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Spain Accession to the EMU: A Long and Hilly Road

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Abstract: Europe has been the driving force of economic policy in Spain over the last four decades and the key factor behind the modernisation and globalisation of the Spanish Economy. Being a founding member of the Economic and Monetary Union (EMU) marked the achievement of one of the key goals in the process of European integration. This process was carried out in several stages. First, trade openness, which was bolstered by Spanish accession to the EEC in 1986 and the single market in 1992, and foreign direct investment abroad and portfolio investment, which grew exponentially in the run-up to Euro membership. Second, the process of nominal convergence, which allowed a more stable macroeconomic framework. Lower inflation and fiscal consolidation have resulted in higher sustainable growth.

However, the process of real integration could have been even more successful. Spain's income per capita still lies at 84 per cent of the European average. The slow pace of reform, in particular in the labour market, with high labour costs leading to persistent unemployment, and an inappropriate policy-mix in the late 1980s prevented Spain from reaping the full benefits of integration and of EMU. Achieving real convergence is the key challenge facing the Spanish economy in the future and Europe will remain a focal point in this venture.

I INTRODUCTION

In Spain, the process of economic integration with the European Union has been slow. The negotiations initiated in the late 1970s concluded in March 1985 with the approval of Spain's entry into the European Economic Community on January 1, 1986 (nine years after it applied for membership). This allowed Spain to become a founding member of the Economic and Monetary Union (EMU). Spain faced the challenge of advancing towards nominal convergence with Europe, and thus complying with the conditions for entry into the single currency. The final substitution of national currencies by

the euro in 2002 is a further step towards the integration of Europe's economies and confirms the political will to press ahead with European construction.

There are considerable benefits and costs attached to economic integration. It is nonetheless difficult to separate out those deriving from greater economic liberalisation (the single market) from those associated with greater nominal and exchange rate stability (the entry of the peseta into the European Monetary System, initially, and, finally, the launch of the single currency).

The opening-up of Spanish markets to Europe started in 1970 with the Preferential Agreement on Trade and drew to a close when the single market was established in 1993, allowing the free movement of goods, services, workers and capital. This liberalisation process gradually spread to different sectors in the course of the 1990s and coincided with the peseta entering the exchange rate mechanism of the EMS in 1989 and the development and consolidation of monetary union. This project began with the approval of the Maastricht Treaty on February 7, 1992 and ended with the launch of the Economic and Monetary Union and the establishment of irrevocably fixed exchange rates on January 1, 1999. Nonetheless, the process of economic and political integration in Europe is still advancing, as shown by the progress being made in different areas, such as the enlargement of EU towards the Countries of Eastern and Central Europe (CEECs).

The macroeconomic effects of trade liberalisation are significant, especially in small economies. As markets open up (lower customs tariffs and border charges and the elimination of technical barriers) and new markets become available (greater competition), trade flows and, hence, investment decisions and the production structure are affected. The increased competition associated with a more open economy brings about a reallocation of resources, which leads to a shift towards those sectors with economies of scale (a larger stock of factors of production), resulting in a rise in productivity and lower production costs. The removal of barriers to trade orients the production structure towards those sectors in which the economy has a comparative advantage, implying that as some sectors expand others will contract. This reallocation of resources, under certain conditions,¹ improves economic efficiency. If these conditions are not met, however, the net effect on living standards is unclear. In the case of the Spanish economy, the increase in output in sectors that are expanding has not compensated for the contraction in other sectors (import penetration).² Liberalisation has led to a widening of

¹ Absence of market rigidities (perfect mobility), perfect substitutability among factors of production, constant returns to scale and equal access to the same technology in every country.

² Viñals *et al.* (1990) find that initially the import penetration effect dominates, resulting in a deterioration in the external sector.

the trade deficit, which has been exacerbated by the limited mobility of labour and the low responsiveness of nominal wages to unemployment.

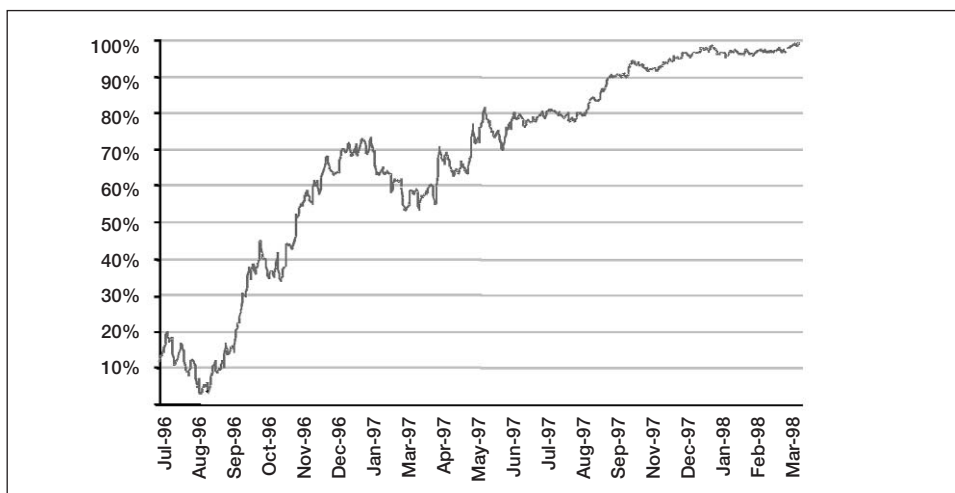
With regard to monetary union, the single currency has not only brought lower costs for intra-union trade, resulting in an increase in trade between the members, but has taken interest rates (real and nominal) down to historic lows, considerably reducing the risk premium demanded by markets for peseta-denominated assets (narrowing long-term spreads with Germany and lowering real interest rates). This reduction testifies to the correction of a number of the major disequilibria traditionally apparent in the Spanish economy, and the resulting compliance with the nominal convergence criteria (inflation, public deficit, debt and nominal interest rates) required for admission to EMU. Increased macroeconomic stability should make room for faster growth in investment and hence in the stock of capital (physical and human), a development which in the long run will increase potential output and per capita income. In addition to this effect, in Spain and the other cohesion countries, EU structural and cohesion funds have contributed to bolster investment since 1989 and enhance the productivity and competitiveness of the economy (as a result of an improved stock of physical and human capital and the positive externalities on private investment). Monetary union would be attractive as long as the long-term benefits derived from lower inflation and fiscal consolidation compensate for the short and medium-term costs of policy measures aimed at securing these objectives: (i) a fall in output and employment associated with the disinflation policies, magnified in Spain's case by low flexibility in the labour market; (ii) an increase in fiscal pressure or a decline in public spending in headings that boost productivity (physical capital, R+D, education) in order to reduce the deficit; and (iii) a loss of monetary policy autonomy as a stabilisation instrument when faced with asymmetrical shocks.

II NOMINAL CONVERGENCE

While accepting the beneficial effects on long-term growth of greater economic stability, the short-term costs associated with lower inflation and the deficit-reduction process delayed, in the case of Spain, the adoption of the economic policy measures needed to correct these imbalances until the admission criteria for EMU were established. Admission to monetary union has been the biggest challenge faced by the economy since Spain entered the EEC. As mentioned earlier, nominal convergence has been the paramount objective of Spanish economic policy since 1993. The large deviations of the Spanish fundamentals from the objective criteria set by Maastricht translated

into the markets assigning a very low, close to zero, probability of Spain joining EMU. However, this changed quite rapidly, as the economic policy objectives became credible and nominal convergence was possible. This gave rise to a virtuous cycle. The increasing probability of Spain joining EMU allowed for the reduction of the risk premium required of Spanish debt, which helped in the fiscal consolidation process, and reduced inflation expectations, allowing for a more accommodative policy-mix.

