VI. POLICY-BASED ADJUSTMENT

Summary

There is significant scope for national policies to influence the adjustment process through the fiscal stance and, over the medium-term, structural policies. Experience with these types of policy-based adjustment is the focus of this chapter. While in principle fiscal policy could play an important role in mitigating idiosyncratic shocks, the size of cross-country differences in general government expenditures limits the contribution to the smoothing of demand-driven differences in economic growth and inflation.

Structural policies can enhance the efficiency of adjustment in the medium-term. Evidence is presented on how structural policies initiated reforms in labour, product and financial markets, which improved the adjustment capacity of the euro area. But progress has varied across the different markets and it is acknowledged that additional structural reforms could improve the functioning of the euro area in the future. In the euro area as a whole, progress on labour market reforms remains steady but slow, with no noticeable acceleration since 1999. Large countries tend to undertake fewer reforms than small countries. There is little hard evidence that membership of the euro area alone has substantially hardened policy-makers' resolve to address the euro-area's labour market problems. While product market reforms can contribute to a smooth adjustment in the euro area, product markets in the euro area remain highly regulated, at least in comparison with major competitors such as the UK, the US and Japan. Moreover, there are significant differences between euro-area Member States. Nevertheless, in recent years visible progress has been made in reducing regulatory barriers. Over the period 1999-2006, a number of important Internal Market directives were adopted, but progress in terms of implementation has been somewhat disappointing. Data on price dispersion and trade integration seem to indicate that progress has indeed slowed down in comparison with the early 1990s. For the future, an effective implementation of the services directive would seem essential. Structural reform in the EU financial sector, which has intensified markedly since the creation of the euro area, has mainly taken the form of measures to facilitate cross-border integration. This focus on reform through integration reflects a two-step rationale whereby integration promotes financial development and financial development in turn enhances economic performance. The introduction of the euro has acted as a powerful catalyst to the process of financial integration by removing exchange rate risk on the bulk of financial flows within the EU and stimulating demand for cross-border financial services. The process of EU financial integration is well underway in a range of areas and particularly in wholesale markets. However, progress has varied across the different sectors of the financial system, with unsecured segments (where there is no transfer of collateral involved) very much in the lead.

TABLE OF CONTENTS

POLICY-BASED ADJUSTMENT

1. Introduction

The adjustment capacity of the euro area depends on market channels of adjustment (see Chapters IV and V), but also on policies conducted in the area as a whole and in the participating Member States. While the use of fiscal policy as a stabilisation tool has been in the focus of economic analysis for a long time, the interest in structural policies and their impact on the adjustment capacity has been less pronounced in the economic literature. The flexibility of labour and product markets are key to ensuring that the market channels of adjustment unfold in a smooth and timely manner. Integrated financial markets in the euro area facilitate the reallocation of resources during the adjustment process and form a basis of cross-border activities. Policies that form the basis of adjustment are fiscal and structural policies with the latter dealing with markets for labour, products and financial services.

Where fiscal policy is concerned, a substantial difference between the euro area and the US monetary union is the existence of a federal budget in the US. Through the latter, adjustment across states can be smoothened. In the absence of such a coercive power the question arises as to how rules for national fiscal policy can contribute to the smoothening within the euro area. Investigations into these issues begin with the measurement of fiscal positions. The impact and adjustment speed of automatic stabilisers might vary across countries reflecting frameworks that have been built up with different goals in mind. Discretionary stabilisation policy, however, might not be a substitute as it may be particularly prone to difficulties in identifying the actual cyclical situation and policy stance. In order to assess fiscal developments in the context of adjustment dynamics in the euro area, an analysis of cyclically-adjusted primary balances is of special interest. Beyond that, developments in revenues and expenditure could be related to adjustment as a balanced budget expenditure increase (decrease) could be expansionary (contractionary).

While fiscal policy deals with short-term disturbances, structural policies aim at reforming the structure of the EU economy. These policies have been on the agenda of policymakers at different levels for quite some time. They aim at maximising the productive potential and enabling the economy to cope with old and new challenges. Developments such as globalisation and demographic change have been identified as challenges that call for appropriate structural changes (e.g. in the framework of the Lisbon Agenda for growth and employment). Unsatisfactory results as indicated by a number of key indicators such as the unemployment rate have pointed to the urgency of structural reforms. As the proper functioning of markets is crucial for adequate responses to shocks hitting the economy, measures to raise flexibility have been high on the agenda. As challenges will continue to arise in the future the characteristics of optimal structures will changes making the pursuit of structural policies a permanent task.

While contributions from structural importance are indispensable in all economies, in a monetary union the removal of one policy instrument, monetary policy at the Member State level, results in an even bigger role for structural policies, in particular to enhance the efficiency of economic adjustment in the medium-term. Moreover, flexibility is deemed to be essential for the functioning of monetary union as already enshrined in the initial contributions to the theory of optimal currency areas. As reforms create winners and losers, however, obstacles to reform can be expected to delay the process of reform and make structural policy a complicated task. Thus any assessment of the adjustment capacity of the euro-area economy has to look at both optimal structures in monetary union and the path towards that situation which depends on policy decisions and implementation.

Structural reforms concern labour, product and financial markets. *Labour market reform* is mainly a national matter in the euro area and as a result required and observed labour market reforms differ considerably across the euro-area economies. The role of labour markets in adjustment, however, has cross-border components. A country hit by an unfavourable shock can be expected to experience lower real wages that will make it more attractive for labour to work in other Member States and such cross-border flows would then also affect the labour market situation in the other countries. Another cross-country dimension relates to area-wide monetary policy that guarantees price stability, lowers thereby inflation uncertainty and could deliver a contribution to wage moderation.

Product market reforms can help in improving the adjustment capacity by enhancing the integration, efficiency and flexibility of product markets. Areas such as Internal Market and competition policies, the liberalisation and regulation of network industries are among the best-known measures. To what extent reforms are initiated or even delayed by monetary union appears an open issue. Increased transparency in a single currency area is expected to increase competition and to lower the obstacles to successful reform, but at the same time lower risk premia in the euro area reduce the incentive to reform. This ambiguous result suggests distinguishing between different types of reform when evaluating the impact of product market reform on adjustment.

Financial sector reforms can facilitate cross-border integration, promote financial development and thereby enhance not only economic performance but also increase the adjustment capacity of euro-area economies. Structural reforms in the financial sector can therefore play an important role in overcoming the fragmentation of the sector as inherited from the pre-euro-area times. Increased cross-border borrowing and lending, more diversified portfolio structures and cross-border ownership of productive capacity are known as important elements of income and consumption smoothing. Financial sector reforms can strengthen these mechanisms. Particularly in the euro area, the removal of the exchange rate risk among participating economies has acted as a catalyst to the process of integration which has enhanced the capacity of inter-country adjustment. An evaluation of the impact of financial sector reform could distinguish between progresses in the completion of EMU (state of play) and the impact on inter-country adjustment.

This brief introduction of channels indicates that there are close links between policy-based adjustment channels. The impact of fiscal policies depends on the structure of the economy, which depends on progress with reforms that in turn affect the budgetary results in an economy. These linkages need to be taken into account in the evaluation of the contribution of policy-based adjustment and in the assessment of the relative importance of these channels for the adjustment capacity of the euro area.

This chapter looks at policy-based adjustment in the euro area, discusses its relevance and offers a preliminary assessment. It is organised as follows. Section 2 provides an overview of fiscal developments in the euro area in order to assess the fiscal stance and the adjustment dynamics in the revised framework for fiscal policies. Section 3 investigates the contribution of structural policies to the adjustment capacity of the euro area, in particular in labour markets (Section 3.1), product markets (Section 3.2), and the financial sector (Section 3.3). The chapter concludes with a section on possible spillovers and interactions, which bring together the issues discussed in this chapter with those covered in the previous two chapters.

