FROM EC ACCESSION TO EMU PARTICIPATION: 
THE PORTUGUESE DISINFLATION EXPERIENCE IN THE PERIOD 1984-1998*

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1. INTRODUCTION

In the early 1980s the Portuguese economy was characterised by severe macroeconomic disequilibria, an uncompetitive industry structure, significant distortions in product and factor markets and a substantial weight of the public sector in productive activities, inherited from the 1974 Revolution. Monetary policy was based on capital controls, credit ceilings and administratively fixed interest rates. Financial markets were thin and the availability of financial instruments was rather limited. Financial institutions (essentially banks) were mostly state-owned, undercapitalised and inefficient. In practice the banking system was geared to financing huge public sector borrowing requirements. The Treasury benefited from important sources of privileged financing, including extensive recourse to central bank financing. Exchange rate policy followed a crawling-peg to preserve the competitiveness of Portuguese exporters with a view to containing high and persistent current account deficits(1). The country was caught in a vicious circle of devaluation and inflation.

In 1985, the year preceding EC accession, Portuguese real per capita income stood slightly above 50 per cent of the European Union (EU) average, reflecting the country’s low productivity levels. The implementation of the 1983 IMF stabilisation package had brought the current account back into balance and had put inflation and the general government deficit on a declining path. However, inflation still ran at 20 per cent (14 percentage points (p.p.) above the EU average) and the general government net borrowing exceeded 10 per cent of GDP, more than twice the EU average (Table 1).

The poor economic performance of the 1970s and early 1980s had made it clear that macroeconomic stability and deep structural reform were necessary conditions for a sustainable convergence of the Portuguese real per capita income to the European level, and that a regime shift was warranted. Accession to the European Community (EC) underlined the authorities’ commitment to such a regime shift and provided the right incentives for the necessary changes.

The general economic situation has strongly improved since EC accession. Nominal stabilisation and a rapid catching-up have taken place, reflecting the increased competition from integration in the Community market, the implementation of broadly appropriate macroeconomic and stru-

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(1) In less than a decade, the country suffered two balance of payments crises which led to the negotiation of stabilisation agreements with the IMF in 1978 and 1983. The crawling peg was introduced in August 1977 (i.e. a few months before the negotiation of the first IMF stabilisation package), in the context of severe balance of payments difficulties. It consisted of a pre-announced monthly depreciation rate of the escudo vis-à-vis a basket of 13 currencies. Between 1978 and 1983, four discrete devaluations (May 1978, June 1982, March 1983, June 1983) and one discrete revaluation (February 1980) have also taken place.
tural policies and EC financial support. GDP per head, expressed in purchasing power parities, increased to about 75 per cent of the EU average in 1998 (Chart 1). Inflation was brought down to levels broadly compatible with price stability and the differential against the EU virtually disappeared. The general government net borrowing was reduced to below the 3 per cent of GDP Maastricht reference value, and the public debt ratio was brought down to below the EU average. Significant progress towards nominal convergence allowed Portugal to meet the conditions for participation in Economic and Monetary Union (EMU) as from January 1999, and thus to be one of the eleven founding members of the euro area.

This paper discusses one of the pillars of the Portuguese convergence process, i.e., the disinflation experience. Section 2 presents a brief overview of the disinflation process. Given that exchange rate stability was at the heart of the disinflation strategy, section 3 describes the monetary and exchange rate policy in Portugal from Community accession to EMU membership. Section 4 discusses disinflation costs. It will be argued that these appear to have been rather low, or non-existent. Section 5 concludes.

2. OVERVIEW OF THE DISINFLATION PROCESS

At the time of accession to the European Community, Portugal recorded the second highest inflation rate amongst EC Member-States (only surpassed by Greece), and the differential against the EC average stood at about 14 p.p. Inflation, which had peaked at almost 30 per cent in 1984, declined to about 2 per cent in 1997-98, a level generally considered as broadly compatible with price stability. At the same time, the differential against the Community average was virtually eliminated. Disinflation was not an even process, however. After a very rapid decline between 1984 and 1987, inflation resumed an upward trend in 1988-90. A
A steady deceleration of prices has then taken place up to 1997/98 (Chart 2).

As from the mid-1980s disinflation has become a major goal of economic policy. To ensure a permanent decline of inflation, exchange rate policy became progressively less accommodating so as to break the vicious circle of inflation-devaluation without putting the sustainability of external accounts into question. In addition, economic agents were encouraged to set nominal wages on the basis of expected (rather than past) price increases. Inflation, measured by the average rate of change of the consumer price index (CPI), declined from 29.3 per cent in 1984 to 9.3 per cent in 1987. In this period, inflation in both the tradable and the non-tradable goods sectors moved closely together. The slack which emerged following the implementation of the 1983 IMF stabilisation package, coupled with favourable international price developments in the mid-1980s, allowed a substantial deceleration of prices to take place in the context of strong GDP growth (Chart 3A).

In 1988, as the economy moved into a state of overheating and international price developments turned less favourable, inflation resumed an upward trend, with average CPI inflation increasing to 13.4 per cent in 1990. The setback in the disinflation process reflected the acceleration of import prices, an unfavourable agricultural year in 1988 and tight labour market conditions. Accordingly, an acceleration of both tradable and non-tradable goods prices has taken place (Chart 3B). After falling by 9.1 per cent in 1986, the goods and services import deflator increased by an average of 7.0 per cent a year between 1987 and 1989 (Chart 3C). In turn, as the unemployment rate reached levels clearly below estimates of the Portuguese NAIRU, unit labour costs accelerated from 7.6 in 1988 to 18.6 in 1991 (Chart 3D). In this period, the pre-announced rate of depreciation of the escudo continued to be cut down in spite of the acceleration of prices, and the escudo started appreciating in real terms. Reflecting the non-accommodating exchange rate policy, tradables prices resumed a decelerating trend in 1990, whereas non-tradables inflation kept edging up in a context of significant wage pressure and an increasingly unbalanced policy-mix. As a result, the differential between non-tradables and tradables inflation widened significantly, peaking at 10.1 p.p. in 1990.

