stock of mortgage debt for housing purchase exceeded 50% of GDP. As noted in the text, the rapid growth of mortgage credit was due to both supply and demand factors: on the supply side, the liberalisation of financial services activities and financial innovation; on the demand side, falling interest rates and rising current and expected incomes, as well as official housing credit support.

The main explanation for the moderation of house prices has probably to be found in the response of housing supply. Buoyant construction activity increased the stock of dwellings by about 20% between 1991 and 2000 - from 4.2 million to 5.0 million. This compares to a total number of households around 3.5 million in the same year.²⁵ Moreover, due to rationed credit and a frozen rental market, many dwellings that were previously vacant entered the market in these years, contributing to dampen price pressures.

The absence of a house price bubble, as is suspected in some of the other countries mentioned above, represents positive news for Portuguese borrowers and lenders alike. For the former, it reduces the risk of capital losses on house purchases and consequent financial distress; for the latter, it decreases the credit risk on what represents a large part of their assets. Nevertheless, the high absolute level of household debt, in a context of slowing personal income growth and rising unemployment, could lead to a significant rise in the number of households that are

²³ For further comparison, the average annual increase in euro area real house prices in 1998-2002 amounted to 4.5%, and was only 1.4% in Portugal.

²⁴ 9.7% between 1986 and 1997, according to European Mortgage Federation (2002), "Hypostat 1991-2001". 1997 was the last available year at the time of this publication. Corroborating evidence comes from population statistics. In the period 1988-2001 Portugal's population increased by 3%, the lowest increase in the EU after Italy, while the average household size (2.9 in 2001) is one of the highest in the EU (source: Eurostat). The owner occupancy ratio is relatively high, above 65%.

²⁵ Data from European Mortgage Federation (2002), "Hypostat 1991-2001".

unable to repay their debt. In addition, the impact of any future rise in interest rates on the debt-servicing costs of households would be significant, as the majority of mortgage contracts are on the basis of floating interest rates, with average length between 25 and 30 years. The average loan-to-value (LTV) ratio is estimated at 70%-80%, which is around the norm in the EU.²⁶

Table: Determinants of real house prices: changes 1995-2001

	Spain	Greece	Ireland	Portugal
Real house price (average annual growth)	4.94	4.27	13.05	1.64
Real GDP (average annual growth)	3.64	3.5	9.09	3.45
Real mortgage rates (cumulative change in percentage points)	-3.91	-8.23	-3.56	-6.56
Nominal mortgage rates (cumulative change in percentage points)	-5.44	-13.97	-2.12	-6.6
Residential investment to GDP (average over the period)	6.37	5.02	6.55	5.71
Mortgage debt to GDP (cumulative change in percentage points)	15.07	7.48	7.46	28.51

Source: ECB (2002)

²⁶ Although there is no legal limit on LTV ratios, loans with higher LTV ratios are penalised by higher capital adequacy requirements. Since July 2000, capital adequacy requirements are set at 4% for LTV's of a maximum of 75% and at 8% for loans exceeding 75% of the house value.

Chapter 5: Economic policy options

In a monetary union, monetary and exchange-rate policies are determined by taking into consideration the situation throughout the participating countries as a group. Therefore, the role of budgetary policy is of central importance for stabilisation purposes, namely to tackle country-specific developments. In a small country, economic imbalances can potentially persist for longer and become larger because of the different nature of budgetary constraints facing an economy participating in a monetary union. In fact, EMU membership eases liquidity constraints as exchange-rate crises are no longer possible. However, there is still a limit to the economy's total indebtedness, given the requirement of long-term sustainability (i.e. the intertemporal resource constraint).

The easing of budgetary constraints in the run-up to EMU, combined with the upward shift in the forecast of households' permanent income, boosted domestic demand in the second half of the 1990s. Moreover, the rapid convergence of domestic interest rates towards the lower levels abroad generated significant windfall gains for general government, permitting a simultaneous reduction in the government deficit and a rise in the primary expenditure-to-GDP ratio. During this period budgetary policy was supportive of economic activity – i.e. it was pro-cyclical. Consequently, a golden opportunity was lost to complete the process of fiscal consolidation and to attain the stability and growth pact's medium-term objective of a balanced budget.