2. Fiscal developments

This section describes fiscal developments in the euro-area Member States in the context of adjustment dynamics in the euro area. Firstly, it looks at the change in the cyclically-adjusted primary balance which is a conventional measure of the fiscal stance. Following on from this, fiscal developments are decomposed into revenue and expenditure developments.

2.1 The fiscal stance in the first few years of the euro area

Table 1 shows the developments of the cyclically-adjusted primary balances (CAPB) in the euro-area Member States since 1999. On average, the CAPBs deteriorated by ½ percentage point in 2000, 2001 and 2002, after which it broadly stabilised. In 2005, the CAPBs improved by ½ percentage point on average, mainly due to unexpectedly high revenues.[1] Table 1 shows large differences in the development of the fiscal stance between Member States. Of the Member States that have experienced continuously high growth and inflation, Spain has gradually tightened its fiscal stance and improved its fiscal position, while Greece and Ireland have further fuelled their economy with fiscal impulses; Ireland in particular in 1999, 2001 and 2002 and Greece in 2000, 2001, 2003 and 2004.

Austria and Germany, which were characterised over the whole period by downward price and wage adjustment and improving current account positions, have had a different experience in terms of the CAPB. In Austria, it improved over the period as a whole, reflecting strong fiscal tightening in 2001 and subsequent loosening. In Germany, 2001 was marked by significant fiscal loosening. Over the remainder of the period, the fiscal stance seems to have been neutral, despite efforts to improve the budgetary position (see Box 1).

The Netherlands and Portugal, which were both characterised by a rather sharp downturn after a period of above average growth and inflation, experienced first a sharp deterioration of the CAPB as potential growth declined. Thereafter, budgetary consolidation was undertaken in Portugal between 2002 and 2004, and in the Netherlands from 2004.

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1 See European Commission (2006b).

Table 1: Changes in the cyclically-adjusted primary balances compared to 1998							
	1999	**2000**	**2001**	**2002**	**2003**	**2004**	**2005**
ES	0.4	-0.3	0.0	0.3	0.6	0.4	1.6
FI	-0.3	4.2	3.5	2.4	0.8	0.0	0.7
AT	-0.4	-0.4	2.1	1.7	0.8	0.9	0.6
NL	0.4	0.3	-1.3	-2.2	-2.5	-1.4	0.4
FR	0.0	-0.6	-0.5	-1.7	-2.2	-1.8	-0.7
Euro area	**0.0**	**-0.6**	**-1.4**	**-1.9**	**-2.0**	**-2.0**	**-1.5**
DE	0.3	-0.2	-2.0	-2.4	-2.1	-2.3	-1.9
BE	-0.7	-1.2	-0.4	-1.3	-1.1	-2.1	-1.9
PT	-0.4	-1.4	-2.4	-0.6	0.4	0.1	-2.3
IE	-1.8	-0.7	-4.4	-5.7	-4.4	-2.5	-2.4
IT	-0.4	-1.9	-3.3	-3.3	-3.8	-4.1	-4.3
LU	-1.2	0.0	1.1	-2.5	-3.3	-4.7	-5.6
EL	-0.1	-1.3	-4.1	-4.8	-6.6	-8.2	-6.2

Source: Commission Services

2.2 *Expenditure and revenue developments decomposed*

Conventional cyclically-adjusted (primary) balances do not indicate a clear pattern of fiscal withdrawal or stimulus in fast-growing or slow-growing Member States. However, looking at more disaggregated data, another picture emerges.

Table 2: Nominal general government expenditures (annual increase in per cent)								
	1999	**2000**	**2001**	**2002**	**2003**	**2004**	**2005**	**Increase 1999-2005**
IE	14	7	18	12	7	8	13	111
LU	9	5	4	17	8	9	7	75
ES	4	8	7	8	6	9	7	60
EL	7	14	4	7	9	8	2	63
PT	11	7	9	4	5	5	5	56
NL	5	4	11	6	4	1	5	42
FI	2	2	4	5	4	4	4	28
FR	3	3	4	5	4	4	3	29
IT	1	1	9	2	5	2	4	26
Euro area	**4**	**1**	**7**	**4**	**4**	**3**	**3**	**29**
BE	3	4	3	5	5	2	3	28
AT	3	2	1	2	3	3	3	18
DE	2	-4	8	3	2	-1	1	11

Note: Sale of UMTS licenses has been recorded as reduction in expenditures in 2000-2002. The increase in percentage points of GDP can be easily estimated by multiplying by the share of government expenditures in GDP, i.e. ranging from around 1/3 for Ireland to ½ for most other Member States.

Source: Commission Services

An examination of the development of nominal expenditures (Table 2) clearly reveals the remarkable extent to which expenditures have grown faster in the Member States that have been characterised by upward price and wage adjustment. While in Germany, nominal expenditures have been virtually frozen since 1999 (with the exception of 2001), in Ireland they have grown by 111 percent. The difference between the laggards and the fast growing economies is equivalent to 30 to 40 percent of their 1999 GDP.

Differences in expenditure growth are largely reflected in the revenue growth (Table 3), with some exceptions. For example, the nominal expenditure growth rate in Portugal and the Netherlands remained high despite a sharp reduction in revenue growth. Similarly, in Luxemburg, the expenditure growth rate remains high, while revenue growth has slowed down markedly since the late 1990s. It should be noted that the revenue developments in the table reflect economic developments as well as discretionary changes in tax structures and levels. This does not affect the general picture and trends.

Table 3: General government nominal revenues (annual increase in per cent)

	1999	2000	2001	2002	2003	2004	2005	Increase 1999-2005
IE	14	14	6	8	9	12	7	94
ES	9	9	8	8	7	8	8	73
EL	9	12	0	9	7	7	8	65
LU	9	13	5	5	4	5	5	56
PT	12	6	6	8	5	4	-2	45
NL	8	7	6	2	2	4	6	40
FI	3	12	1	3	0	4	3	29
BE	4	5	4	4	5	1	3	29
FR	5	4	3	2	2	5	4	28
Euro area	**6**	**4**	**3**	**3**	**3**	**3**	**3**	**28**
IT	4	3	4	3	4	2	2	24
AT	4	3	5	1	1	3	1	19
DE	4	2	-1	1	1	0	1	8

Note: Sale of UMTS licenses has been recorded as reduction in expenditures in 2000-2002. The increase in percentage points of GDP can be easily estimated by multiplying by the share of government expenditures in GDP, i.e. ranging from around 1/3 for Ireland to ½ for most other Member State. The changes in revenues may reflect economic developments as well as changes in tax rates and structures.

Source: Commission Services

Public spending increases have a larger expansionary impact on demand and the current account than the contractionary effect of equivalent revenue gains. Haavelmo's "balanced budget multiplier theorem" shows that an equal increase in government expenditure and revenues would lead to a net increase in output as the multiplier effect of government spending is greater than the fall in output implied by an equivalent increase in taxation. The reason is that government expenditure has a direct impact on aggregate demand, while only a proportion of the increase in revenues actually impacts aggregate demand (as the private sector saves as well). Moreover, government consumption and investment may tend to be tilted more towards domestic goods and services than private sector consumption and investment,[2] further strengthening the expansionary effect of the balanced budget multiplier theorem. Criticism of the balanced budget multiplier theorem mainly concerns the distortionary effect of tax increases on the consumption and investment demand of private agents. However, in the case at hand, the revenue increases are generally not accompanied by tax increases (rather reductions) but can be characterised as windfall gains.

In the context of adjustment, the large divergences in nominal expenditures growth – even if they are matched by increases in revenue growth – reflect an important difference with smoothing adjustment and output stabilisation amongst regions within a state with a centralised fiscal policy. In an economy with a centralised fiscal policy, the redistribution of central government revenue would not have allowed general government expenditure to deviate continuously and substantially across regions. Smaller differences in general government expenditure could have contributed to reducing demand-driven divergences in growth and inflation.