Figure 1: *Probability of Spain Joining EMU*



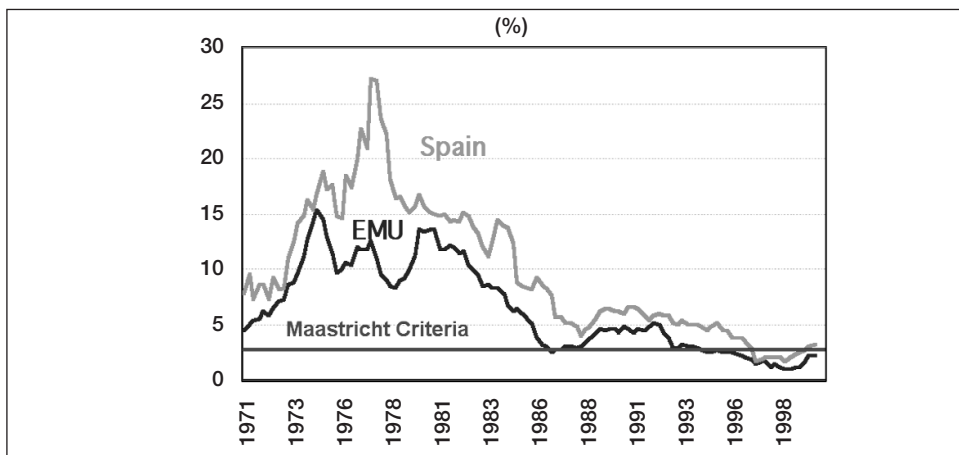
Source: J.P. Morgan

2.1 Inflation

Inflation first began to fall at the end of the 1970s as a result of the new monetary policy framework adopted by the Bank of Spain – it began to announce a targeted growth rate for the monetary aggregate M3 – and the signing of the “Pactos de Moncloa”. These developments led to inflation being reined in from rates in excess of 20 per cent at the end of the 1970s to around 5 per cent in 1987. After Spain joined the EEC in 1986, the exchange rate became a key variable in the design of monetary policy. Monetary policy was asked to play a dual role, maintain exchange rate stability with other EEC currencies and bring down inflation. The need to converge towards the inflation rate of the major EEC countries saw interest rates rise to quite high levels, generating upward pressure on the peseta. Achieving compatibility between the external goal of averting sharp exchange rate fluctuations and the internal goal of controlling inflation was therefore difficult. With the

Spanish economy overheating, and the consequent worsening of imbalances (external deficit and inflation), inflation rose again, to stand at around 6.5 per cent in the summer months of 1989. After the peseta entered the EMS,³ with fluctuation margins of ± 6 per cent, pressure on the exchange rate eased. In spite of this, the Bank of Spain held interest rates high, so inflation once again began to trend downwards. However, the need for a stable peseta within the EMS placed restrictions on monetary policy, meaning that by itself it could not bring inflation down to the rates prevailing in other countries. Additionally, also hindering the correction of inflation (at a time of economic recession), were the increase in the public deficit, from 3 per cent of GDP in 1988 to a peak of 6.7 per cent in 1993, and the wage policy of the early 1990s, in which employee compensation rose by 10.4 per cent on average in the period 1990-1992.

Figure 2: *Inflation*



Source: INE and BBVA.

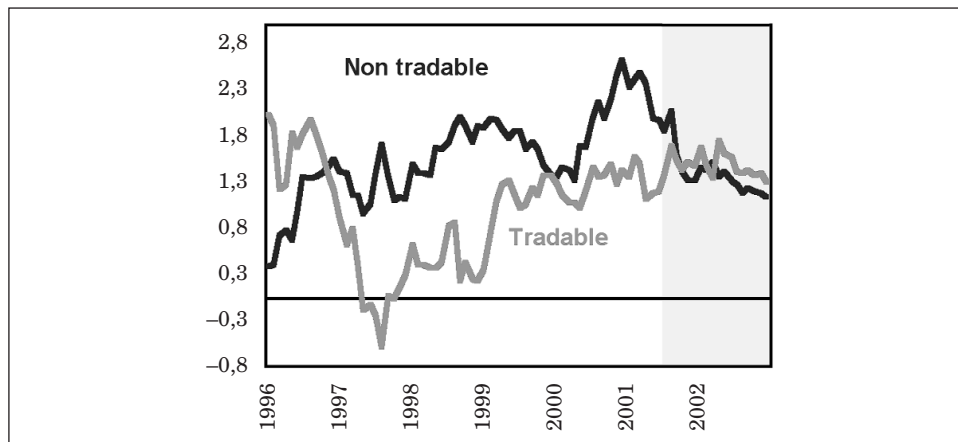
The nominal divergence among the member countries of the EMS stood in the way of monetary policy co-ordination. Following the drawing up of the Maastricht criteria, economic policies in Spain were aimed at securing compliance with the reference values. Wage moderation and the granting of independence to the Bank of Spain (1994), which brought the introduction of annual inflation targets, allowed expectations of inflation to diminish, as the likelihood that Spain would form part of EMU increased. After 1996 the

³ Integration in an exchange rate mechanism like the EMS generates a credibility and discipline effect that contributes to a reduction in inflation expectations.

Spanish economy experienced a sharp disinflationary process. The growth rate of prices fell from 4.3 per cent in December 1995 to 2 per cent at the end of 1997, paving the way for Spain to meet the Maastricht requirement. Even though the inflation differential with EMU continued to decline in 1998 (from 0.6 to 0.2 percentage points), the presence of significant rigidities in the Spanish economy prevented further progress. This became apparent in 1999 and 2000, as a result of the reversal of the conditions that had permitted a favourable evolution of the more erratic price components (commodity and food price developments in 1998) and the application of a policy-mix in Spain that was too expansionary.⁴ The inflation differential with EMU widened to 1.1 and 1.3 percentage points in 1999 and 2000, respectively. This shows that the recent reduction in inflation was underpinned by the favourable evolution of the more erratic components of the price index, rather than by economic policies aimed at generating greater market efficiency and flexibility (the inflation differential with EMU in the services sector – which in 1997 was one percentage point, as against 0.3 points for inflation overall – widened in 2000 to 1.8 percentage points). This inflation performance is a cause for concern, since it represents a loss of competitiveness *vis-à-vis* the EMU, which accounts for around 60 per cent of Spanish trade, and because of the consequences for the formation of inflation expectations and they influence wage demands. It must be remembered that wage moderation was the key factor behind the recent cyclical expansion of the Spanish economy. In the Spanish case, the inflation differential is not the result of a faster rate of productivity growth and is not, therefore, the natural consequence of the convergence process of an economy with a lower per capita income (the Balassa-Samuelson hypothesis). The risk of the inflation differential becoming permanent arises because of the “double” inflation problem of the Spanish economy, that is, an inflation differential with EMU in both the non-tradable and tradable sectors. Spain has thus gone from being a country with dual inflation (systematically faster growth in services prices than in goods prices) to one with “double” inflation.

As noted above, the fact that the inflation differential is due to surplus demand and market inefficiency could lead to a permanent and cumulative loss of competitiveness of the Spanish economy, given the impossibility of resorting to competitive devaluations as in the past.

⁴ The official ECB interest rate in 2000 was on average 4.0 per cent, whereas a Taylor-style monetary rule estimated rates of over 6 per cent for Spain. The Spanish economy was at a more advanced stage of the cycle than the EMU as a whole and higher interest rates were needed. Fiscal policy has not been restrictive enough to offset the expansionary monetary policy stance, so that the policy-mix is expansionary for the cyclical position of the Spanish economy.