Domestic stabilisation policy (both fiscal and incomes policies) did not contribute to offset the easing of monetary conditions brought about by EMU, on the contrary, these policies were markedly pro-cyclical. However, EMU can be seen largely as a level effect to which the economy has gradually to adjust, but once adjustment is completed, all what is left are large and permanent welfare gains associated with the significant declines in interest rates (both nominal and real) and the effective elimination of liquidity constraints. Therefore, these permanent welfare gains dwarf in importance the expected adjustment costs to the new macroeconomic framework, which are partly to blame to the mismanagement of domestic stabilisation policies.

It has also become clear by now that in the run-up to EMU domestic demand overshoot its equilibrium long term level, basically on account of too optimistic expectations on the reaction of supply to the initial level shift in demand. In fact, the large gap that emerged between domestic demand and supply in the second half of the 1990s was only partly made of investment expenditure, and even a smaller amount of plant investment, which is what has a more direct impact on the productive capacity of the economy. As a consequence, the rise in supply has only partly caught up with demand, which had eventually to start declining towards supply. Hence, the adjustment period the Portuguese economy is currently undergoing.

The economic slowdown in the years 2001-03 occurred at the time when a public finance crisis had emerged, again triggering markedly pro-cyclical policies that had nevertheless to be introduced promptly given the international commitments entered into within EMU, the need to restore credibility before embarking on an ambitious and difficult programme of structural reforms and the need to unwind a number of imbalances present in the economy.

Although it is clear that, under the new policy regime, the role of budgetary policy is now of central importance for stabilisation purposes, a note of caution is necessary as regards both the scope and effectiveness of discretionary fiscal policy. As regards scope, it should be pointed out that, under the new policy regime, the number of policy targets is under-determined because of the absence of the exchange-rate instrument. It is not possible simultaneously to determine aggregate demand and to target the net borrowing of the economy, basically because in an EMU the real exchange-rate is endogenously determined by the ratio of domestic to foreign prices. As regards the effectiveness of policy, fiscal policy is subject to various lags, including the time needed to recognise the situation, to propose adequate action and to carry it through the political process. In addition, the timing of discretionary fiscal policy would ideally depend not only on the position in the domestic economic cycle but also on the conditions prevailing in the euroarea and the policy response of the European Central Bank. Moreover, in a small open economy fiscal policy has limited effectiveness in influencing aggregate demand on account of leakages in the current account. As a result of these drawbacks, discretionary fiscal policy might eventually have a destabilising effect in the short term. However, automatic stabilisers do not suffer from the numerous drawbacks of discretionary fiscal policy although, by their nature, they can only attenuate and not fully offset, the effects of shocks.

Hence, the paramount importance of relying on structural policies to ensure that cyclical fluctuations do not develop in future into costly and prolonged adjustment periods like the present one.

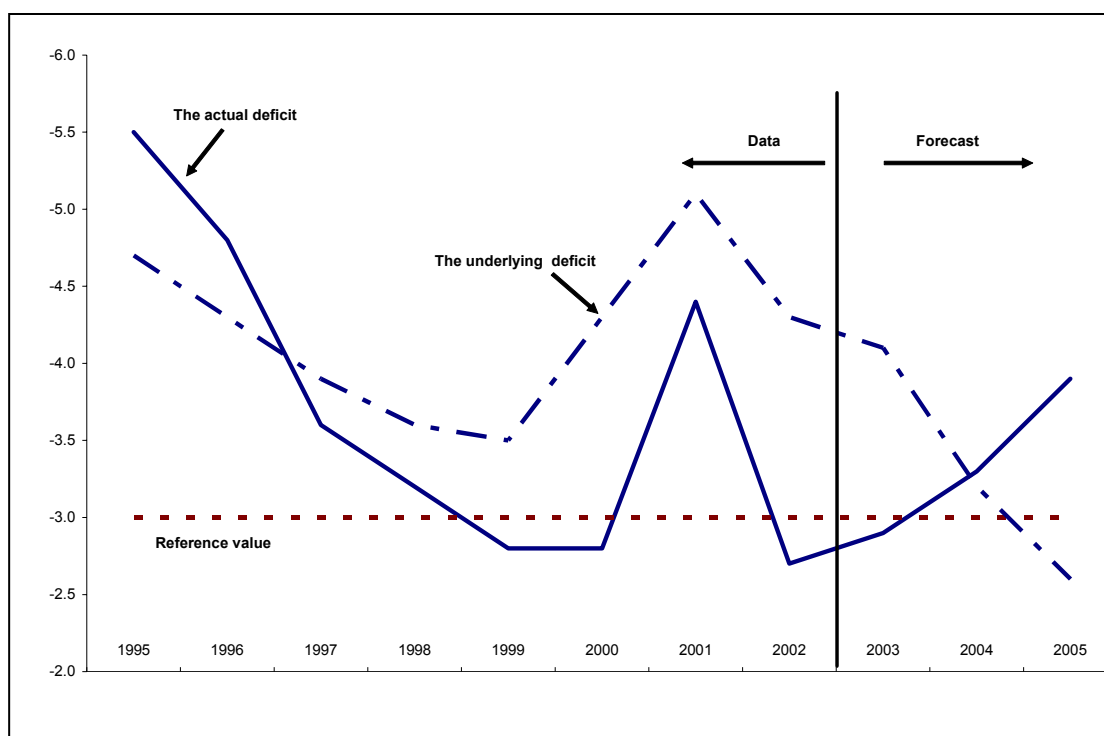
5.1 Securing the sustainability of public finances