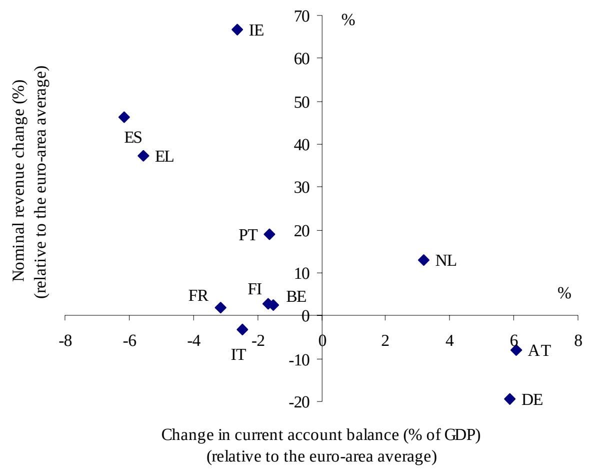
[2] Funke and Nickel (2006) for instance analyse the effects of public and private demand on the trade balance and find that the import content of government consumption is lower than the import content of other demand components.

Box 1: Taking account of adjustment dynamics in the revised SGP

The 2005 revision of the Stability and Growth Pact[3] allows for increased room for judgement and enhanced economic rationale in EU economic surveillance. In the application of the rules and procedures, this allows for better weighting the budgetary risks associated with adjustment in the euro area. Broad economic assessment may indicate whether the past developments are likely to continue, or fade out in the case where adjustment is completed, or even reverse in the case of overshooting. The budgetary stance may then be assessed in the light of these risks. In the context of the reform of the SGP in 2005, it was agreed that fiscal surveillance should foster fiscal prudence in good times. This can be especially applied during periods of possible loss of competitiveness by promoting very cautious (potential) growth and revenue assumptions, allowing the risk of feeding overheating dynamics to be reduced, while at the same time creating more fiscal room for manoeuvre in circumstances where adjustment is completed and growth and inflation return to normality or in a case where downward adjustment would be required. It implies tough judgement in the SGP framework on fast-growing countries, with high inflation and a positive output gap. Attention should be focused on: high tax revenues (elasticities), which are not captured by the cyclical adjustment; and softer judgement on countries that are in a process of downward price adjustment. A balance needs to be struck between taking into account possible adjustment dynamics and the risks to sustainable budgetary developments in the medium- and long-term.

When assessing the soundness of the budgetary position, a key question concerns the extent to which the large and persistent differences in revenue growth are structural and the extent to which they also reflect cyclical effects and adjustment dynamics. In this respect, the sharp and continuous decline of revenue growth in Portugal, coming from high growth rates up to 2002, is striking. Also in the case of the Netherlands, the decline in nominal revenue growth between 1999 and 2003 is remarkable. Graphs 1 and 2 may provide some indication that the high revenue growth is at least to some extent related to adjustment in the euro area.

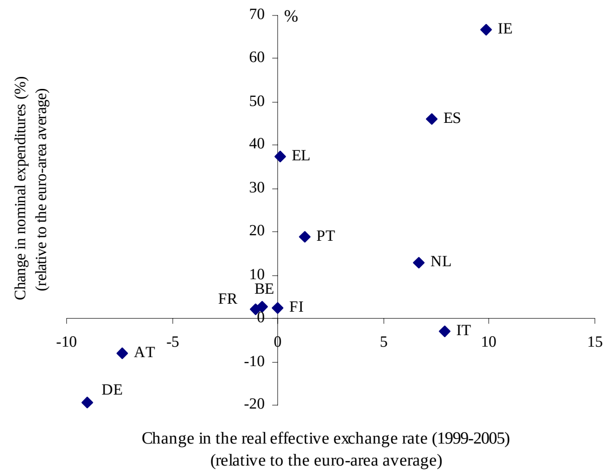
Graph 1: Changes in nominal revenues versus changes in the current account balance,[1] percentage change 1998-2005



Note: 1 - Both underlying variables - current account and nominal revenues - are measured as deviations from the euro-area average.

Source: Commission Services

Graph 2: Changes in nominal revenues versus changes in the real effective exchange rate,[1] percentage change1998-2005



Note: 1 - Both underlying variables – real effective exchange rate and nominal expenditures - are measured as deviations from the euro-area average. The real effective exchange rate index is based on unit labour costs.

Source: Commission Services

High revenue growth has generally been accompanied by appreciating real exchange rates and deteriorating current account balances, while real depreciation and improving current account balances have been associated with low nominal revenue growth. This may to some extent be related to the effect of entry into the euro area, which in some of the Member States led to a decline in the exchange risk premium. In addition, some Member States may have entered at a somewhat under- or over- valued real exchange rate. As shown in Chapter VII, an initial shock to the foreign exchange risk premium – such as that related mostly to the euro – would lead to domestic demand growth and wage and price increases. Both the higher level of growth and its composition, tilted towards domestic demand (especially if it is fed by consumption), may have induced part of the high revenue growth. Domestic asset price developments, in particular housing may also have contributed to windfall revenues. This effect of growth

3 The substance of the agreement on the revised SGP is laid down in Council of the European Union (2005). "Public Finances in EMU – 2006" (European Commission, 2006b) takes stock of experience on the revised Pact.

composition, high wage growth, price increases and booming asset prices on nominal revenue growth cannot be continued forever as the accompanying deterioration of the current account balances and the appreciation of the real effective exchange rate need to come to an end. At some point in time, expenditure growth rates will need to be adjusted downward. Experience with the Netherlands and Portugal shows that the response of expenditure growth to lower revenue growth may take some time.

Box 2: Fiscal consolidation efforts and real exchange rate developments in the large Member States

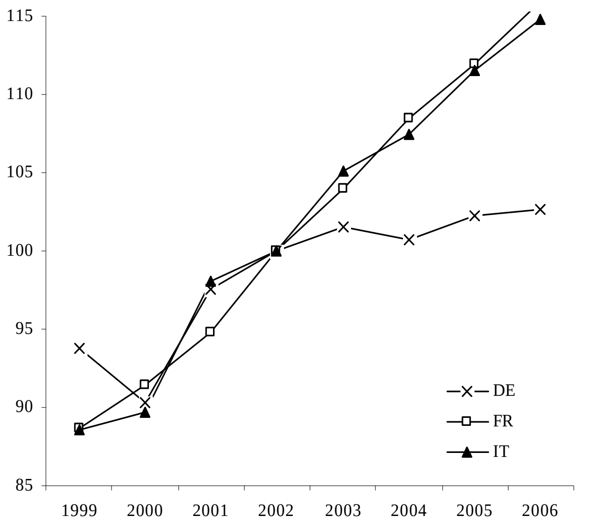
The three largest Member States in the euro-area – France, Germany and Italy – have all experienced deteriorations in their budgetary positions resulting in deficits in excess of the 3 percent of GDP reference value of the Stability and Growth Pact.

In all three countries, fiscal consolidation was not successful in the years following the recording of a high deficit. While the aggregate development of the budget balances show similarities, the underlying developments of revenues, expenditures and the real exchange rate have been rather different.