Figure 3: *Inflation Differential: Spain vs. EMU*

Source: INE and BBVA

In view of the costs that the empirical evidence and theory attribute to inflation, the disinflation process has positive implications for the economy in the long run. First, inflation increases the opportunity cost of holding money, reduces the demand for labour and introduces inefficiencies in the economy through its interaction with the tax system (inflation reduces real after-tax earnings). In addition to this, the uncertainty generated by inflation with respect to the evolution of the structure of relative prices in an economy leads to inefficient resource allocation. Many studies have found a negative relationship between inflation and growth in the medium term. For Spain, papers by Andrés and Hernando (1996 and 1997)⁵ and Andrés, Hernando and Krüger (1996) conclude that inflation reduces real per capita income growth over an extended period of time, there being a permanent impact on the level, but not on the growth rate.

Even though empirical evidence indicates that the reduction of inflation improves the long-term growth outlook, a fall in inflation has short-term costs in terms of unemployment. And the lower the flexibility of the labour market, the greater will be the costs. The decline in inflation in Spain since the end of the 1970s coincided with the rise in unemployment. Thus, while the annual rate of inflation fell from 24.5 per cent in 1977 to 8.8 per cent in 1985, the unemployment rate jumped from 5.3 per cent of the labour force to 21.6 per cent. However, surging unemployment was not simply due to the adoption of

⁵ An average increase in inflation of one percentage point is found to reduce the level of steady-state income by between 0.5 per cent–0.75 per cent. This effect doubles if inflation is below 5 per cent.

policies targeted at reining-in inflation, but also reflected the dismantling of the protectionist barriers that had shaped Spain's production structure during the dictatorship. Despite the short-term cost of the disinflation process, in the medium and long term, a more efficient allocation of resources and lower inflation expectations, which allow greater price stability, should raise the growth rate of output and hence reduce unemployment. In the second half of the 1990s, there was therefore a simultaneous decline in inflation and the unemployment rate, from an annual rate of 4.9 per cent in 1995 to 2.5 per cent in 2000, in the former case, and from 22.9 per cent to 13.2 per cent, respectively, in the latter. This decline has been linked to the impact of the labour market reforms approved since 1994. However, the continuation of a high structural rate of unemployment (above 13 per cent since 1998), following a sharp fall in the early 1990s (from 27.2 per cent in 1990 to 15.6 per cent in 1995), suggests otherwise. In particular it suggests that the simultaneous decline of inflation and the unemployment rate, rather than the result of labour market reform was prompted by the wage moderation arising from a shift in trade union attitudes, and the fall in inflation expectations associated with Spain's participation in EMU.

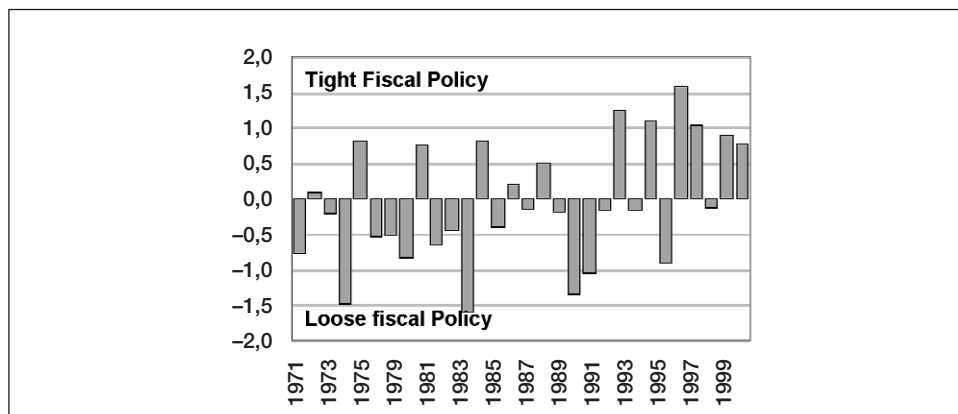
2.2 Public Finances

With regard to fiscal policy, the persistence of generalised and continuing public deficits in the prospective EMU participants, and the credibility problems this could generate for the monetary policy of the future ECB, made it necessary to include additional convergence criteria in the Maastricht Treaty, limiting budget deficits to 3 per cent of GDP and debt to 60 per cent of GDP. After the long period of autocratic rule, the decade before Spain entered the EEC (1975-1985) was characterised by the gradual adaptation of the country's institutions to the new environment and a sharp increase in the budget deficit resulting from rapid growth in spending outstripping revenue growth. The development of public services and the creation of a welfare state, similar to that of more developed economies, together with the increase in public support for crisis-hit sectors, are some of the factors behind the rise in public spending (from 20.7 per cent of GDP in 1970, to 40.4 per cent in 1985). In spite of the increase in revenue from 22 per cent to 34.2 per cent of GDP, the result was a sharp deterioration in public sector finances, from a surplus of 0.6 per cent of GDP in 1970 to a deficit of 6.2 per cent in 1985. Reflecting this, public debt surged to 45 per cent of GDP by 1985, up from 17 per cent in 1980. The surge in public spending was partly responsible for the emergence of significant imbalances in inflation and the external sector after Spain joined the EEC. After the peseta entered the EMS, the pursuit of restrictive monetary policies to offset the expansionary stance of fiscal policy only served

to exacerbate the imbalances that had accumulated during the phase of expansion. Public spending rocketed over these years. The introduction of universal health care, wider unemployment benefit cover, the increase in public employment and investment policy took public spending up to 47.6 per cent of GDP in 1993. Following the economic crisis in the first half of the 1990s and the changes in the EMS, Spain's budget deficit rose once more, confirming that the slight correction seen in the public accounts during the expansion was simply due to the favourable economic context. Thus, in 1993, the budget deficit reached a peak of 6.7 per cent of GDP, as against 3 per cent in 1988, remaining at similar levels until 1995 (6.6 per cent of GDP). The inertia shown by spending led to an increase in the structural component of the deficit, which reached 5.3 per cent of GDP in 1993 (3.7 per cent in 1988). In this period, structural public spending rose steadily, confirming the expansionary nature of fiscal policy.

In order to strip out the impact of the economic cycle on the public accounts and assess to what extent fiscal policy was restrictive, we have constructed a fiscal indicator, corrected for the cycle, referred to as the fiscal impulse. This measures the difference between the structural deficits in two consecutive years. A positive fiscal impulse, therefore, indicates that fiscal policy was relatively more restrictive and a negative value that it was more expansionary.

Figure 4: *Fiscal Impulse (as a percentage of GDP)*



Source: Ministerio de Hacienda and BBVA.

The increasingly expansionary nature of fiscal policy at the end of the 1980s and in the early 1990s is apparent in Figure 4. Thereafter, given the pressing need to lower the deficit to the 3 per cent ceiling by 1997, stipulated

by the Maastricht Treaty, Spain's budget deficit dropped over two years by 3.5 percentage points of GDP, to 2.8 per cent. As a result, the structural deficit came down by 2.6 percentage points, to stand at 2.5 per cent of GDP in 1997. Figure 4 confirms the markedly restrictive fiscal policy stance pursued in 1996 and 1997. While an end to the process of expansion in spending, following the overshoot observed in previous years, must be viewed as a positive development, an in-depth analysis of its composition shows that expenditure containment was based primarily on two headings that are unlikely to contribute to the same extent to the reduction of the budget deficit in the future. The first of these, interest payments, fell as a proportion of GDP by 0.5 percentage points, reflecting the positive impact of declining interest rates, while the second, public investment, declined as a percentage of GDP by 1.2 points. An end to the process of convergence in interest rates with Europe (interest rates on the Spanish Treasury's 10-year bonds fell by 490 basis points over a two-year period), and to the refinancing of debt issued at higher rates, suggests that this expenditure heading will make only a modest contribution to the reduction of the budget deficit in the periods ahead. Likewise, if further progress is to be made in real convergence with the more developed countries, the correction of the budget deficit should not be borne by public investment, in view of the beneficial impact it has on productivity and competitiveness.