The current fiscal position is unsustainable over the medium term. The underlying deficit (i.e. the actual deficit excluding one-off operations and after adjustment for the cycle) is estimated to have averaged over 4% of GDP in the period 1995-2003, although declining since 2002 (Figure 5.1).

5.2 Reducing government indebtedness in view of population ageing

On the basis of current policies, calculations by DG-ECFIN suggest that the risk of unsustainable public finances leading to budgetary imbalances cannot be ruled out. In order to achieve a fast pace of debt reduction before the budgetary impact of ageing populations sets in, it is therefore essential that Portugal achieve and sustain a budget position of close to balance or in surplus. This is a necessary but not a sufficient step towards ensuring the sustainability of public finances. It has to be backed up by determined implementation of the structural reforms outlined in the last update of the stability programme in order to curb the growth dynamics of age-related expenditure, broaden the tax bases and increase the overall growth potential of the economy.

Figure 5.1: Actual and underlying deficit as % of nominal GDP



Sources: Ameco; calculations by DG-ECFIN.

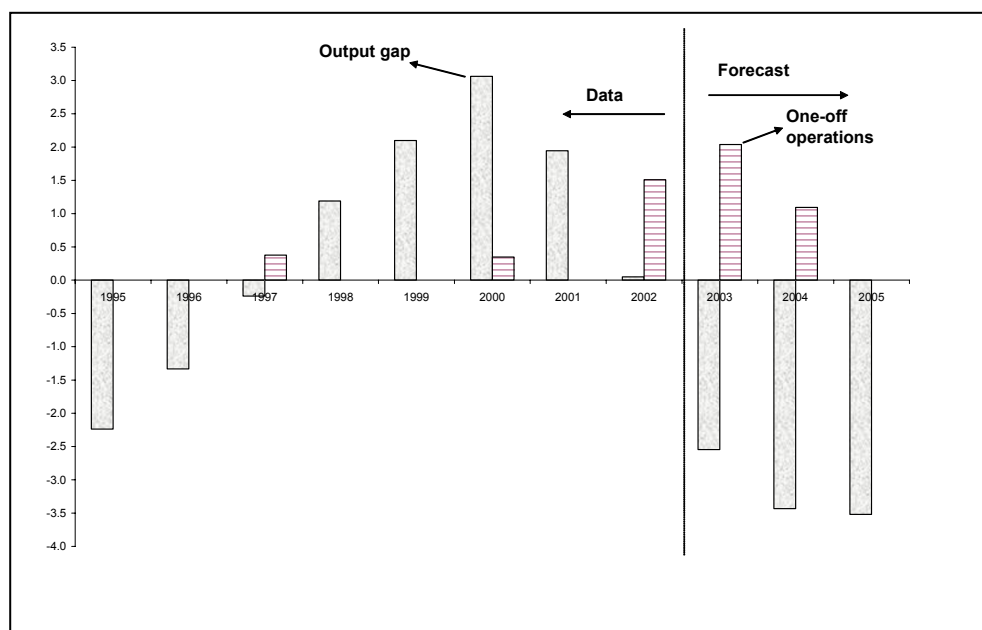
Table 5.1: Actual, cyclically adjusted balance and underlying balance (as % of GDP)