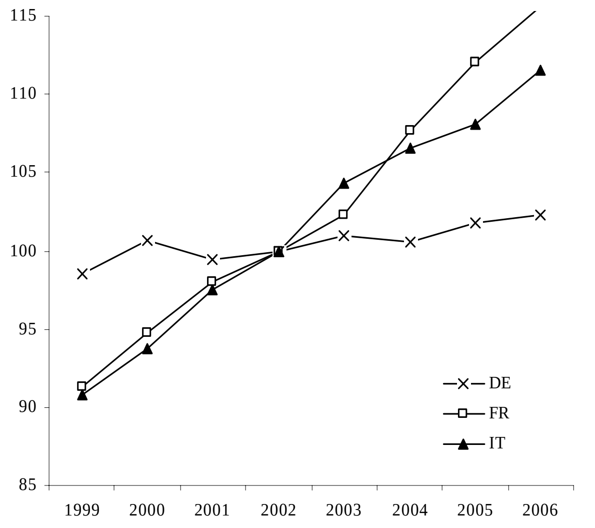
Developments of the real exchange rate relative to euro-area competitors reflect sustained trends since the start of the third stage of EMU. Germany has gone through a competitive adjustment with prices and wages declining relative to the euro-area average, resulting in a substantial improvement of the real exchange rate vis-à-vis its euro-area competitors. In France, the real effective exchange rate remained broadly unchanged, while Italy was characterised by real exchange rate appreciation.

The period of real exchange rate adjustment in Germany was accompanied by high real interest rates, low nominal growth, lacklustre asset price developments, and lack of consumer demand and investment. Nominal expenditure growth was virtually frozen, responding to continuous downward revisions of nominal growth (which in early 2001 was still forecast to be in the same range as France (around 4% annual growth)) and thus revenues. On the revenue side, Germany has also taken measures that reduced the unit labour costs, contributing to competitive adjustment. Helped by a reduction in income taxes, the wage share declined from 52.6% in 2002 to 50.3% in 2005, despite very low nominal growth. It is set to decline further to 49.6% in 2007. At the same time, France has experienced steadily increasing revenue. In Italy revenue growth has slowed down since 2003, but remains much stronger than in Germany. Looking at the underlying fiscal effort – no effective constraint on expenditures in France and Italy is visible in the chart. In France and Italy, nominal expenditures have grown by 15% (over 7% of 2002 GDP) more than in Germany since 2002, when France and Germany both recorded an excessive deficit and the Italian general government budget deficit was also around 3% of GDP.

Graph 3: Nominal expenditure developments (index: 2002=100)



Graph 4: Nominal revenue developments (index: 2002=100)



Source: Commission Services

3. Structural policies

3.1 The labour market and the welfare state

The need for labour market reform was already widely acknowledged during the run up to the third stage of EMU. Increased economic ‘turbulence’, globalisation, skill-biased technological change and demographic developments called into question the design of existing labour market institutions. The main reason is poor overall labour market performance, as reflected in high unemployment and low employment. What membership of the euro area adds to these arguments is that there may be greater demand for adjustment capacity, since monetary instruments previously used to cushion shocks are no longer available, while the creation of the euro area may increase the degree of competition and regional specialisation (and thus the frequency of asymmetric shocks).

With the loss of monetary autonomy a greater burden of the economic adjustment should fall on labour markets, which calls for an acceleration of the reform process. An issue widely discussed in the literature is whether membership of the euro area has led to a speeding up or slowing down of labour market reforms in euro-area countries (see Chapter II). Because of various institutional lock-ins that resist market pressures, this process is likely to be discontinuous, with stops and starts. This uneven reform pattern influences the transition toward a new configuration of labour market institutions and the adjustment capacity of the euro area.

The main issue is the extent to which membership of the euro area creates incentives to develop alternative adjustment mechanisms. In a fixed-but-adjustable exchange rate regime, mounting structural disequilibria culminate in an exchange rate crisis which highlights the need to reform.[4] In a monetary union, the exchange rate is no longer available to national governments as a tool to ease adjustment to country-specific shocks, allowing them to buy time and get temporary relief from country-specific structural disequilibria. Under the euro area, structural disequilibria tend to accumulate over time and reveal only gradually the need for radical reforms.

The first sub-section reviews the different, and sometime conflicting, views on the incentives to undertake labour market reforms in the euro area. The second sub-section presents some evidence on the path of reforms by contrasting the experience of seven years under the euro with experience in the period that just preceded the new monetary regime.

EMU and labour market reforms

The prevalent view before 1999 was that: (i) the smooth operation of the euro area would require a more flexible labour market that could bear a larger share of the short-term adjustment burden to asymmetric shocks; and (ii) competitive forces unleashed by euro-area membership might well increase the pressure for reforms.

The optimal currency area literature identifies the market adjustment mechanisms needed to cope with idiosyncratic shocks.[5] A country hit by an unfavourable asymmetric shock should experience a decline in real wages and labour migration toward other regions, so that the adjustment costs are lower than when the adjustment takes the form of recession and unemployment (e.g., De Grauwe, 1997). The view that labour market adjustment takes on added importance under the euro area rests on the assumption that the exchange rates and national monetary policies were effective in smoothing or substituting for real adjustment and/or that the frequency of shocks was likely to increase as a result of participation in the euro area.[6] Although doubts were expressed on this, there was widespread consensus that increased labour market flexibility, in particular wage flexibility, would be needed to strengthen adjustment capacity under the euro.

As regards nominal wage flexibility, the predictions from the theory are uncertain. To the extent that the lack of stabilisation of asymmetric shocks increases the expected aggregate demand fluctuations, economic and monetary union would provide incentives to shorten the duration of contracts and the timing of wage negotiations (Calmfors, 1998). This implies less inertia through wage settlements and more stable cyclical unemployment. The incentive to shorten contract duration would be higher for larger than for smaller countries. However, the prevalence of a low (actual and expected) inflation environment also weakens the incentive to shorten contract lengths. Also, the presence of coordination failures in wage bargaining can make nominal flexibility an unfeasible objective (Calmfors, 1998).[7] Finally, the fact that monetary policy is set on the basis of the aggregate euro-area inflation makes

4 However, no guarantees exist that credible reforms will be implemented in the aftermath of the crisis For example, already during the period of ERM membership, the Netherlands introduced important labour market reforms, while Italy started to reform (mildly) its labour market only when the prospects of euro-area membership became certain. Moreover, substantial reforms have also been introduced by countries outside of monetary union.

5 Inter alia, these include having similar economic structure so that real symmetric shocks are more frequent than country-specific shocks, having economies that are closely linked by trade in goods and services, factor mobility (Krugman and Obstfeld, 2003), and flexible wages and prices.

6 Doubts were expressed on the first point, while there were diverging views as to whether the frequency and scale of shocks (and consequently the demand for adjustment capacity within Member States), would increase or diminish. It may be argued that national monetary policies and exchange rates are of limited effectiveness except in the case of temporary shocks affecting the whole national territory. In the case of regional or sectoral shocks, they are blunt instruments, while in the case of permanent shocks they can at best slow or delay adjustment, not prevent it. Some argued that the frequency of asymmetric shocks would diminish in the euro area as economic integration led to a convergence in the sectoral composition of activity across Member States, and also due to policy convergence as national policy errors have been a major source of asymmetric shocks in the past. In contrast, others have argued that membership of the euro area and the process of economic integration in general are likely to lead to greater regional specialisation in production, which might leave sub-national regions more vulnerable to sector-specific shocks (e.g. Krugman, 1993).

7 Each individual firm would prefer to reduce the length of their wage contracts only if the variability of its own demand rises. However, if others firms were to reduce the contract duration, the rest of the economy would benefit from higher flexibility, thus limiting the output volatility that would put pressure on each firm to change the contract length.

asymmetric shocks equivalent to local shocks within countries with a national monetary policy. This implies that national bargaining will internalise only partially the costs of wages fixed for long periods, depending on the influence of national wage on the area-wide inflation rate.