In order to prevent deficits from rising as in the past, and thus hampering the design of a single monetary policy, EU countries signed a Stability and Growth Pact, the aim of which was to establish a deficit ceiling (3 per cent of GDP) and set the attainment of a balanced budget as a medium-term goal. During the latter part of the 1990s, Spain's budget deficit continued to fall (to -0.3 per cent of GDP in 2000), reaching a balanced budget in 2001. This was partly due to growing fiscal pressure⁶ (despite the 1999 income tax reform), reflecting favourable economic conditions, and lower interest payments (-1.4 percentage points). The structural deficit has also continued to shrink, to stand at below 1 per cent of GDP in 2001. This would guarantee a budget deficit of below 3 per cent in a recession, as marked by the Stability and Growth Pact.⁷

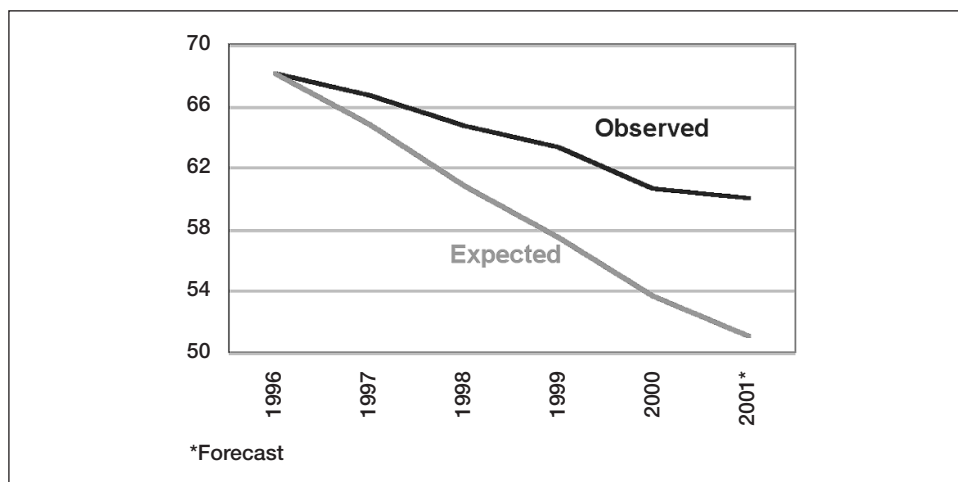
In contrast to the experience of Ireland, falling deficits and the favourable domestic economic scene in the second half of the 1990s did not bring about any significant decline in the level of public debt. Bearing in mind that

⁶ Tax revenue (including social security contributions) increased as a proportion of GDP by 1.4 percentage points.

⁷ In the case of the Spanish economy, estimates show that, in the event of a recession, the economic cycle is likely to swell the budget deficit by 1.5 percentage points of GDP, so that the maximum structural deficit compatible with the Stability and Growth Pact is of the order of 1.5 per cent of GDP.

privatisation receipts since 1995 total over 5.5 trillion pesetas, this development is particularly worrisome. Public debt in 2000 was still running above the 60 per cent of GDP limit set by the Maastricht Treaty, at 60.6 per cent of GDP. Given the stock of public debt at end-1995, and considering both the evolution of the budget deficit and privatisation receipts, public debt should have fallen to below 55 per cent of GDP by 2000. Revenue from the sale of financial assets has been used to purchase new financial assets (allocations of loans and guarantees, share acquisitions, etc.). This confirms that, despite the shrinking corporate public sector, cash injections to public entities and loans extended have remained high.

Figure 5: *Public Debt (as a percentage of GDP)*



* Expected debt refers to the debt level if all privatisation receipts had been dedicated to debt reduction.

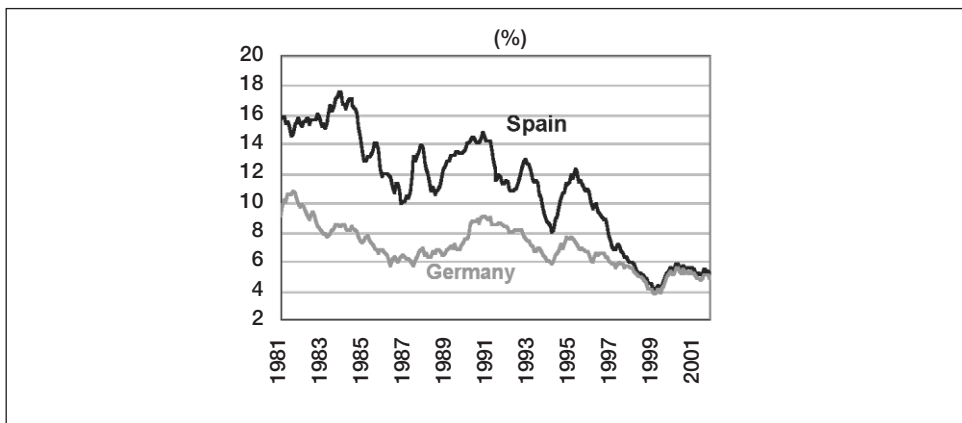
Source: Ministerio de Hacienda and BBVA.

2.3 Interest rates

The correction of some of the key disequilibria in the Spanish economy (inflation and the budget deficit) has been accompanied by a decline in both nominal interest rates and their volatility. Ten-year rates fell from an average of 16.4 per cent in 1983 to a low point of 4.8 per cent in 1999. This reduction in rates, which is a reflection of the greater macroeconomic stability and the progress in convergence with the leading European countries, translated into a decline in the long-term interest rate differential between Spain and Germany. The narrowing of spreads speeded up as markets priced-in the growing probability that Spain would be among the first wave of entrants to

the Economic and Monetary Union. The probability of this occurring, which in mid-1996 was only around 10 per cent, had risen to above 50 per cent by early 1997 and to over 75 per cent by the summer of that year. As a result, the interest rate differential shrank from 390 basis points in December 1995 to 100 basis points in January 1997, and to 30 basis points in January 1998, only marginally above an average level of 27 basis points since the launch of EMU. Lower real interest rates reduce the cost of capital and hence bolster investment and the stock of capital.

Figure 6: *Long-Term (10y) Nominal Interest Rates*



Source: Bank of Spain.

However, economic growth is affected not only by the level of interest rates but also by their volatility, as it is a source of uncertainty. In keeping with the Fisher equation, the main component of the volatility of nominal interest rates is the volatility of inflation expectations. In so far as EMU provides a more stable environment, therefore, uncertainty seems set to fall. Sebastián and Taguas (1998) estimate that a permanent reduction in the volatility of Spanish interest rates to close to the historical volatility of German rates raises the growth rate of per capita GDP in the Spanish economy by 0.5 percentage points.