	Output		Output gap (% of pot.outp.) (3)	One-off measures (% of GDP) (4)	Cyclical adjustment (% of GDP) (5)	Actual balance (% of GDP) (6)	Cyclic. Adjust. balance (% of GDP) (7)=(6)-(5)	Underlying balance (% of GDP) (8)=(6)-(4)-(5)
	Potential (% growth rates) (1)	Actual (2)						
1995	2.6	4.3	-2.2	0.0	-0.8	-5.5	-4.7	-4.7
1996	2.6	3.5	-1.3	0.0	-0.5	-4.8	-4.3	-4.3
1997	2.8	4.0	-0.2	0.4	-0.1	-3.6	-3.5	-3.9
1998	3.1	4.6	1.2	0.0	0.4	-3.2	-3.6	-3.6
1999	2.9	3.8	2.1	0.0	0.7	-2.8	-3.5	-3.5
2000	2.7	3.7	3.1	0.4	1.1	-2.8	-3.9	-4.3
2001	2.8	1.6	1.9	0.0	0.7	-4.4	-5.1	-5.1
2002	2.3	0.4	0.1	1.5	0.0	-2.7	-2.8	-4.3
2003 a)	1.9	-0.8	-2.5	2.0	-0.9	-2.9	-2.1	-4.1
2004 a)	1.9	1.0	-3.4	1.1	-1.2	-3.3	-2.1	-3.2
2005 a)	2.1	2.0	-3.5	0.0	-1.2	-3.9	-2.6	-2.6

a) Commission's autumn 2003 forecast.

Sources: Ameco; calculations by DG-ECFIN

Figure 5.2: Output gap as % of potential output and value of one-off operations as % of GDP



Sources: Ameco, calculations by DG-ECFIN.

Table 5.2 gives two different scenarios for indebtedness and the budget balance: a “programme scenario” and a “2002 situation scenario”. The “programme scenario” is based on the following:

- the projections for age-related expenditures come from the Economic and Policy Committee report;
- government revenues are held constant at the ratio projected for 2005;
- the starting point for gross debt and the primary surplus are the 2005 levels reported in the latest update of the stability programme (January 2003).

The “2002 situation scenario” is based on the budgetary data for 2002 contained in the stability programme update of January 2003. It assumes that no budgetary adjustment occurs during the period covered by the stability programme: in other words, the primary balance remains unchanged at its 2002 level until 2006. In this way, the impact on the sustainability of public finances of the proposed change in the underlying budget position during the programme can be gauged. Table 5.2 clearly indicates the risk of budget imbalances emerging under both scenarios. However, there is a striking difference in the results for both scenarios, and this underscores the pressing need for Portugal to achieve and sustain a budget position of close to balance or in surplus.

Table 5.2: Quantitative indicators on the sustainability of public finances

Main assumptions - baseline scenario (as % of GDP)							
	2006	2010	2020	2030	2040	2050	changes
Total age-related expenditure	16.4	17.1	18.6	19.4	19.8	19.3	2.9
Pensions	11.1	11.8	13.1	13.6	13.8	13.2	2.2
Health care	5.3	5.3	5.5	5.8	6.0	6.1	0.8
Other age-related expenditure	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total non age-related expenditure	24.2						
Total revenue*	43.0						
* constant							
Results (as % of GDP)							
	2006	2010	2020	2030	2040	2050	changes
<i>Programme scenario</i>							
Debt	52.7	46.1	42.1	51.4	74.8	107.3	54.6
Net borrowing	-0.4	-1.0	-2.0	-3.3	-5.0	-6.2	-5.8
<i>2002 situation scenario</i>							
Debt	58.3	60.7	81.3	120.4	187.5	281.2	222.9
Net borrowing	-3.1	-3.9	-6.2	-9.1	-13.1	-17.6	-14.5
Tax gaps							
	T1*	T2**	T3***				
<i>Programme scenario</i>	1.3	1.0	2.0				
<i>2002 situation scenario</i>	3.7	3.3	4.3				

* This expresses the constant difference between projected revenues and the revenues required to reach in 2050 the same debt-to-ratio since the close-to-balance position holds for the whole projection period. For information: debt-to-GDP ratio at the end of the period is 10.2.

** This expresses the constant difference between projected revenues and the revenues required to reach in 2050 a debt-to-GDP ratio equal to 40%.

*** This indicates the change in tax revenues as a share of GDP that respects the government's intertemporal budget constraint, i.e. that equates the discounted flow of revenues and expenses over an infinite horizon.