A monetary policy strategy based on exchange rate stability as an intermediate target to reach the final goal of price stability was progressively adopted. In October 1990 the crawling-peg regime was abandoned, and eighteen months later the escudo joined the exchange rate mechanism (ERM) of the European Monetary System (EMS) (Chart 4). After being devalued in the context of the ERM crisis of 1992-93, the nominal exchange rate was

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(2) See the 10th Constitutional Government’s Programme, dated November 1985 (Diário da Assembleia da República, II série no.4, 16/11/1985).

(3) In addition to being an effective tool to promote decline of inflation, the exchange-rate based disinflation strategy also fostered an adequate environment for sustainable economic development. Indeed, while the real depreciation of the currency maintained competitiveness through a deterioration of real wages (favouring a specialisation in low value added activities), a non-accommodating exchange rate policy provided the right incentives to exporters (by making them aware that competitiveness would have to rely on qualitative factors such as innovation, product differentiation, improved management techniques).

(4) See Botas, Marques and Neves (1998). Estimates of the Portuguese NAIRU point to values in the range 5.5 to 6.0 per cent. These values should not be extrapolated to the current date. In 1998, the Employment Survey of the Instituto Nacional de Estatística underwent important methodological changes, in the context of the adoption of Eurostat guidelines towards greater statistical harmonisation. These changes resulted into a statistical break in 1997-98, with an estimated magnitude of 0.75 to 1 percentage points. Taking the statistical break into account, NAIRU estimates should be updated to the range of 4.5-5.0 per cent.
kept broadly stable since mid-1993 to 1998. Consistent with their announced strategy, the authorities did not to make use of the enlarged room for manoeuvre provided by the enlarged ERM bands, and official interest rates were adjusted in a manner consistent with the maintenance of exchange rate stability.

Inflation followed a continuous downward trend in the period 1991-97, with CPI inflation reaching 2.2 per cent 1997. The emergence of a negative output gap in 1993 and the subsequent increase of unemployment fostered wage moderation, contributing to a steady deceleration of non-tradable goods prices. Nominal unit labour costs decelerated to 2.2 per cent in 1994, and remained relatively moderate up to 1998. The monetary and exchange rate policy pursued since the early-1990s was key in containing inflation expectations throughout the decade, particularly when the economy re-bounded as from the mid-1990s. Portugal was in a position to comply with the price stability criterion for EMU participation since July 1997.
3. MONETARY AND EXCHANGE RATE POLICY IN 1986-1998

This section describes the monetary and exchange rate policy developments in Portugal from EC accession to EMU participation. The section is divided into two parts. The first sub-section covers the period from EC accession in 1986 to early 1992, when the escudo joined the ERM. In this period economic policy was driven by the need to implement the Single Market programme and the acquis communautaire. The second sub-section covers the period 1992-1998, i.e., the period from the agreement on the Maastricht Treaty to the start of monetary union. In this period ensuring compliance with the convergence criteria for EMU participation was the immediate priority of economic policy. This corresponds also to the period of ERM membership.

3.1. From EC Accession to the Maastricht Treaty (1986-1991)

In the mid-1980s disinflation became the main goal of monetary and exchange rate policy, and the exchange rate was chosen as the main instrument of the disinflation strategy. The monthly rate of depreciation of the escudo was successively cut down in the period from 1986 to 1990, even when inflation temporarily rebounded in 1988-90. In contrast to the previous decade, the inflation differential between Portugal and its main trading partners was no longer fully compensated, and the escudo appreciated in real terms as from 1987.

After a very substantial decline in 1984-87, inflation resumed an upward trend in 1988-90. The rebound in the inflation rate and the concomitant increase in the inflation differential against the Community average, at a time when exchange rate policy had turned less accommodating have taken the authorities by surprise. Indeed, in the previous decade the behaviour of inflation in Portugal

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(5) Although the focus here is on monetary and exchange rate policy, and most notably its role in the disinflation strategy, it is important to emphasise that changes to the monetary and exchange rate policy framework were part of a coherent package which also included financial sector reform and the consolidation of public finances. It is also worth noting that the timing and the sequencing of the various reforms is relevant. In particular, and as far as the Portuguese experience is concerned, steady fiscal adjustment was a pre-requisite for financial reform and the gradual elimination of central bank financing of the public sector. Indeed, without a substantial reduction of the public sector borrowing requirement, the move to financing at market-determined rates would have translated into an explosive budget deficit. See OCDE (1999) and Borges (1991b).

(6) Over this period, year-on-year inflation increased from (a minimum of) 8.0 per cent in April 1988, to (a maximum of) 14.4 per cent in October 1990.
seemed to be well explained by the (relative version of the) Purchasing Power Parity theory.(7)

As noted in section 2 above, an acceleration of both tradables and non-tradables prices has initially taken place. However, while tradables inflation resumed a declining trend as from mid-1989, non-tradables prices kept on accelerating until late 1990.(8) As a result, a substantial inflation differential between both sectors emerged, leading to a marked increase of the relative price of non-tradables. To the extent that this increasing differential reflected strong productivity gains in the tradable goods sector there was no cause for concern (see Section 4 below). However, signs of an increasingly overheated economy were also becoming apparent. The closing of the output gap and the deterioration of the trade balance in the late 1980s, as well as the decline in unemployment and the acceleration of unit labour costs, signalled that domestic production was limited by capacity constraints and a tight labour market. The rebound in the inflation rate, and in particular the strong acceleration of prices in the sheltered sector, added to the signs of overheating.