The process of nominal convergence has prompted a reduction in real interest rates. At the end of the 1970s real interest rates began to rise, reaching an average level that was much higher than in the previous decade and much higher than in the EMU (7.7 per cent and 6.7 per cent, respectively). From 1999 onwards, both the level of interest rates and the differential started to come down, with the exception of 1995, to stand at around 3 per cent in both Spain and the EMU at the end of the period. Lower inflation

expectations, greater exchange stability and the correction of the budget deficit lie behind the decline in real interest rates, as these simply reflect the lower risk premium charged on Spanish assets. The decline in Spain's budget deficit has positive implications for national saving⁸ and hence for interest rates. There is an estimated statistically significant negative relationship between fiscal surpluses and real interest rates in Spain (the estimated coefficient is -0.65 , similar to the one estimated for the EMU: -0.62). This implies that a 2 per cent increase in the budget deficit corresponds to a rise of approximately 1 point in real interest rates.⁹

Nominal convergence is a necessary condition for two reasons. First, an ECB monetary policy that inherits the credibility of the more stable countries of the European Union will translate into lower rates of inflation and dampen the volatility of inflation, which is just as important for uncertainty as the level of inflation itself. Second, a sustainable fiscal policy, as enshrined in the Stability and Growth Pact, will contribute to fiscal consolidation in the EMU as a whole. However, nominal convergence and its implications in terms of nominal stability and diminishing uncertainty cannot by themselves produce real convergence.

III TRADE AND FOREIGN DIRECT INVESTMENT

3.1 Trade

The lowering of trade barriers, the suppression of import tariffs, the adoption of economic policy rules (quality standards, harmonisation of indirect taxes) and the increasing mobility of goods and factors of production that comes with greater economic integration, together with the lower cost of transactions and greater exchange rate stability associated with the single currency, have boosted trade and enhanced the openness of the Spanish economy. To the extent that, in an open economy, a country's external trade is one of the most important and fastest vehicles for the transmission of shocks. This is particularly relevant in today's context in which neither the exchange rate nor monetary policy can be used as mechanisms to correct the impact of asymmetrical shocks on EMU economies.

3.1.1 Exports, Imports and the Degree of Openness

By the time of the launch of the Economic and Monetary Union, the Spanish economy had already transformed, in particular with regards to trade

⁸ Note that a 4-point increase in the national saving rate raises the rate of GDP growth by 0.3 percentage points (Doménech, Taguas and Varela, 1997) .

⁹ The result also holds if the structural deficit is used instead. The coefficient for the Spanish economy is estimated to be -0.66 .

liberalisation. Spanish entry into the EEC in 1986 induced a large scale tariff dismantling, as required by economic integration. It also saw the introduction of VAT, which had an impact on the performance of Spain's external trade, in general, and of imports, in particular.¹⁰ The launch of the single market, (December 31st, 1992) and the successive devaluations of the peseta (1992, 1993 and 1995), with the associated gains in competitiveness, provided an important stimulus to Spanish exports.¹¹ All in all, by 1999, trade represented 56.4 per cent of GDP.

As in 1986 and 1992, the structural change that took place in the European Union in 1999 will bolster the opening of the Spanish economy. The lower cost of transactions associated with a single currency (Spain's trade with the euro zone represents around 60 per cent of the total) and the reduction (elimination) in exchange rate volatility will encourage trade between the member countries of EMU. Rising trade flows have resulted in a greater cyclical alignment of the EMU economies since 1992 and will, therefore, help dampen Spain's economic cycle and developments in the external sector.

Although the changes in the production structure, and hence in the structure of exports,¹² will clearly work to stave off the large deterioration witnessed in Spain's external balance in the past (1986 and 1992), indicators of the degree of competitiveness of the Spanish economy (human capital skills, stock of capital, technological capital) show that significant differences still remain in comparison to the more developed economies. This confirms the need to press ahead with the structural reforms required to enhance economic efficiency.

3.1.2 Competition from Central and Eastern Europe

The first challenge confronting the Spanish economy in the short run will be competition from the central and eastern European countries (CEECs) after the enlargement of the European Union. The CEECs specialise in labour-intensive and low-to-medium technology products (machinery, electrical equipment, textile goods and cars). These sectors make up a large proportion of Spanish trade (7.4 per cent, 7.3 per cent, 4.5 per cent and 20 per cent, respectively, of total Spanish exports to the EU-15), and are sectors in which competitiveness via prices is of particular importance. In the CEECs labour costs are between 20 per cent and 60 per cent lower than those of the EU.

¹⁰ The import of goods and services as a proportion of GDP rose sharply, to 13.6 per cent in 1987 from 9.6 per cent in 1984, whereas the share of exports shrank slightly, to 15.8 per cent of GDP from 16.6 per cent in 1984.

¹¹ Exports rose from 17 per cent of GDP in 1992 to 27 per cent in 1997.

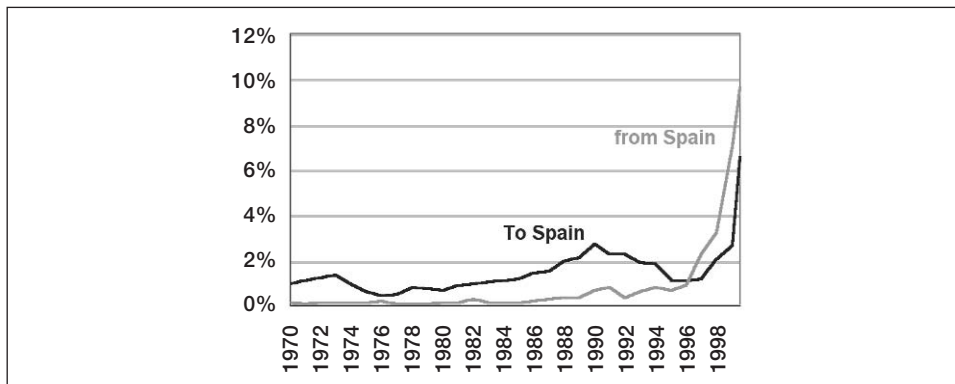
¹² In 2000, the technology-intensive sectors represented 22.4 per cent of total trade in manufactured goods, compared with 19.1 per cent in 1999.

While this might lead to the conclusion that Spanish trade is highly sensitive to competitive pressures from these countries and that enlargement could lead to a loss of market share in the countries of the EU (the market for 70 per cent of Spanish exports), a fuller analysis presents a more optimistic panorama. First, exports of many goods to the EU from aspirant countries have already been liberalised (except for agricultural goods) by virtue of bilateral agreements that the EU has drawn up with each country since the beginning of the 1990s. This is reflected in a rise in exports to the EU from the CEECs, up by an average 12 per cent rate between 1989-1999. Despite this, Spanish exports to Europe expanded at a robust 13.4 per cent average annual rate over this period. Second, indices of import similarity show that the composition of EU imports from the CEECs and from Southern European countries is similar to the import structure from other developing countries. Third, the considerable differences in unit values (export prices) indicate that these countries compete in market segments of different quality. Therefore, the direct impact on Spanish exports to third markets resulting from EU enlargement will be modest. Finally, the competitiveness of Spanish products could be bolstered in the short run as a result of real exchange rate appreciation of the currencies of aspirant countries, caused by higher rates of inflation while nominal convergence consolidates, and in the medium term, because of the reduction of wage differentials as real convergence progresses.

3.2 Foreign Direct Investment

When Spain applied to join the EEC at the end of the 1970s, the perception of foreign investors as of the economy's growth prospects changed. As a result, FDI in Spain began to rise, slowly at first, in line with the progress being made in the negotiations, and then rapidly, after EEC entry in 1986. The process of opening to international trade, improved growth potential, falling production costs (lower wages) and lower risk premia in response to the brighter macroeconomic outlook (economic reforms) account for this increase.