Source: DG-ECFIN

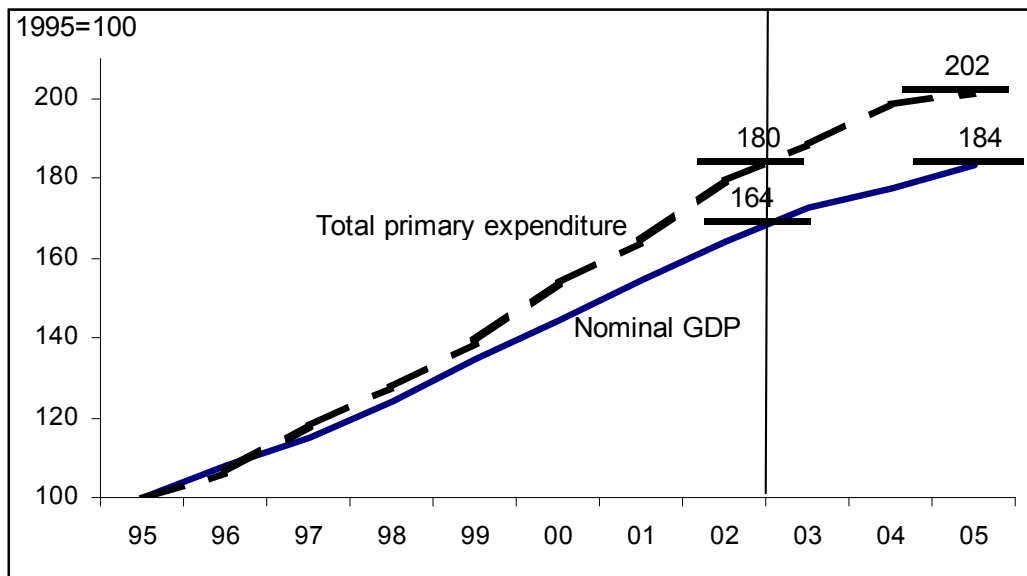
5.3 "Crowding in" higher productivity activities

The cumulative growth of total primary expenditure outpaced that of nominal GDP in the second half of the 1990s (Figure 5.3). Total primary expenditure rose by nearly 80% between 1995 and 2002 (i.e. at an annual rate of 8¾%), while nominal GDP increased by 64% (i.e. 7¼% per year). Consequently, the total primary expenditure-to-GDP ratio rose by 4¼ percentage points between 1995 and 2002, to 43.0% of GDP in 2002. Obviously, this trend cannot go unchecked indefinitely. For most of the 1990s, this was possible because of the declining interest expenditure (from 6.3% of GDP in 1995 to 3.0% in 2002), together with a rise of about 3 percentage points in the tax burden¹ (to 36.6% of GDP in 2002). The former has come to a halt with the convergence of interest rates, while competitiveness requirements impose limits on further rises in taxation.

Economic theory suggests that the tax burden is positively correlated with the level of economic development. A simple ordinary least-squares regression (Figure 5.4) suggests that the level of taxation in Portugal is just what one would expect given the level of economic development. There thus seems to be no scope for a further rise in the tax burden at least if not accompanied by a broadening of the tax base, on account among other factors, of a reduced incidence of tax fraud and evasion.

¹ Excluding imputed social security contributions.

Figure 5.3: Index of total primary expenditure and nominal GDP (1995=100)



Source: Ameco.

However, the problem with public expenditure in Portugal is not only the pace of growth but also the quality/efficiency of expenditure. In particular, economic studies on the efficiency of government expenditure in health and education, using the *free disposable hull* technique, have produced results suggesting that there is a considerable degree of inefficiency in the use of resources in those two sectors (St. Aubyn, 2002).