In contrast, many have expected real wage rigidities to be reduced. Along with economic integration in general, euro-area membership was expected to intensify the product market competition. Fiercer competition in the product market translates into an increase in the real wage elasticity of labour demand that squeeze labour market rents (Nickell, 1999) and add to pressures for reform. Furthermore, the increase in the real wage elasticity of labour demand weakens the bargaining power of unions and raises the cost of labour market distortions motivated by distributional concerns (Bertola and Boeri, 2002). Also, pressures to change bargaining institutions were expected to come from the *de-facto* reduced wage centralisation brought about by the creation of the euro area. The risk of loosening market shares for open economies reduces the advantage of centralised bargaining systems and push for a decentralisation of wage agreements (Calmfors, 1993).

The main issue is to what extent membership of the euro area creates incentives to overcome the institutional locks-in that resist market pressures to reform the labour markets. Some argued that euro-area participation in would remove the barriers to labour market reforms and create incentives to implement reforms that favour flexibility and efficiency (Bean, 1998b). This is the so-called *"There Is NO Alternative to reform (TINA)"* argument. Euro-area participation should encourage structural reforms on the grounds that it provides a precautionary motive to speed up labour and product market reforms at the country level as it makes the costs of non-reform more evident (Calmfors, 2001). Pressure for labour market reform could also stem from the greater mobility of capital and labour, which would in effect bring workers and welfare systems in different Member States more directly into competition with each other.

Others argued that the incentives to reform labour markets are weaker inside than outside the monetary union (e.g. Calmfors, 1998). Outside the euro area, reforms help to reduce both the inflation bias, which derives from the lack of credibility of anti-inflationary government policies (i.e. their time inconsistency), and the level of unemployment (IMF, 1999). With the euro area, the inflation bias vanishes and the incentives to undertake structural reforms are weakened. In EMU, *"there is no double dividend in labour market reforms"*.

While there is broad agreement on the desirability of reforms, the directions such reforms might take appears to deserve a closer look, particularly whether they can be expected to enhance flexibility. Some argued that "more elastic microeconomic interactions" raise the labour market risks, leading to a demand for greater protection, even at the costs of efficiency (Bertola and Boeri, 2002). In a calibrated model, Bentolila and Saint Paul (2001) show that euro-area participation would affect the incentives to reform in directions that depend on the type of labour market distortions, public preferences and the strength of unions. For example, employment protection increases the volatility of real wages and prices and reduces that of employment. Within EMU, there is an incentive to reduce protection, except if society cares about employment. Moreover, the authors distinguish between reforms that improve the adjustment capacity to asymmetric shocks from reforms that reduce the natural rate of unemployment. In their calibrated model, it is shown that participation in the euro area may create incentives to introduce some reforms that increase the speed of adjustment to country-specific shocks - namely reduction of the EPL, while the effects on the real and nominal wage flexibility are more uncertain. When monetary policy cannot accommodate reforms undertaken in single countries, reforms that reduce the equilibrium unemployment engender a large deflationary shock.[8] This implies that large-scale reforms are less likely than more partial and gradual reforms.

Describing the impact of euro-area participation on labour market reforms

Labour market performance in the euro area began on a promising note as some Member States reaped the (lagged) benefits of reforms in labour and other markets. Employment growth, which had been traditionally low in most Member States, reached 1.1% on average in 1998-2001 in the euro area, raising the employment rate from 58% in 1996 to 63.4% in 2005. Despite the recent increase in the unemployment rate, the decline in overall unemployment during the second half of the 1990s appears to have been more than just a cyclical phenomenon. Commission services' estimates of the NAIRU[9] suggest a reduction in structural unemployment, which is reflected in the decline of long-term unemployment (over 12 months) and youth unemployment (under-25s). Also, the relatively muted response of unemployment and employment to the downturn, in comparison with previous cycles, provides support for the view that part of the improvement in labour market performance has been structural.

In spite of these improvements, the labour market performance of the euro area remains lacklustre, partly on account of macroeconomic developments. Low labour force participation prevails among certain groups, namely women and older working-age people. Unemployment remains a serious concern as suggested by the fact that about 45% of

8 If the reform reduces the equilibrium unemployment rate, while the initial level of unemployment remains high, the market mechanism will entail a downward adjustment of prices and wages that cannot be stabilised by the common monetary policy.

9 See Denis et al. (2006) for an explanation of the methodology for calculating the NAIRU.

unemployed people have been out of work for one year or more, compared to less than 15% in the US.[10] There is a distinct geographical dimension to the problem in several countries, with severe disparities (in terms of both employment and unemployment) between leading and lagging regions.

Most discussions of the impact of euro-area membership on labour markets have tended to focus on wage bargaining. Despite the vast literature on labour market institutions and labour market performances, only few analyses have described the effects of euro-area membership on labour market institutions. Bertola and Boeri (2002), using information on reforms of non-employment benefits and employment protection collected by variety of sources, show an acceleration of reforms after 1998, which they assume being started when the framework for fiscal policy was set in 1997.[11] Driven by the increase in the number of marginal reforms, their orientation was towards relaxing the strictness of employment protection legislation, through looser regulation of atypical contracts, and increasing the rewards from work. Duval and Elmeskov (2006), using an indicator of the overall intensity of reforms developed as part of the assessment of the OECD Job Strategy, conclude that the advent of the third stage of EMU did not coincide with an acceleration of labour market reforms. Yet, compared to the OECD average, it is shown that a number of euro-area countries have pursued both far-reaching and comprehensive reform strategies while only few have confined themselves to either minor reforms or reforms covering only a number of areas.

The striking difference between the findings of these two studies highlights the importance of the methodology used to combine qualitative information which responds to different objectives. The OECD indicators have been developed to monitor progress in the implementation of the Job Strategy, while the data used by Bertola and Boeri (2002) categorise reforms according to their expected effects on labour market flexibility and/or their scope – i.e. marginal or radical. Other databases have been developed to evaluate the costs of regulation (World Bank *Doing Business* database), to measure *de facto* labour practices *(Global Labor Survey* by Chor and Freeman (2005)) or to systematically record and track reform measures over time (*LABREF* database). *LABREF*[12] was conceived as an instrument to provide information on the design of reforms and their broad characteristics – it does not provide information on the direction of the reforms.

Using the data on the scope and the direction of the reforms kindly provided by the Fondazione Rodolfo DeBenedetti (*FRDB*), this section explores whether the pace of labour market reforms has accelerated since the creation of the euro area. In doing so, it extends the analysis of Bertola and Boeri to more recent years. Finally, based on *LABREF*, the sub-section describes the main characteristics of the reform implemented in the 2004-2005 period.

Before reaching a definitive conclusion on the impact of euro-area membership on labour markets, it is important to bear in mind a series of caveats:

- Labour market reforms rarely come as one single event. They rather follow an evolutionary process with many measures predating the establishment of the euro area. While part of these reforms may have been implemented in anticipation of the monetary union, membership of the euro area is only one of several factors driving the policy debate on labour market reforms in the EU;
- It is not easy to judge the ‘appropriateness’ of labour market reforms. While there is fairly broad agreement among economists and policy-makers on the main EU labour markets problems, there is not a complete consensus on the measures required to improve performance. Those who question whether increased ‘flexibility’ (however defined) is the solution may perceive some tension between the aim of improving performance and the aim of improving adjustment capacity under the euro. On the other hand, while flexibility is not an end in itself, the literature has recently highlighted the importance of the interaction between shocks and institutions.[13] This literature suggests that institutions should be conducive to adjustment, or else the negative consequences of shocks may persist for a long time – a point which the EU experience of recent decades seems to corroborate. In this light, improving adjustment capacity appears perfectly consistent with the goal of improved labour market performance. As another example, in the FRDB database, an unemployment benefits reform is deemed to be radical if the replacement rate is reduced by at least 10%. However, it should be considered that in countries where the replacement rate for the average production worker is extremely low, a further reduction is not needed. Rather, an increase in the replacement rate might be required in the context of reforms that reduce the protection of workers on the job;
- The impact of policy reforms on labour market performance usually occurs with lags. In many cases, it may take several years before the benefits begin to show through. In addition, the interaction of a wide range of

[10] The proportion has fallen in recent years, which may reflect efforts to activate long-term unemployed people.