The launching of the Euro, as compared to the accession of Spain to the EEC, translated into an increase of FDI, both, into and from Spain, but with a predominance of the latter. This was the result, on the one hand, of greater European integration, which called for larger intra-European flows and the internationalisation of markets. On the other, the increase in Spanish FDI abroad is a reflection of the maturity of the Spanish economy. The need to seek out new markets with potentially higher returns turned Spain into a net investor of capital (rather than a recipient country as hitherto). In fact, in recent years, Spain has become one of the biggest international investors. It ranked sixth in the world in the year 2000 according to UNO data on foreign investment. On Bank of Spain data, Spanish FDI abroad amounted to 9.6 per

Figure 7: *Foreign Direct Investment (as a percentage of GDP)*

Source: Bank of Spain.

cent of GDP in 2000. Specifically, Spain is now one of the main investors in Latin America, not only in relation to its GDP but also in absolute terms. Moreover, the degree of maturity reached by the Spanish market, and the potential siphoning-off effect on European capital flows of EU enlargement into central and Eastern Europe, suggest that FDI in Spain will fall back in the coming years. Spain is likely, therefore, to continue to be a net capital exporter.

IV REDISTRIBUTION POLICIES IN THE EU BUDGET: THE ROLE OF STRUCTURAL AND COHESION FUNDS

The structural funds (reformed in 1988) and cohesion funds (1992)¹³ are the instruments designed by the European Commission to develop social and cohesion policy within the European Union (Table 1 summarises the importance of EU funds in the four cohesion countries). These funds, which amount to just over one-third of the EU budget, have contributed significantly to reducing regional disparities and fostering convergence within the EU. They have played a prominent role in developing the factors that improve the competitiveness and determine the potential growth of the least developed regions.

During the period 1994-1999, EU aid accounted for 1.5 per cent of Spanish GDP (3.3 per cent in Portugal). This is set to fall slightly in the period 2000-

¹³ The creation of the cohesion funds was approved at the Maastricht summit in order to compensate for the efforts that countries with the lowest per capita income relative to the EU (Ireland, Greece, Portugal and Spain) would need to make in the short run to comply with the nominal convergence criteria.

2006, to 1.3 per cent of GDP. The decline reflects, on the one hand, a reduction in structural funds over the new programming horizon (structural funds will represent around 0.3 per cent of European Union GDP in 2006, compared with 0.45 per cent in 1999) and, on the other hand, the impact of enlargement (accession aid).

Table 1: *Structural and Cohesion Funds*

	<i>Greece</i>	<i>Ireland</i>	<i>Spain</i>	<i>Portugal</i>
<i>GDP %</i>				
1989–93	2,6	2,5	0,7	3,0
1994–99	3,0	1,9	1,5	3,3
2000–06	2,8	0,6	1,3	2,9
<i>% on Gross Fixed Capital Formation</i>				
1989–93	11,8	15,0	2,9	12,4
1994–99	14,6	9,6	6,7	14,2
2000–06	12,3	2,6	5,5	11,4

Source: European Commission. Estimates based on Eurostat data and forecast for 2000-06.

The magnitude of funding implies that they cannot be omitted from any analysis of the impact of EMU on potential economic growth in the cohesion countries. In fact, the funds have helped minimise the negative short-term impact of compliance with the nominal convergence requirements. Specifically, the negative impact on public investment, and hence on the stock of capital, of the fiscal adjustment undertaken to bring the deficit below 3 per cent of GDP. EU funding has allowed rates of public investment to remain relatively stable since the mid-1980s, despite the fact that part of the fiscal consolidation process has been achieved at the expense of funding for public infrastructure.

Figure 8 displays the impact on public investment of EU funding in a number of EMU countries. It is interesting to note that the percentage of public investment financed by EU funds has been rising since 1985, to reach average values of 42 per cent for Greece, 42 per cent for Portugal, 40 per cent for Ireland and 15 per cent for Spain from 1993 onwards (the year the cohesion funds were ratified). The structural and cohesion funds account for quite a large portion of the public capital accumulated in these countries: 23.5 per cent in Portugal in 1997, 17.5 per cent in Greece, 13.2 per cent in Ireland and 6 per cent in Spain. These effects stand in marked contrast to the modest impact in net contributor countries: the impact in Germany and the Netherlands is estimated at -0.7 per cent and -1.1 per cent, respectively, at the end of 1997. EU funds have made, therefore, a significant contribution to

Figure 8: *Percentage of Public Investment Financed via Structural Funds*

Source: Doménech & Taguas (1999)

convergence in per capita stocks of public capital. In the absence of transfers, these differentials would have been 47.5 per cent for Greece, 44.5 per cent for Portugal, 22.4 per cent for Ireland and 25.3 per cent for Spain, as against the observed differentials of 33.4 per cent, 35.2 per cent, 13.4 per cent and 22.9 per cent, respectively.

In a recent paper, departing from Solow's neo-classical model, Doménech and Taguas (1999) estimate that the ratio of public investment in the Spanish economy in the past few years has been 0.5 per cent higher as a consequence of EU funding. This increase has in turn had a positive effect on private investment and per capita income in the long run. In the case of Spain, the cumulative long-term impact of EU funding is estimated to have produced a rise of 0.9 per cent in the rate of private investment and an increase in per capita income of 1.7 per cent.¹⁴

V ESTIMATED MACROECONOMIC IMPACT OF EMU

The impact on the Spanish economy of the combination of the previously analysed factors was estimated by Doménech and Taguas (1999) and are given in Table 2. They find that the effects on GDP growth of lower inflation, a shrinking public deficit and a more open Spanish economy resulting from

¹⁴ In the case of per capita income, the impact is measured in terms of deviations from the steady state that would have been reached in the absence of EU funding.

economic and monetary integration in the EMU. They conclude that the long-term impact of EMU can be estimated to lead to a 3.3 percentage-point increase in the rate of private investment and a 10.4 per cent rise in income per capita. With regard to the latter variable, the largest effect is generated by the fall in inflation (some 4.5 per cent), followed by the correction of the public deficit (3.8 per cent), EU funding (1.7 per cent) and finally the degree of openness (0.4 per cent).

Table 2: *Long-Run Impact of EMU*¹⁵

	<i>Observed Change</i>	<i>Impact on:</i>	
		<i>Private Investment*</i>	<i>GDP per Capita</i>
Inflation	-3,0	0,0	4,5
Structural public surplus	4,6	2,2	3,8
Degree of openness	4,0	0,2	0,4
Public investment	0,5	0,9	1,7
Accumulated impact		3,3	10,4

* % GDP

Source: Doménech and Taguas (1999).

The above estimates take no account of the short-term cost of the policies applied to secure compliance with the nominal convergence criteria laid down by Maastricht. Some studies undertaken for Spain reckon that this cost amounts to around one-third of the long-term benefits.¹⁶ Applying this result to the estimates obtained by Doménech and Taguas (1999), the conclusion is that the net effect of economic and monetary integration is likely to translate into approximately a 5.1 per cent increase in per capita income.