An increasingly unbalanced policy-mix exacerbated excess demand in the economy in the early 1990s. While a significant decline in the general government deficit and an improvement of the cyclically-adjusted primary balance have taken place up to 1989, the early 1990s witnessed a reversal in fiscal consolidation (Chart 6). The latter was initially caused by a sharp increase in the ratio of primary public expenditure in a context of favourable cyclical conditions, which translated into a significant deterioration of both the actual and cyclically-adjusted primary balances.(9)

In the monetary front, as capital movement liberalization was being progressively implemented, the authorities tried to control aggregate demand through a tight monetary policy without allowing for an excessive real appreciation of the escudo. This resulted in a vicious circle, which came to be known as the monetary policy dilemma: high domestic interest rates coupled with a tightly managed (and thus highly predictable) exchange rate in the context of the crawling-peg regime fostered strong (in particular short-term) capital inflows, raising serious difficulties to the management of domestic liquidity.(10)

The interruption of the disinflation process and the difficulties in controlling domestic liquidity prompted profound changes in the monetary and exchange rate policy framework. Credit ceilings, which had become ineffective, were abolished in March 1990, a new system of reserve requirements was put in place in May 1990, and a major liquidity absorption operation was carried out in December 1990 and March 1991 to mop up the excess

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(7) According to Barosa and Cunha (1989), Portuguese inflation behaved in accordance with the (rate form of the) PPP relationship in the period 1976-1987. In a later study, the same authors show that the PPP relationship has been broken in late 1987 (see Barosa and Cunha (1990)).

(8) Tradable goods prices accelerated from below 7 per cent in May 1988 to over 13 per cent in January 1989, whereas non-tradable goods inflation increased from around 8 per cent in early 1998 to over 20 per cent in late 1990.

(9) The ratio of primary current expenditure to GDP increased from 26.5 per cent in 1989 to 30.6 per cent in 1991. Over the same period, the cumulative deterioration of the cyclically-adjusted primary balance amounted to almost 3 percentage points of GDP. For a detailed account of fiscal policy in the period 1986-1994, see Cunha and Neves (1995).

(10) It is a well-documented result in economics that one cannot have at the same time free capital movements, an exchange rate target and an autonomous monetary policy. Indeed, in a context of financial integration, markets ensure the equalization of expected returns from assets denominated in different currencies. Accordingly, the domestic interest rate reflects the foreign interest rate and the expected depreciation of the currency.
liquidity created under the system of credit ceilings. In addition, a new central bank law was introduced in October 1990(11), imposing limits to the monetary financing of budget deficits. (12) Interest rates had already been progressively liberalized in the second half of the 1980s. (13) A system of indirect, market-based monetary management was thus implemented. (14)

The crawling-peg regime was abandoned in October 1990. At the time, the monthly rate of depreciation against a basket of thirteen currencies stood at 0.25 per cent. The aim of the exchange rate regime shift was two-fold. First, the authorities wished to introduce some short-term unpredictability in the exchange rate of the escudo in order to discourage (short-term) capital inflows. Second, the new regime should prepare the country for future participation in the ERM. Against this background, the objective of a 3.0 per cent depreciation was initially kept, but over an undefined horizon (i.e., in the short term the escudo would be allowed to fluctuate within a non-announced band). In addition, the reference basket against which the escudo was measured was changed to a basket of five ERM currencies. (15) In parallel, the authorities tried to insulate the domestic market through a temporary re-imposition of controls on the inflow of capital. A compulsory non-remunerated deposit amounting to 40.0 per cent of foreign borrowing was introduced in July 1990 and, one year later, restrictions were re-imposed on the purchase of floating-rate Portuguese securities by non-residents.

The depreciation objective was gradually replaced by a policy of “stability of the escudo”. In the 18-month period from October 1990 – when the crawling peg was abandoned – and March 1992 – just before ERM entry –, the escudo appreciated by 2.6 percent in nominal effective terms (Chart 7), and by a similar magnitude against the D-mark. Given the still substantial inflation differential against the EU average, the (CPI-based) real effective exchange rate appreciated by about 15 per cent between 1990 and 1992.

Changes to the monetary and exchange rate policy framework failed to put an end to the mon-
etary policy dilemma because the authorities tried to keep nominal interest rates at a high level in order to fight inflation (Chart 8) but, at the same time, continued to resist the pressure towards nominal appreciation of the escudo out of fear of harming competitiveness. As domestic interest rates were raised to curb excessive demand growth, the positive interest rate differential attracted substantial (in particular short term) capital inflows from abroad, putting upward pressure on the exchange rate of the escudo. This was a period of strong optimism in international financial markets. Risk were low and the escudo, like the higher-yielding ERM currencies, was the object of "convergence plays" (see section 3.2 below). The Banco de Portugal intervened in the foreign exchange market by selling escudos in order to prevent an excessive appreciation of the exchange rate which could harm competitiveness. Foreign exchange market intervention increased domestic liquidity and put downward pressure on domestic interest rates. The Banco de Portugal then tried to dry up the excess liquidity through open-market operations in order to keep interest rates high, again stimulating capital inflows. Since the currency was seen as a "one way bet", administrative restrictions proved rather ineffective to contain capital inflows and net foreign assets peaked at over 25 per cent of GDP in 1991 (Chart 9). Nevertheless, the difficulties in controlling liquidity did not prevent the beginning of a sustained process of disinflation. During this period of "limited floating", the year-on-year CPI inflation declined from over 14 per cent to below 9 per cent.