[11] The time span of the analysis in their paper is 1987-1999.

[12] Together with the Labour Market Working Group attached to the Economic Policy Committee the Directorate General for Economic and Financial Affairs has established a database of those reform measures which are intended to modify relevant labour market institutions in the EU-25. The database can be freely accessed at: http://europa.eu.int/comm/economy_finance/indicators/labref_en.htm.

[13] For a review of the literature on labour market institutions and labour market performance, see Arpaia and Mourre (2005).

labour market policies and institutions also have a relevant bearing on the outcome, not to mention complementarities and interaction with policy changes in product and capital markets;

- In practice it is difficult to isolate the impact of euro-area membership from the effects of other ongoing economic trends such as globalisation or the effect of non-EMU related policy measures such as the single market programme. Moreover, economic agents may have anticipated the implications of euro-area membership: hence, one cannot simply consider the period 1999 to 2006 in isolation from earlier developments; and
- The FRDB database covers four policy areas (EPL, Non-employment benefits, Pensions and Migration). Therefore it gives only a partial description of the reform process.

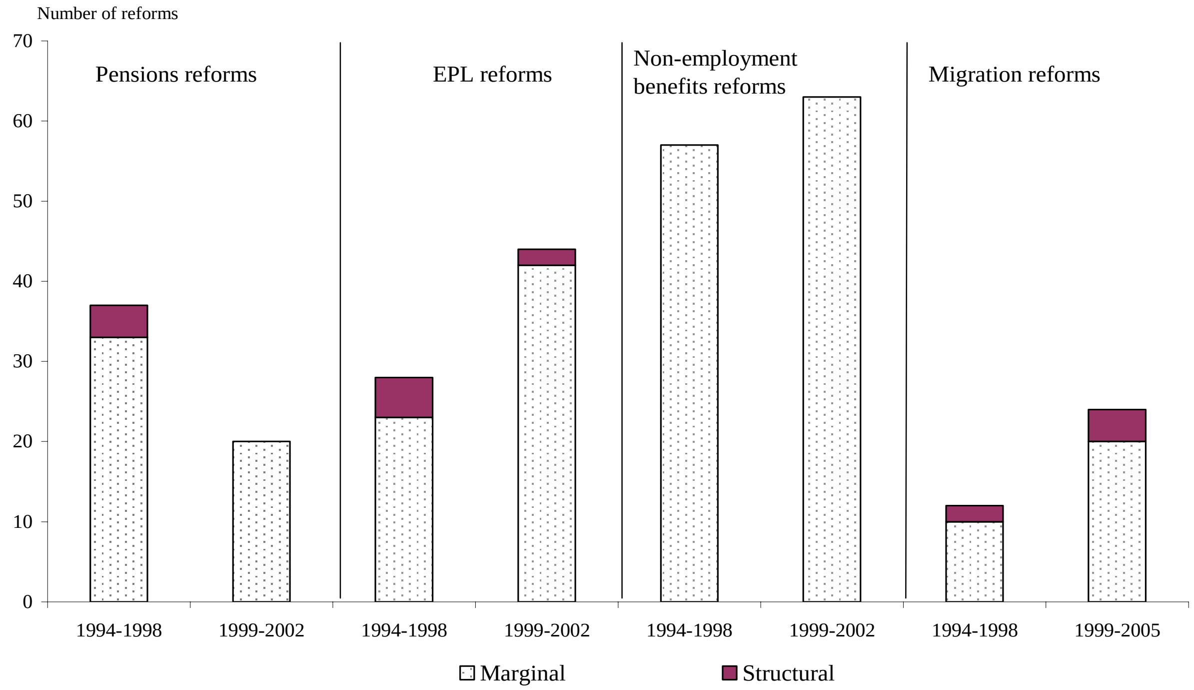
Reform efforts in the euro-area years

Data available from the FRDB allow for tracking over time the scope and the direction of labour market reforms. The FRDB database collects information on reforms implemented in four policy areas (pensions systems; unemployment and non-employment; employment protection legislation and migration policies) in the EU countries over the period 1987-2005. For each of these policy areas, reforms are categorised[14] as marginal or radical, as well as on the basis of their expected effects on: labour market distortions, reward to labour market participation, generosity of pension systems and immigration policies.

In the early years of monetary union there was an increase in the number of reforms implemented in all areas except pensions systems (Graph 5). However, the reform process was characterised by a sequence of modest reforms rather than by few radical changes, partly confirming the view that euro-area membership reduces the incentives for large-scale labour market reforms (Bentolila and Saint Paul, 2001). Indeed, the increase in the total number of reforms is to a large extent explained by the number of marginal reforms, while the number of structural measures rose only for migration policies. However, since marginal reforms prevailed also in the years before 1999, the change in the monetary regime did not represent a clear break with respect to the previous reform strategies.

[14] Based the FRDB database, a subjective procedure was used to evaluate the marginal versus radical nature of reforms. The classification is based on a two-step approach. The firs step entails a qualitative assessment of the scope of various reforms. The second step involves a consideration of the actual behaviour of the series that should be most affected by the reform: the qualitative assessment in the first step is confirmed only if there is a change in the underlying trend of the series in question. For further details of the procedure, see Boeri (2005).

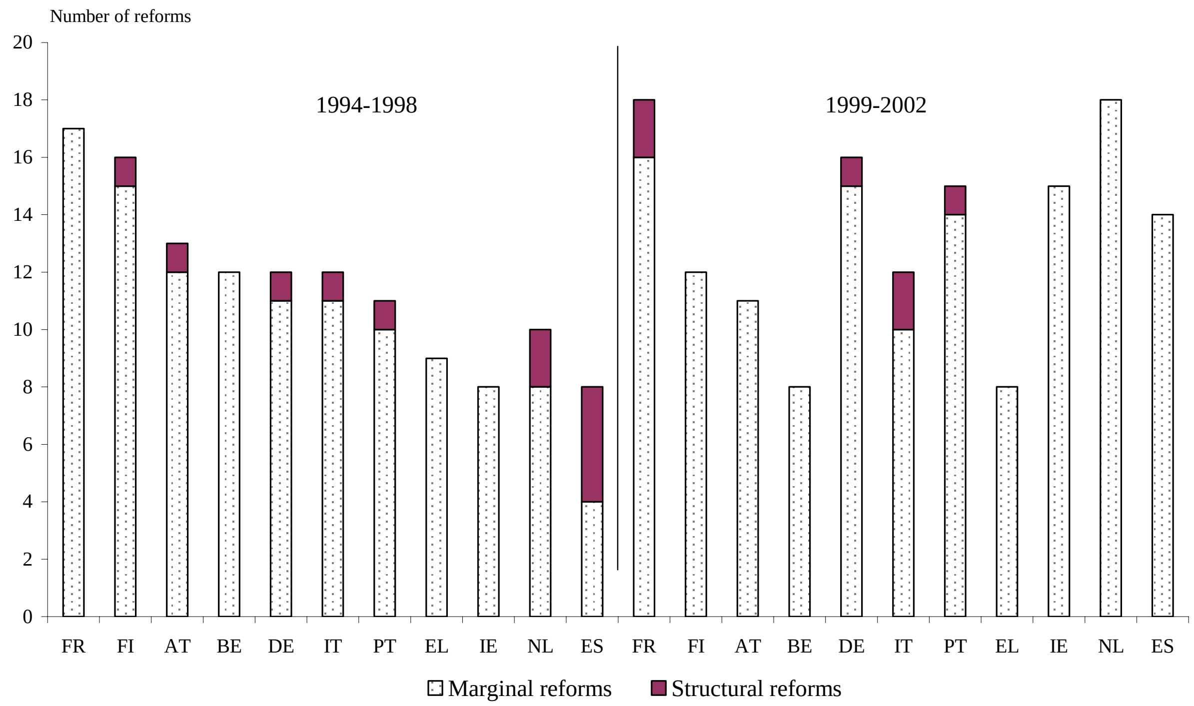
Graph 5: Reforms in the euro area (number of marginal and structural reforms)



Note: Calculations based on the Fondazione Rodolfo DeBenedetti (FRDB) Social Reforms Database.