VI THE PROCESS IS FAR FROM OVER: THE CHALLENGE OF REAL CONVERGENCE

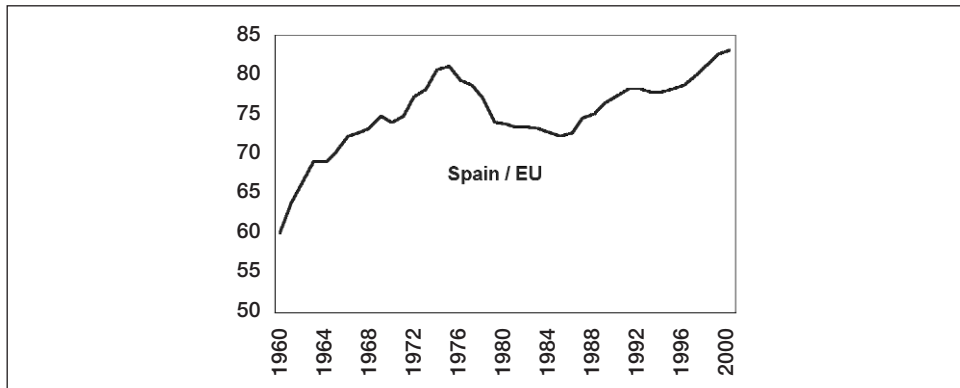
As already mentioned, the goal of economic and monetary integration in Europe, from an economic standpoint, is, first, to stimulate growth in EU countries as a whole and, second, to nurture the process of convergence

¹⁵ Inflation is assumed to fall from 5 per cent to 2 per cent, and the structural deficit from 6.6 per cent to 2 per cent; the degree of openness is assumed to rise at a constant 4 per cent rate, and EU funds are assumed to increase public investment by 0.5 per cent.

¹⁶ See Dolado, González-Páramo and Viñals (1997) and Andrés, Hernando and López-Salido (1998).

between member countries. Spain's participation in EMU constitutes the culmination of the process of integration of the Spanish economy with the international environment. In this sense, compliance with the accession criteria for the EMU, as laid down by the Maastricht Treaty, enabled the Spanish economy to converge nominally with the countries of the European Union. The momentum provided by this process has allowed per capita income to reach 84 per cent of the EU average in 2000, up from 73 per cent in 1986. In the past 40 years per capita income has grown by 2.4 per cent annually in the EU, a percentage point slower than in Spain. Productivity, on the other hand, has risen by 2.6 percentage points, also more than 1 point lower than in the Spanish economy. Nonetheless, despite the great strides made, even if the Spanish economy were to grow at a 1-point faster rate than Europe, the average differential in the last 40 years, in the years ahead, real convergence would still take more than 15 years to achieve.

Figure 9: *Spain's Convergence Process with EU*



Source: European Commission and BBVA.

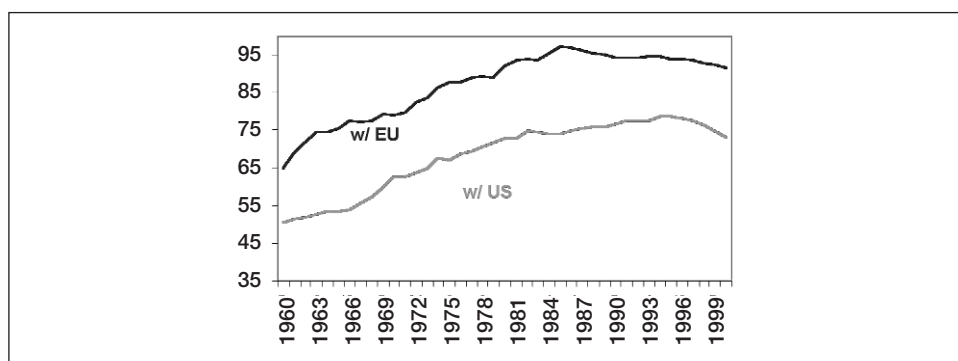
6.1 *Income Per Capita and Productivity*

In the past 40 years, Spain's per capita income has grown at a rate of 3.4 per cent annually. After correcting for purchasing power parity (PPP) per capita income has risen by 30 per cent more than the average of the European economies. After advancing rapidly up to 1974, the convergence process stalled in the period 1975-1984, as a result of the uncertainty associated with the political transition, a wages shock and the two oil crises. After 1975, Spain's economic and institutional structure had to be modernised and internationalised, shifting from a highly rigid and controlled economy to a more flexible and open one. These years witnessed the industrial restructuring process, and the privatisation of state enterprises got underway, clearing

the way for considerable gains in efficiency. The process was not resumed until 1986, partly because of the impetus provided by membership of the European Union. From 1986 on, the Spanish economy has been converging continuously with Europe in real terms. As a result, despite the considerable progress made, per capita income in the Spanish economy is still less than 85 per cent of that of the European Union and under 55 per cent of that of the United States.

However, the long-term behaviour of per capita income is determined by developments in productivity. In this case, the Spanish experience has been more positive, reaching apparent labour productivity 80 per cent of the European Union's (though the trend in the past five years has been in the opposite direction). The Spanish economy has registered more spectacular gains in productivity than in per capita income, so that the productivity gap with Europe was almost closed by the mid-1980s. In 1960, the productivity of the Spanish economy was only 65 per cent of that of Europe. By 1985, the apparent productivity of labour had practically converged with that of the European Union (97 per cent). In the past few years, however, Spanish productivity has grown at very moderate rates, widening the gap with the European Union.

Figure 10: *Convergence of Spain's Labour Productivity*



Source: European Commission and BBVA.

Nonetheless, the convergence in productivity that took place during the 1980s was accompanied by a substantial rise in unemployment, which at one point climbed to above 20 per cent. Likewise, the fall in the unemployment rate since 1995 has coincided with productivity gains of below 1 per cent annually. Estimates for the Spanish economy (Doménech, 2000) suggest that a decline in the unemployment rate to the European average would push up the productivity gap by some 13 points, there being only a small impact on per capita income.

The productivity growth differential with the United States of both Spain and the EMU, having been positive up to 1990, has now turned clearly negative. This development is particularly troublesome for Spain, since, with lower productivity growth rates than in EMU, the process of real per capita convergence with the Euro area is also likely to slow down. If these trends continue in the years ahead, it would seriously jeopardise the convergence process of the Spanish economy.

For a more comprehensive analysis of the behaviour of Spanish productivity, we must examine the factors governing its growth. For a global view of the situation, the evolution of other factors of production (capital), the degree of substitution between them and total factor productivity (TFP), which reflects technical progress in the economy, must all be taken into account. We use a neo-classical growth model to assess the apparent productivity of labour, allowing us to disentangle the contributions of physical capital per worker from the quality of human capital and TFP, measured as the portion of productivity growth that cannot be accounted for by the other factors. The results are given in Tables 3 and 4.

Table 3: *Labour Productivity*

	<i>Spain</i>	<i>EMU</i>	<i>US</i>
1961–1970	6,5	4,9*	2,3
1971–1980	4,1	2,9	0,9
1981–1990	2,3	1,9	1,3
1991–2000	1,5	1,6	2,0
1995–2000	0,7	1,2	2,4

* 1964–1970.
Source: BBVA.

Table 4: *Total Factor Productivity*

	<i>Spain</i>	<i>EMU</i>	<i>US</i>
1961–1970	3,2	2,2*	1,7
1971–1980	1,0	1,0	0,5
1981–1990	0,8	0,9	0,9
1991–2000	0,1	0,5	1,3
1995–2000	0,2	0,5	1,7

* 1964–1970.
Source: BBVA.

The evolution of TFP is similar to that of the apparent productivity of labour. In Spain, as in the EMU, TFP slowed down continuously from 1970 onwards. However, its slowdown was much more intense in Spain in the second half of the 1990s. From 1995 to 2000 TFP grew on average at a rate of 0.2 per cent, lower than the 0.5 per cent rate observed in the EMU. The slower growth rate of TFP in the second half of the 1990s (of the major EMU countries only France recorded a clear recovery in TFP in this period), combined with the advance in TFP in the United States, has widened the existing differential. These differences reflect the technological gap of the Spanish economy overall relative to EMU, and, particularly, to the United States. In fact, Spain is far behind other countries in the promotion of R&D. Investment in R&D, as a percentage of Spain's GDP, has hardly grown in recent years, and has remained below 1 per cent (compared with 2.6 per cent in the United States or 2.2 per cent in Germany). It remains at rates similar to Italy's spending on this heading in 1980.