### 3.2. The ERM experience (1992-1998)

In April 1992, the escudo joined the exchange rate mechanism of the European Monetary System with a fluctuation band of +6.0 per cent.\(^{(16)}\) For a small open economy, exchange rate stability vis-à-vis a set of currencies with a high degree of nominal stability is a powerful means to reach price stability in the medium-run. ERM membership underlined the authorities’ commitment to the pursuit of a non-accommodating exchange rate policy, and was therefore expected to have a favourable impact on inflation expectations. Membership was also a necessary step to ensure that the country would be a candidate for participation in Economic and Monetary Union.

After joining the ERM, the escudo became the strongest currency in the parity grid, and reached the ceiling against the weakest currency in the system, which at the time was the British Pound. These were still the times of the "hard EMS" and of "convergence palys".\(^{(17)}\) Strong performance in the band placed downward pressure on domestic interest rates, at a time when year-on-year inflation was edging up again, due to an increase in in-
direct taxes. (18) In August 1992, the Government announced that all remaining capital controls would be gradually abolished until the end of the year. This announcement was accompanied by a significant decline in official interest rates in order to prevent disturbing capital inflows from increasing further. The repo rate declined by 2 p.p. (from 18 to 16 per cent) in the three and half month period between ERM entry and mid-August (when full capital account liberalisation was announced). The decision to fully liberalise capital movements virtually eliminated the room for manoeuvre of domestic monetary policy, as official interest rates had to be used to ensure that the exchange rate was kept within the ERM fluctuation bands.

In spite of a promising start, the first year of ERM participation was not an easy one. The escudo started to fall to the lower half of its fluctuation band, reflecting a combination of external and domestic factors. First and foremost, the loss of credibility of the ERM in the wake of the Danish referendum on the Maastricht Treaty in June 1992 translated into a significant increase of the risk premia of the currencies from countries with the worst stability track-records. “Convergence plays” ended abruptly causing a massive shift out of those currencies. Secondly, the temporary increase in inflation, coupled with the marked decline of interest rates following the announcement of full capital movement liberalisation, created an increasing perception of incompatible policy requirements in the domestic and the external front.

The escudo was thus caught in the turmoil which affected the ERM in 1992-93, and which led to the widening of the ERM fluctuation bands to ±15.0 per cent in August 1993. (19) During this period, the escudo was devalued twice (Chart 10A). After resisting a speculative attack in September 1992 – when the central rate of the Spanish peseta was devalued by 5.0 per cent and the Italian lira and British pound suspended their intervention obligations within the ERM –, the central rate of the Portuguese escudo was devalued by 6.0 per cent in November 1992, and by 6.5 per cent in May 1993. These adjustments have taken place in the context of realignment requests by the Spanish authorities, i.e. the realignments were not initiated by the Portuguese authorities, and in fact the escudo was not under particularly strong pressure in either occasion. However, the devaluation of the peseta (by 6.0 and 8.0 per cent, respectively) changed the conditions which had determined the choice of the central parity of the escudo. In particular, the loss of competitiveness vis-à-vis Spain (one of Portugal’s main trading partners a a major competitor in third markets) that would occur if the escudo were not devalued along with the peseta could have been very hard to sustain, particularly at a time when the credibility of the ERM was severely damaged and domestic fundamentals were deteriorating fast. Indeed, the period of rapid economic expansion was coming to an end, and a significant slowdown of real GDP growth led to a recession in 1993.

In spite of deteriorating domestic conditions, the Portuguese authorities did not exploit the increased room for manoeuvre provided by the enlarged ERM fluctuation margins, so that official interest rates were adjusted in a manner consistent with the maintenance of exchange rate stability (Charts 10A to 10D). In the aftermath of the Mexico crisis (December 1994) tensions re-emerged in the ERM. On 6 March 1995 the central rate of the peseta (by 6.0 and 8.0 per cent, respectively) changed the conditions which had determined the choice of the central parity of the escudo in November 1992 and by 6.5 per cent in May 1993. These adjustments have taken place in the context of realignment requests by the Spanish authorities, i.e. the realignments were not initiated by the Portuguese authorities, and in fact the escudo was not under particularly strong pressure in either occasion. However, the devaluation of the peseta (by 6.0 and 8.0 per cent, respectively) changed the conditions which had determined the choice of the central parity of the escudo. In particular, the loss of competitiveness vis-à-vis Spain (one of Portugal’s main trading partners a a major competitor in third markets) that would occur if the escudo were not devalued along with the peseta could have been very hard to sustain, particularly at a time when the credibility of the ERM was severely damaged and domestic fundamentals were deteriorating fast. Indeed, the period of rapid economic expansion was coming to an end, and a significant slowdown of real GDP growth led to a recession in 1993.

Perhaps somewhat surprisingly, the depreciation of the nominal exchange rate in late 1992 and early 1993 did not prevent the gradual and continuous decline of the inflation rate. The fact that the devaluations of the escudo were probably not per-

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(17) The absence of realignments in the EMS since 1987 and increasing prospects regarding the creation of a monetary union in Europe fostered large capital inflows into the higher-yielding ERM currencies. Investors believed that all ERM countries were on a sustainable convergence path towards monetary union, so that interest rate differentials in favour of the higher yielding currencies significantly overestimated the actual risk of exchange rate depreciation. This phenomenon came to be known as “the convergence play”. See IMF(1993).

(18) The year-on-year CPI inflation increased from 8.0 per cent in February 1992 to 9.5 per cent in June 1992, resuming a declining trend thereafter.


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Articles

Chart 10


A – DM/PTE exchange rate

[Graph showing DM/PTE exchange rate from April 1992 to December 1998]

Source: Banco de Portugal.