Source: Commission Services

Graph 6: Reforms in euro-area countries (number of marginal and structural reforms)



Note: Countries are ranked in decreasing order of the number of marginal reforms. Calculations based on the FRDB Social Reforms Database.

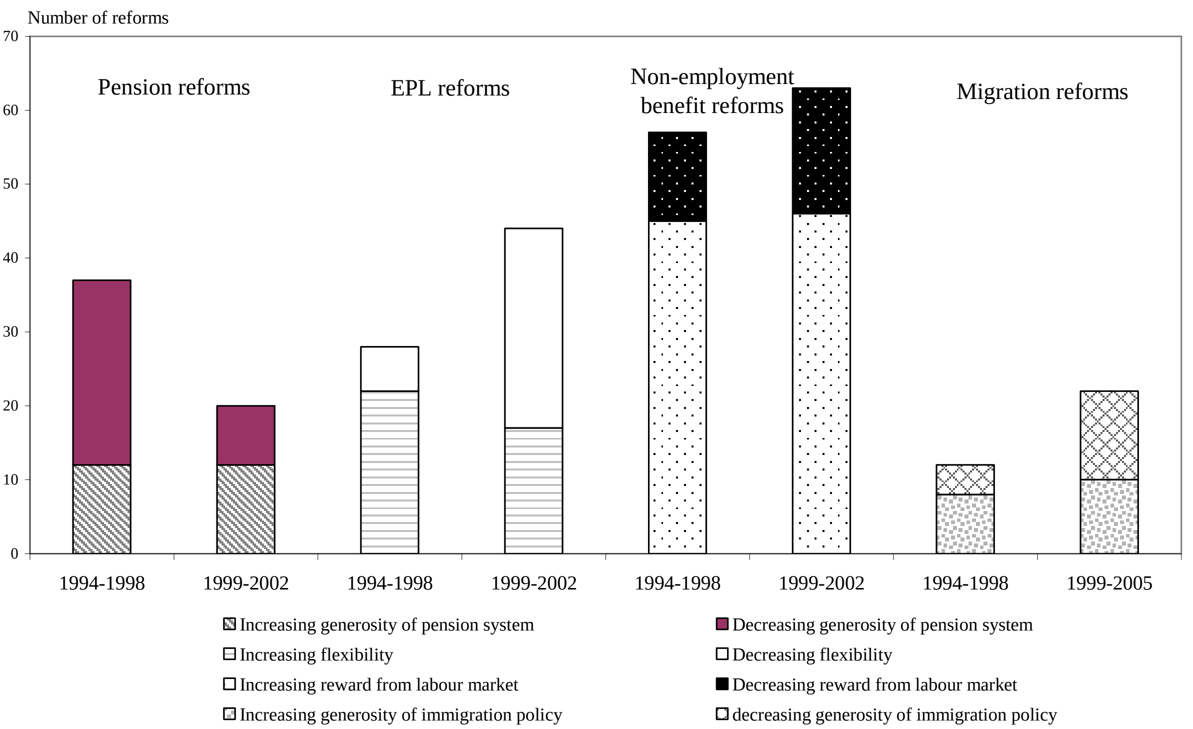
Source: Commission Services

If any, an effect of euro-area membership can be seen in the cross-country distribution of the number of marginal reforms (Graph 6). If one excludes France, the country with the highest number of marginal reforms both in the pre- and post-1999 period, there is a negative relationship between the number of marginal reforms implemented by a country respectively in the periods 1994-1998 and 1999-2005. Hence, countries with a relatively low intensity of marginal reforms in the pre-1999 period were relatively more active during the euro-area years. It is worth mentioning that the smaller countries were those where less marginal reforms were implemented after the creation of the euro area, perhaps because, given the limited independence of their monetary policy in the years before 1999, they were forced to implement some reforms.

Turning to the broad orientation of labour market reforms, according to the TINA argument an acceleration of reforms improving the adjustment capacity of the labour market should be expected under the monetary union. Graph 7 displays the number of reforms according to their broad orientation for the euro area as a whole, while Graph 8 displays such information for individual Member States. It can immediately be seen that after the launch of the euro area, the direction of reforms did not take the path that one would have expected. Indeed, there is a significant increase in the number of reforms that reduce labour market flexibility and reforms that reduce the reward from working.. This does not, however, outweigh the overall positive shift toward reforms that reward the overall work effort.

Finally, reforms that reduce the generosity of the migration policies are more prevalent, which is suggestive of a policy shift from non-national to national working-age population. The increase in the tightness of employment protection legislation is to some extent driven by countries such as Portugal, Spain and France, where flexibility at the margin was facilitated by the extensive use of temporary employment (Graph 9a and Table 4).

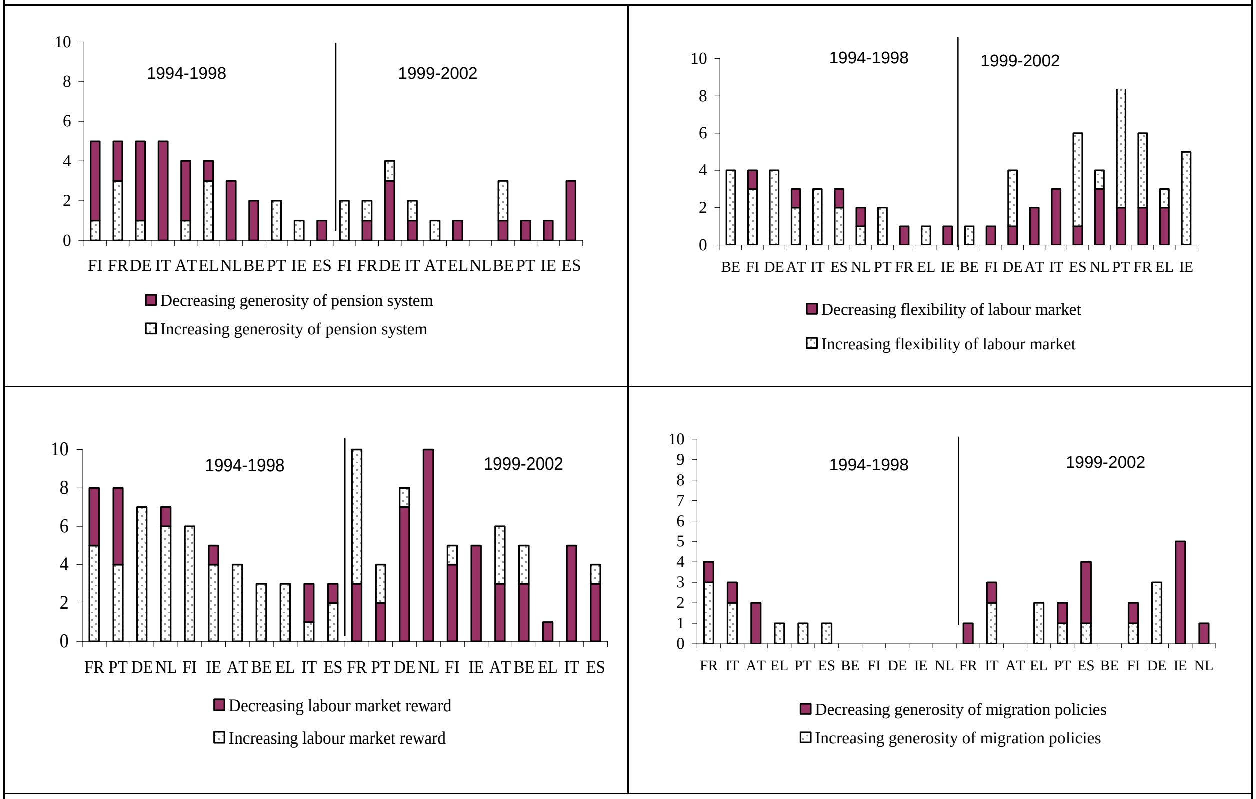
Graph 7: Direction of labour market reforms in the euro area



Note: Calculations based on the FRDB Social Reforms Database.