5.4 Structural reforms to foster higher productivity levels

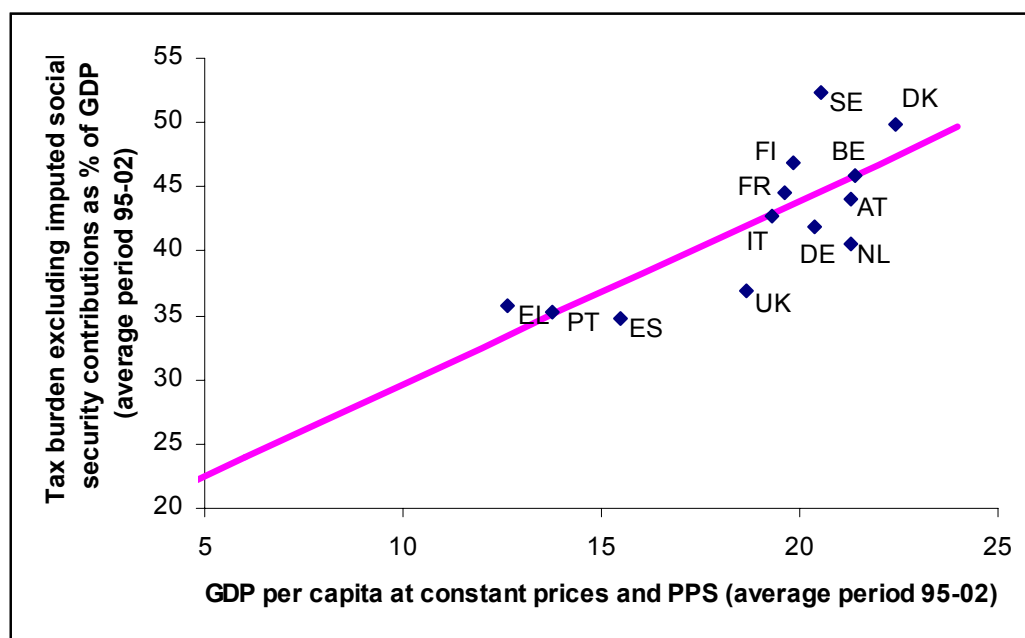
A successful budgetary consolidation strategy can be achieved only by curbing primary expenditure growth, which in turn requires the introduction of a comprehensive programme of structural reforms. Such a strategy is in line with the general recommendations in the Broad Economic Policy Guidelines, which advocate budgetary consolidation relying mainly on the expenditure side of the budget, because experience has shown that, besides limiting the inefficiency costs associated with high marginal tax rates, such consolidation has a higher resilience to economy fluctuations.

The January 2003 update of the stability programme outlines an ambitious and difficult programme of structural reforms that is in line with the broader strategy mapped out at the Lisbon European Council. The major aims of these reforms are: first, to pursue the process of budgetary consolidation on a sustainable basis and, second, to enhance the growth potential of the economy.

The programme of structural reforms encompasses nearly all major policy areas. With regard to the labour market, a new labour code has been approved with the following major objectives: (i) to increase flexibility and (ii) to improve labour productivity and hence competitiveness by reinforcing incentive mechanisms. As regards the improvement in the overall competitiveness of the Portuguese economy, a large number of measures have been recently approved or are planned, including (i) the

establishment of an independent competition authority with powers similar to those of competition authorities in other EU countries, together with the approval of a new competition law in line with the more advanced legislation at EU level, and (ii) measures to facilitate the setting-up and licensing of new firms.

Figure 5.4: Tax burden and per capita GDP



Source: Ameco

In June 2003 the government presented guidelines for a gradual, comprehensive reform of public administration in the coming years. The proposed measures include: (i) fostering the use of individual labour contracts, (ii) independent assessment in the light of predetermined goals of the quality/performance of public services that could be carried out by private enterprises, (iii) replacement of the current (automatic) promotion system based on seniority with one based on merit and performance, (iv) strengthening of investment in vocational training at all levels of the administration, including the top echelons, (v) promotion of e-government, and (vi) fostering of an internal labour market.

In the education sector, the government plans to curb excessive spending in those areas where current and prospective demographic trends point to a reduction in demand, in particular for primary and secondary education, while tuition fees for tertiary education would be increased.

In the health sector, a wide range of measures have already been adopted or are planned in order to improve the use of resources. They include: (i) a significant number of public hospitals have been transformed into publicly owned corporations, with an enhanced degree of entrepreneurial autonomy, (ii) medical services will be charged for in future according to a price list established for medical services/techniques, (iii) the setting-up of a regulatory agency for the health care sector that will address, among other things, the problem of adverse selection, (iv) the implementation of a comprehensive policy for the consumption of medicines, involving the promotion of generic drugs and the setting of ceilings for the

reimbursement of drugs according to reference prices, etc. and (v) an increase in user fees for medical treatment.

As regards social security, the 2003 budget reduced the replacement ratio for early retirement in the government sector while measures were introduced to reduce incentives to claim sickness benefits of short duration and to tighten control over false unemployment benefit claims. However, given the revealed dynamism in recent years of transfers to households, especially of pensions, together with the projected impact of the oncoming demographic shock, it seems that Portugal is in need of additional reforms in this area that have largely not yet been announced.

The successful implementation of structural reforms, eventually securing a more efficient provision of public goods/services, is paramount with a view to release additional resources for a more productive use, thereby raising total factor productivity in the economy.