B – Escudo’s effective exchange rate

[Graph showing Escudo’s effective exchange rate from April 1992 to December 1998]

Source: Banco de Portugal.

C – Banco de Portugal intervention rates

[Graph showing Banco de Portugal intervention rates from April 1992 to December 1998]

Source: Banco de Portugal.

D – Short-term interest rates – 3-month euro-market rates

[Graph showing short-term interest rates from April 1992 to December 1998]

Source: Reuters.

E – Long-term interest rates

10 years; from 1 Jan. 1994 to 31 Dec. 1998

[Graph showing long-term interest rates from January 1994 to December 1998]

Source: Reuters.

F – Portugal - Sovereign and currency risk

Risk vis-à-vis Germany

[Graph showing sovereign and currency risk from August 1993 to December 1998]

Source: Banco de Portugal.

Notes:
(a) Interest rate differential between a Portuguese bond denominated in DM and a German bond for a similar maturity.
(b) Interest rate differential between Portuguese bonds denominated in PTE and in DM, for the same maturity.
ceived as a regime shift, together with the emergence of a negative output gap in 1993, are likely to have contained the transmission of the exchange rate depreciation to domestic prices. The increase in the unemployment rate in 1993-95 fostered wage moderation, contributing to a sustained deceleration of non-tradables prices.\(^{(20)}\) When the economy re-bounded as from the mid-1990s, the successful preservation of exchange rate stability since mid-1993 anchored inflation expectations, preventing a re-acceleration of prices. Inflation declined from over 9 per cent in mid-1992 to about 2 per cent in end-1997.

The stability of the nominal exchange rate since mid-1993 and the continuous decline of the inflation rate since the early 1990s, allowed a sustained and significant reduction of both short- and long-term nominal interest rates. Average long-term interest rates declined from a peak of 12.2 per cent in April 1995 to 4.1 per cent in December 1998 (Chart 10E). During the same period the long-term interest rate differential against the D-mark narrowed from over 5 p.p. to about 0.3 p.p. At a certain point in time, a virtuous circle between nominal convergence and the prospect of EMU participation started to emerge. Progress towards nominal convergence increased the likelihood of Portugal meeting the convergence criteria for EMU participation, whereas, at the same time, increased prospects of EMU participation facilitated exchange rate stability, the convergence of interest rates to the lowest levels in the EU and the improvement of the budget balance.\(^{(21)}\) This virtuous circle is reflected in the substantial decline of the foreign exchange risk premium as from mid-1995 (Chart 10F).

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\(^{(20)}\) This is not to say that the nominal depreciation of the escudo had no impact on the exchange rate. Initially the impact of the depreciation on prices was probably masked by favourable base effects related to the unwinding of the impact on the inflation rate of the VAT increase in the first quarter of 1992. However, as from mid-1993 a temporary acceleration of tradable goods prices is clearly evident (the year-on-year rate of change of tradable goods prices increased from 3.4 per cent in June 1993 to 5.3 per cent one year later). The decline of average CPI inflation from 6.5 per cent in 1993 to 5.2 per cent in 1994 can basically be attributed to the deceleration of non-tradable goods prices from 9.0 to 6.3 per cent. Tradables inflation remained virtually unchanged over this period (4.6 per cent in 1993 and 4.4 per cent in 1994).

4. ASSESSING THE COSTS OF DISINFLATION

There is now a widespread recognition that inflation and uncertainty about future inflation negatively affect the level of welfare in the economy.\(^{(22)}\) However, while the medium to long-run benefits of a disinflation programme are beyond question, a disinflation process is often associated with a temporary increase in unemployment and a loss of output, reflecting the short-term trade-off between inflation and employment (and output).\(^{(23)}\) As a result of hysteresis, short-run costs may persist over the medium term, particularly in the labour market. Such costs may affect the willingness of the policy authorities to pursue a consistent disinflation strategy.

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\(^{(21)}\) As noted in section 2.1 above, after significant improvements in the second half of the 1980s, the process of budgetary consolidation suffered a serious reversal in the early 1990s. The setback in fiscal consolidation reflected an expansionary fiscal policy in 1990-91, the sharp downturn of the economy in 1993 and severe tax collection problems following the elimination of border controls within the European Union in January 1993. A steady improvement of the budget balance was achieved from 1994 onwards. The deficit to GDP ratio was continuously brought down from over 6.0 per cent of GDP in 1993, to 2.1 per cent of GDP in 1998. After peaking at 65.9 per cent of GDP in 1995, the debt ratio declined to 60.0 per cent of GDP in 1998. In 1997 Portugal was no longer in an excessive deficit situation. The Council decision on the existence of an excessive deficit in Portugal was abrogated in May 1998, ensuring compliance with the EMU criterion on the sustainability of public finances. It should be noted, however, that the improvement of the deficit ratio was achieved as a result of the decline of the interest burden. In fact, over the period 1995-1998, both the primary balance and the cyclically-adjusted primary balance as a per cent of GDP have deteriorated.

\(^{(22)}\) Costs from inflation identified in the theoretical literature arise from the need to frequently revise price lists, the need to economise on real money balances, the less than full indexation of tax systems and debt contracts, the unplanned redistribution of income and wealth, increased uncertainty about future prices, and the difficulty in identifying relative price changes. The theoretical literature finds empirical support in a vast number of applied work, where a negative relation between inflation and economic performance is established. The evidence regarding the costs of inflation has led to the adoption of price stability as the main objective of monetary policy in a large number of countries. See Briault (1995), Barbosa et al. (1999) and ECB (2001).