Given the different behaviour of TFP in the United States, the EMU and Spain, the convergence in productivity between these economies must reflect developments in the other factors of production: physical capital per employee and human capital. The sharp increase in investment in the United States (investment in equipment and software has grown on average by 13.1 per cent annually in the period 1995-2000) has translated into a substantial contribution of the stock of capital per worker to apparent productivity growth since the second half of the 1980s, overtaking in the 1990s the high points reached in the 1960s. In the EMU and Spain, the situation is very different. Not only have the rates of the 1970s, much higher in both cases than those of the United States, not been equalled, but also the contribution of the physical capital stock has continued to fall, and in the second half of the 1990s was clearly lower than in the United States. The situation is worse still in Spain, where the contribution of the physical capital stock to the apparent productivity of labour, as a reflection of the process of substitution of labour by capital that took place in Spain before 1985 and between 1989 and 1993, has slowed down during the last phase of expansion. This may be a reflection, on the one hand, of the wage containment of the second half of the 1990s, or, on the other hand, of the moderate increase in investment in relation to other economic expansions (an average of 8.4 per cent annually in 1995-2000, compared with 13.9 per cent in the second half of 1980s).

The stock of physical capital in Spain has increased twelve fold in the last 40 years, while in the same period it has only increased eightfold in the EU and threefold in the OECD. This represents an important impulse to convergence in this factor of production. The most important thrust took place in the second half of the 1980s, owing to the structural change that took place

with Spain's entry into the European Community. Another factor (noted earlier) is the impact that the structural funds have had on the accumulation of capital in the Spanish economy (6 per cent of Spanish public capital has been financed with European funds). The strong impulse towards convergence in the capital stock that took place in the second part of the 1980s had slowed considerably by the mid-1990s, with the result that convergence was not realised. The Spanish economy's physical capital stock is still around 70 per cent of the EU average, and is only higher than that of Portugal, Ireland and Greece. As for public capital, the accumulated stock is a little higher than that of private capital (in EU terms), that is to say 83 per cent of the EU average.

All in all, technical progress and the stock of physical capital have contributed only moderately to growth in the apparent productivity of labour in Spain, especially in the last decade. Its meagre relative advance is attributable, fundamentally, to the improvement registered in the quality of human capital. Unlike in EMU and the United States, in Spain human capital accounts entirely for the slight increase in apparent productivity. This fact is compatible with the increase in the percentage of the working population with advanced studies (in 1977 21 per cent of the labour force had pursued their studies to a secondary or tertiary level; in 2000 this had increased to 71 per cent). This permits a certain optimism concerning the future evolution of productivity, as human capital will permit a more efficient use of the new technologies. Despite this, Spain's accumulated human capital is still significantly lower than that of neighbouring countries (around 75 per cent of that of the EMU). The challenge is to continue the process of convergence in human capital while increasing the participation rate to a European level.

A breakdown of the apparent productivity of labour using a production function also allows us to estimate the potential GDP of the economy. Thus, the potential GDP of the Spanish economy is between 2.6 per cent and 2.8 per cent while that of the United States and the EMU, estimated using the same method, are around 3.5 per cent and 2.2 per cent, respectively. This implies that the income per capita in Spain will not converge in the medium term with that of the United States, and that, owing to the small growth differential with the EMU (approximately 0.5 per cent), it will take several decades for Spain to achieve convergence in real terms with the EMU.

VII CONCLUSIONS

The Spanish experience within the EU has allowed its economy to become integrated internationally and to modernise, thus securing convergence in nominal terms with Europe. This granted membership to the EMU from the

beginning, which might be considered one of the most important economic achievements of the Spanish economy ever. It allowed for the modernisation and internationalisation of Spanish firms and gave the economy a strong push into the XXI century. However, Spain still finds itself far from achieving its main objective, real convergence. In spite of the progress made, more far-reaching reforms are still necessary to guarantee a sustained future growth. The reforms carried out in the decade 1975-1985 caused a slowdown in the convergence of the Spanish economy, but made room for the subsequent acceleration that allowed Spain, first, to enter the European Community and, later, to join the EMU. In spite of this, Spain has still one of the highest levels of regulation among OECD countries in both the labour market (collective bargaining, high firing costs...) and in the goods and services market (regulation of trading hours, obstacles to the creation of companies, the slow judicial process).

A flexible economic framework is of special relevance in a monetary union, as monetary autonomy has been yielded in favour of the union's central bank. The absence of an exchange rate, which could adjust for differing growth rates of prices in the union's member countries, makes price stability a crucial goal of economic policy, as inflation differentials translate into a loss of competitiveness for the high inflation economy. In this context, the sustained inflation differential of the Spanish economy with EMU is deteriorating the competitive position of Spanish firms. The problem is not a one-year problem but accumulative one, which, in time, will lead to an adjustment in terms of employment and economic growth. Spain has maintained around a 1 per cent price growth differential with EMU over the last few years. And everything points to the maintenance of this differential for years to come, as Spain has a problem of dual and "double" inflation, non-tradable goods inflation above that of tradables, and both of them above their European counterparts.

It has been argued that the inflation differential of the Spanish economy does not pose a threat to future growth, as it is merely the reflection of the Balassa-Samuelson hypothesis. This is not so, as it would imply higher productivity growth in Spain than in EMU, which is not the case. Additionally, Spanish productivity has been more dynamic in the non-tradable than in the tradable goods sector, which contradicts the assumptions of the Balassa-Samuelson hypothesis. The Spanish inflation differential is due to excess demand, as EMU's monetary policy stance is too loose for the Spanish economy, and the lack of flexibility in key markets.

In the absence of autonomous monetary policy, fiscal policy gathers special importance, in particular in light of the lax tone of the European Central Bank for the Spanish economy. Fiscal policy has to play the dual role of traditional

fiscal policy and inflation containment through the expectations channel. In this context, the balancing of the fiscal budget in the medium term, as proclaimed by the Stability and Growth Pact (SGP), is crucial for the maintenance of a stable macroeconomic environment. A balanced budget provides the government with room to manoeuvre during recessions. The Stability and Growth Pact is necessary, as the national nature of fiscal policy collides with the EMU nature of monetary policy, which gives all countries an incentive to carry out a more expansionary policy than warranted, free-riding on the rest. The SGP, however, should focus on the structural deficit, ignoring fluctuations due to the cyclical behaviour of the economy and guaranteeing the soundness of public finances in the medium term. Furthermore, it should not only restrict the deficit allowed to the States, but should take into consideration the composition of the public finances. The SGP should encourage public policies aimed at R&D or the accumulation of human capital, among others, as these increase the growth potential of the economy and yield a positive externality on the rest of the Union members.

In this context, the Spanish economy has one of the best track records of its European partners, having balanced the budget in 2001 and with small deviations from it expected in the future. Now, the challenge is onto the modification of public expenditures towards more productive uses and towards the factors underpinning economic growth. Spain should not fear the free-rider problem of other economies. At the end of the day, the benefits of sound public finances more than outweigh the short-term benefits of free riding.

The combination of policies should aim to achieve the final challenge of the Spanish economy, the convergence in real terms, reconciling convergence in productivity with that of other factors of production and with employment creation. In terms of convergence and long-run growth, the process is still far from over. Goods and services and labour market flexibilisation and the challenges posed by the Eastern enlargement of the European Union should be the first steps. Moreover, Spain must aspire not to convergence with the European average, but with the most advanced countries of the Union, and in this process, the climb has just begun.

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