\(^{(23)}\) This trade-off results from rigidities in product and labour markets, as well as in debt contracts. Unless economic agents perfectly anticipate the decline in inflation, and have the possibility of adjusting their contracts accordingly, disinflation will lead to a loss of output and employment.
Against this background, an important question is to assess whether there have been any significant (short-run) costs of disinflation in Portugal. This is the aim of the present section. Disinflation costs are likely to depend on the structural characteristics of the economy and on the features of the disinflation programme. Given that the Portuguese disinflation strategy was based on a non-accommodating exchange rate policy, one would expect potential costs to be apparent in a deteriorating performance of the external sector, which in turn would be likely to translate into increasing unemployment and a decline of output. This suggests that one should start by looking at how the external sector has performed during the disinflation period. A second step would then be to look more closely at output and labour market developments.

4.1. The external sector

Conventional measures of the real effective exchange rate show a significant real appreciation of the escudo since 1987, when the exchange rate policy turned less accommodating (Chart 11). The magnitude of the appreciation varies considerably according to the actual measure used. The accumulated rate of appreciation in the period 1987-1992 ranges from 35 per cent, when measured on the basis of relative unit labour costs in the whole economy, and 20 per cent when measured on the basis of unit labour costs in manufacturing. Real appreciation was particularly strong in the period 1990-92, after the crawling-peg was abandoned. Following a period of instability in the context of the ERM crisis in 1992-93, the real effective exchange rate has remained quite stable from 1995 to 1998, at a level close to that prevailing from mid-1992 to early 1993. The ratio of prices of non-tradable to tradable goods also shows a substantial appreciation, particularly as from 1989.

The performance of the external sector does not point to any significant erosion of the competitiveness of the Portuguese economy during the disinflation period. As can be observed from Chart 12, real export growth was high, market share gains were significant, movements in the trade balance and the current account do not point to an exchange rate misalignment, and no unsustainable compression of exporters’ profit margins appears to have taken place.

A very strong growth of both imports and exports took place following EC accession, leading to significant increases of both import penetration and export market shares (Charts 12A and 12B). Real import growth clearly outpaced the expansion of exports, leading to an increase of the trade deficit in the period 1986-1988, in spite of significant terms of trade gains (Charts 12C and 12D). This deterioration of the trade balance occurred before real appreciation had become significant, and at a time when domestic demand growth in Portugal was significantly higher than abroad (Chart 12E). Moreover, in 1988, exporters’ unit profit margins were still considerably above their level in 1985 (Chart 12F). The increased trade deficit thus appears to reflect the behaviour of relative domestic demand growth, rather than a loss of competitiveness of Portuguese exporters. The widening trade deficit was partly compensated by the increase of unilateral public transfers (particularly related to the inflow of Community structural funds), and the current account was kept broadly balanced. From 1989 onwards both the trade and the current account balance as a percentage of

(24) The liberalisation of automobile imports, which gave rise to a stock adjustment, has also contributed to the large deterioration of the trade balance observed in 1988.
Chart 12
THE EXTERNAL SECTOR DURING THE DISINFLATION PERIOD

A – Exports and market share

B – Imports and import penetration

C – Terms of trade

D – Trade Balance and Current Account Balance

E – Change in trade deficit and relative domestic demand

F – Unit profit margin of the exports sector

Source: Banco de Portugal.
GDP remained broadly stable, again moving in a manner consistent with changes in relative domestic demand. The substantial increase of exporters’ profits in 1985-87 was only partially reversed in 1988-92, when the bulk of real appreciation has taken place. By the end of the disinflation process, in 1997-98, unit profit margins in the exports’ sector were about 6 per cent above their level in 1985.

The favourable performance of the external sector suggests that an equilibrium real appreciation was taking place at the time when disinflation was being pursued. Estimates of the so-called “fundamental equilibrium real exchange rate” (FEER) give support to this possibility. Chart 13, which depicts the observed (CPI-based) real effective exchange rate together with an (estimated) path for the FEER, suggests that the Portuguese economy was “over-competitive” from the mid-1980s to the early 1990s, and that the observed real exchange rate did not deviate significantly from its estimated equilibrium values from 1992 to 1995.

Substantial capital inflows related to the Community structural funds and to the process of financial integration (Charts 14 and 15) induced a relaxation of the intertemporal external constraint of the Portuguese economy. Through their impact on investment, these capital inflows fostered the convergence of Portuguese per capita income.


(26) See Costa (1998). The results in this paper are consistent with those obtained in other studies. See, for example, Manteu and Mello (1992).

(27) In other words, a given level of the fundamental balance (which basically corresponds to the balance of current transactions and “permanent” capital flows – i.e., foreign direct investment flows) could be achieved at a more appreciated exchange rate.

(28) A significant terms of trade improvement, reflecting the combined effect of a US dollar depreciation and a marked decline in oil prices, also contributed to a slowdown of the external constraint of the Portuguese economy, particularly in the period 1985-87.
come to EU levels (the so-called “real convergence”, or “catching-up” process).\(^{(29)}\) A process of catching-up with more developed economies tends to be associated with an equilibrium real exchange rate appreciation.\(^{(30)}\)

The behaviour of the observed real exchange rate appreciation was indeed caused by favourable productivity shocks in the tradable goods sector\(^{(31)}\) (Chart 16). The transition to the steady-state capital/labour ratio also appears to have played a role in explaining the appreciation of the real exchange rate.\(^{(32)}\)

Besides their medium-to-long run supply-side effects, structural funds and financial integration were also associated with an immediate expansionary impact on aggregate demand. In addition to a strong impact on investment expenditure, there was pressure on public expenditure (reflecting the principles of additionality and complementarity applying to the structural funds), and private consumption (reflecting the perception of an increase in permanent income). Strong demand growth in the early 1990s reinforced the pressure towards real appreciation of the escudo, generating a dilemma between nominal appreciation of the exchange rate and higher inflation.\(^{(33)}\) Given that disinflation was an explicit policy objective, the only option from a monetary policy viewpoint would have been to allow a stronger nominal appreciation of the currency.\(^{(34)}\) However, this option would have concentrated the burden of the adjustment on the tradables sector. The risk of overshooting could not be ignored, and there was no

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\(^{(29)}\)Structural funds are aimed at reducing the relative scarcity of capital in the EC poorest regions. By fostering (public, private and human) capital accumulation, the funds contribute to enhance the supply potential in the recipient countries in the medium to long run, thus promoting real convergence. Financial integration contributes to reinforce the process of real convergence through its favourable impact on the efficiency of financial intermediation. Integration in the Community – by improving economic prospects and signalling the commitment to an “investment-friendly” economic and political regime greatly enhanced Portugal’s attractiveness for investment. This translated into a (permanent) decline of the country’s risk premium, allowing Portugal to benefit from massive direct investment flows in the late 1980s and early 1990s. See Gaspar and Pereira (1995) and Gaspar and Leite (1995).

\(^{(30)}\)It is an empirical observation that countries’ price levels tend to be positively related to the level of real per capita income (see Esteves (1993) for an application to Portugal), and that such price level discrepancies result from a lower level of non-tradable goods prices in poorer countries. This means that countries in a catching-up process tend to have higher inflation rates than abroad. Explanations for this empirical regularity include cross-country productivity differences (the so-called Balassa-Samuelson hypothesis), cross-country differences in factor endowments (the so-called Bhagwati-Kravis-Lipsey view), and the idea that the income elasticity of non-tradable goods is greater than one. See Balassa (1964), Samuelson (1964), Bhagwati (1984), Kravis and Lipsey (1983 and 1987) and Bergstrand (1991).

\(^{(31)}\)Costa (2000) studies the behaviour of relative prices and productivities in the tradable and non tradable sectors in Portugal and in Germany. The analysis suggests that Portugal has experienced a Balassa-Samuelson effect in 1986-1995. In this period, the increase of the relative price of non-tradable goods was higher in Portugal than in Germany (i.e., \(\Delta PN/PT (\text{Port}) > \Delta PN/PT (\text{Germany})\)). This coincided with a higher growth rate of the relative labour productivity in the tradable goods sector (i.e., \(\Delta L\prod T / \prod N(\text{Port}) > \Delta L\prod T / \prod N(\text{Germany})\)), which was determined by the faster increase of labour productivity in the tradables sector in Portugal.

\(^{(32)}\)See Brito and Correia (2000).

\(^{(33)}\)It has been argued that the pressure towards real appreciation in the early 1990s was the result of an overly tight monetary policy, which was stimulating massive capital inflows. See Cunha and Machado (1993) and Lopes (1994). However, while (significantly) lower interest rates would have curbed (short-term) capital inflows, easing the pressure towards nominal appreciation of the currency, they would also have exacerbated the excessive growth of domestic demand. This would most likely translate into higher domestic inflation and an even stronger real appreciation of the currency.

\(^{(34)}\)Higher interest rate increases, coupled with a policy of nominal stability of the escudo, would have stimulated further (short-term) capital inflows at a time when domestic liquidity management was already rather complicated.
consensus among the policy authorities for letting the currency appreciate. In this context, fiscal restraint would have been the obvious policy solution to moderate the pressure towards real appreciation. Instead, as already noted, fiscal policy was clearly expansionary in the period 1990-91. This translated into a fundamentally unbalanced policy-mix, which may have caused some overshooting of the real exchange rate relative to equilibrium levels.\(^{(35)}\)

### 4.2. Output and labour market developments

The absence of clear evidence pointing towards an erosion of the competitiveness of Portuguese exporters in the context of substantial real appreciation of the escudo suggests that costs from the disinflation process were, at most, rather low. This view is confirmed by looking at output and labour market developments over the disinflation period.

Following a sustained expansion after EC accession, the Portuguese economy experienced a sharp deceleration from 1991 onwards, and entered into recession in 1993. The unemployment rate increased from 4.0 in 1992 to over 7.0 per cent in 1995/96. It could be argued that the 1993 recession and the subsequent increase in the unemployment rate were the result of the disinflation policy that was being followed or, in other words, that they were reflecting the costs of disinflation in terms of economic activity and employment. However, in order to assess the costs of disinflation one needs a benchmark. One possibility is to look at output and labour market developments in Portugal both over a long horizon\(^{(36)}\), and in comparison to developments in other EU countries.

Developments in real economic activity suggest that the 1993 recession was less strong than previous ones. Indeed, the 1975 and the 1983-84 recessions were associated with a more marked decline of GDP and a more negative growth differential against the EU (Chart 17). In fact, the EU also suffered a recession in 1993, and the deceleration of economic activity in Portugal can largely be explained by the decline in real foreign demand observed in that year. The idea that the 1993 recession was not particularly severe is consistent with the behaviour of the Portuguese output gap (Chart 18).\(^{(37)}\) During the disinflation period, the unemployment rate in Portugal stayed consistently (and significantly) below the EU average (Chart 19). Portuguese labour market developments appear to

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\(^{(35)}\)This view is in line with Gaspar and Pinheiro (1994), who claim that positive demand shocks (related to the behaviour of external demand, massive capital inflows and, in particular, from an expansionary fiscal policy) were an important factor in explaining the magnitude of the real appreciation of the exchange rate in the period 1990-1992. Along the same lines, Barbosa (1996) argued that the re-acceleration of inflation in 1988-1990 was essentially caused by demand shocks. See also Borges (1994).

\(^{(36)}\)An alternative (and rather common) way of assessing disinflation costs consists in estimating the so-called “sacrifice ratio”, which measures the average decline (increase) of output (unemployment) per each percentage point decline of the inflation rate. This approach is followed in Barbosa and Machado (1996), who compute sacrifice ratios for a number of EU countries that have undergone disinflation experiences in the 1980s and 1990s (i.e., Portugal, Ireland, France, Spain and Italy). For Portugal, a sacrifice ratio of 0.7 is obtained when the periods 1984-88 and 1991-94 (i.e. when a decline of inflation was observed) are taken together. As underlined by the authors themselves, results are rather sensitive to the choice of the period for which the sacrifice ratio is computed. Indeed, if one extended the computations up to 1997 (the end of the disinflation process) the sacrifice ratio obtained would be lower, given developments in the output gap in 1994-97. In any case, it is worth mentioning that the results obtained for Portugal compare favourably with those obtained for the remaining countries. This again is consistent with the idea that costs from disinflation have not been significant in Portugal.

\(^{(37)}\)The results obtained by Botas, Marques and Neves (1998) also indicate that the output gap estimated for the period following the 1993 recession is clearly less negative than that obtained following the 1975 and 1983/84 recessions.
have reflected business cycle conditions, with no evidence of an increase in the natural rate of unemployment\(^{38}\). Real wage flexibility has acted as a partial substitute for employment/unemployment movements, providing a smoothing mechanism for economic activity (Chart 20). Three main conclusions emerge from this picture. First, labour market developments in Portugal compare favourably with those in the EU in the disinflation period. Secondly, the process of disinflation, and the related monetary and exchange rate regime shift, do not appear to have affected the structural features of the Portuguese labour market. Finally, the responsiveness of real wages to changes in unemployment is likely to have contributed to the low costs of the disinflation strategy in Portugal.

5. CONCLUSION

In 1985, real per capita income in Portugal was about half that in the European Community, the economy suffered from significant macroeconomic disequilibria, and the weight of the public sector in productive activities was substantial. Accession to the Community has brought about many difficult challenges, as well as key opportunities. The process of trade and financial integration, and later on the commitment to being a founding member of monetary union, provided the “stick and carrot” for the country to adopt an economic regime based on the prevalence of market mechanisms and macroeconomic stability. Such a regime is a necessary condition for the sustained convergence of real per capita income towards Community levels.

There are important lessons to be learnt from successes and mistakes in the process of stabilisa-

\(^{38}\)A number of studies suggest that, at least for the past 15 years, the Portuguese natural rate of unemployment has been moving without trend around a range of 5.5 to 6.0 per cent (see footnote 5 above) and that the behaviour of the Portuguese labour market can be characterised by a stable Okun relation (estimates of an Okun equation indicate that a 1 percentage point deviation of output growth from trend leads to a decline of the unemployment rate by about 0.5 percentage points after one year). This evidence suggests that unemployment has been essentially determined by developments in economic activity. On the macroeconomic features of the Portuguese labour market see Barbosa (1999), Botas and Marques (1997), Gaspar and Luz (1997) and Luz and Pinheiro (1994).
tion in Portugal. Given the similarities in the point of departure, these lessons can be most useful to the countries of Central and Eastern Europe currently preparing for accession.

First and foremost, real and nominal convergence should be seen as mutually reinforcing. While this idea is generally accepted in a medium-to long-run perspective, the existence of a (short-run) trade-off between real growth and nominal stabilisation often receives disproportionate attention in the policy debate. The Portuguese disinflation experience shows that, provided the right conditions are in place, this short-run trade-off does not necessarily emerge. An equilibrium real appreciation of the escudo in the period following accession to the Community, the pursuit of broadly appropriate macroeconomic policies, and the macroeconomic flexibility of the Portuguese labour market have made it possible to disinflate “without pain”.

Secondly, trade liberalisation and financial integration lead to a radical change of the environment in which the authorities define and implement their economic policies. Integration increases the costs of economic distortions and inconsistent policies, clearly illustrated by the failure of the Portuguese authorities to simultaneously pursue a tight domestic monetary policy and contain the appreciation of the escudo, in a context of capital movement liberalisation; however, integration also enhances the rewards from sound policies, as apparent from the emergence of a virtuous circle between nominal convergence and the prospect of EMU participation.

Finally, a balanced monetary and fiscal policy-mix can greatly reduce the risks of an excessive real appreciation of the currency in the context of disinflation. The monetary and exchange rate policy pursued since accession to the Community was key to the success of the disinflation process. In 1990-1992, when the crawling-peg regime was abandoned and real appreciation steepened, this policy was subject to a lot of criticism. It was often argued that an overly tight policy was inducing an excessive real appreciation of the currency which in turn was hurting the real side of the economy. However, real appreciation was an endogenous response to the process of real convergence and to excess demand in the economy. The pressure towards real appreciation of the escudo could have been attenuated through a programme of fiscal restraint aimed at moderating the expansionary impact on domestic demand from financial integration and the Community structural funds. However, fiscal policy was rather expansionary in 1990-91, and the resulting unbalanced policy-mix may have caused some overshooting of the exchange rate relative to equilibrium levels.

The policy lessons drawn here from the Portuguese disinflation experience cannot be extrapolated to the current situation in which the country has become a member of EMU. Participation in a monetary union raises new challenges, which are not necessarily less demanding than the ones faced during the disinflation process. While the price stability regime which characterises EMU provides the best possible framework for sustainable growth and employment creation, steady real convergence will depend crucially on the pursuit of sound domestic policies. Preserving the flexibility of real wages and strictly adhering to the requirements of the Stability and Growth Pact, a necessary condition for fiscal policy to play its stabilisation role, are obviously relevant in this context.

REFERENCES