Source: Commission Services

Graph 8: Direction of labour market reforms in individual euro-area countries

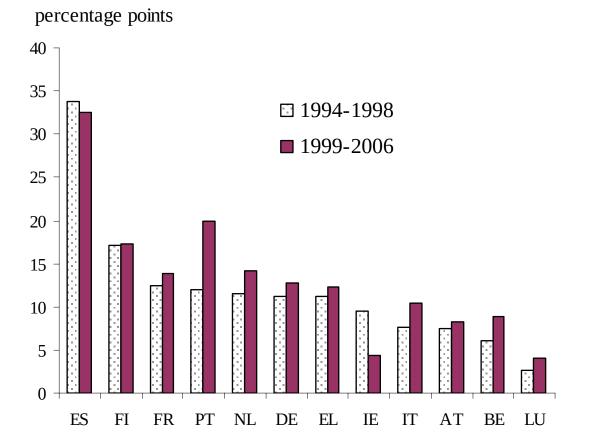


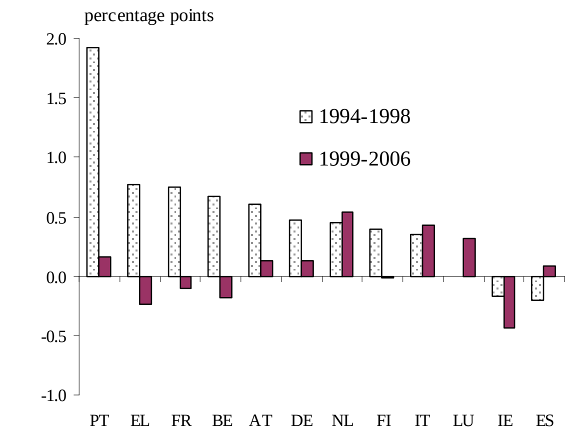
Note: Calculations based on FRDB Social Reforms Database.

Source: Commission Services

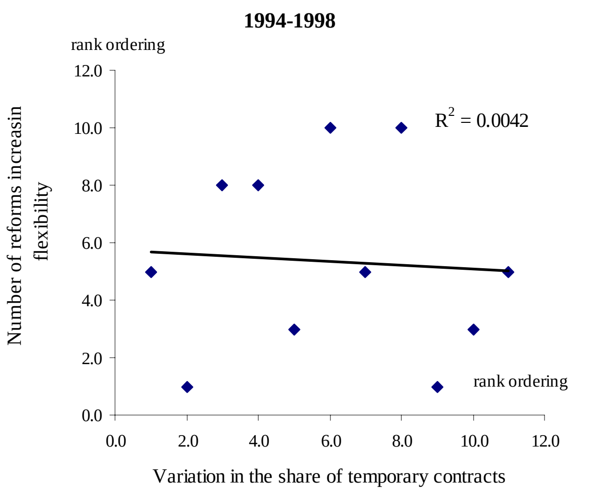
Graph 9: Temporary employment in euro-area Member States

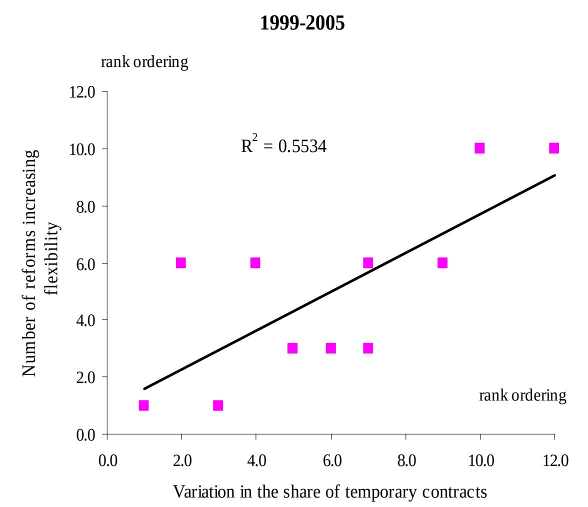
a) Shares (left graph) of temporary employment and variation in shares (right graph) of temporary employment





b) Ranking of shares (left graph) and variation in shares (right graph) of temporary employment





Note: Calculations based on FRDB Social Reforms Database.

Source: Commission Services

Table 4 provides a synopsis of reform efforts in the different areas based on the information available form the LABREF database for the years 2004 and 2005.

Table 4: Structural reforms in euro-area labour markets, 2004-2005	
Policy area	**Main developments in the euro area as a whole**
Active labour market policies	- Gradual shift from passive to active policies - Redirection of active labour market policies towards more effective job search and early activation - More focus on targeted policies
Welfare benefits	- Only limited action was undertaken in 2005 in the field of unemployment and welfare-related benefits (housing benefits, social assistance)
EPL	- Reforms continued to be lagging in many Member States, especially in those countries characterised by tight employment regulation and where the measures adopted during the pre-1999 years aimed at increasing flexibility at the margin of the employment contract with potentially detrimental segmentation effects on the labour market
Taxation	- Cuts of labour taxes targeted at low income to reduce inactivity and unemployment traps for low-income earners
Pensions	Not much focus on reforms of early-retirement, sickness, disability and old-age pension systems, for which substantial reform programmes were adopted in a number of Member States in previous years
Wage bargaining	- Only timid efforts, mainly in Germany and Spain, to keep wage moderation and to make wages more responsive to sectoral and local cyclical conditions
Working time	- Introduction of innovative working time arrangements, both to reconcile work and family life and to promote a more flexible work organisation at company level
Immigration and mobility	- some measures to improve the integration of third country nationals, to simplify the procedures for entry and regularisation or to develop a flexible employment permit system focused on the economy's skills and labour needs.

Note: Data from Labour Marker Reform Database (LABREF).
Source: Commission Services

Despite these unfavourable developments, the last update (2004) of the OECD EPL indicator suggests a marginal loosening in the euro area as a whole (Table 5). However, in several cases, reforms have gone in the 'wrong' direction of tightening EPL for regular employment or collective dismissals, while liberalising temporary contracts or agency work, thereby aggravating problems of a "dual" labour market. Indeed, in the years since the creation of the euro area, the most active countries in executing reforms that increased labour market flexibility were also those with the highest increase in the share of temporary contracts (Graph 9b).

Table 5: Reforms of EPL and temporary contracts, late 1990s to 2003

OECD indicator of EPL stringency (version 2)				
	Late 1990s	2003	Relaxed	Tightened
Belgium	2.5	2.5		
Denmark	1.8	1.8		
Germany	2.6	2.5	temp	collective
Greece	3.5	2.9	temp	regular
Spain	3.0	3.1		temp
France	2.8	2.9		regular
Ireland	1.2	1.3		temp
Italy	3.1	2.4	temp	
Luxembourg	-	-		
Netherlands	2.3	2.3		
Austria	2.5	2.3	regular	
Portugal	3.7	3.7		
Finland	2.2	2.1	regular	
Sweden	2.6	2.6		
Unite Kingdom	1.0	1.0	collective	temp, regular
European Union	2.5	2.3		
Euro Area	2.8	2.7		

Note: EU and Euro-area averages are weighted by employment.

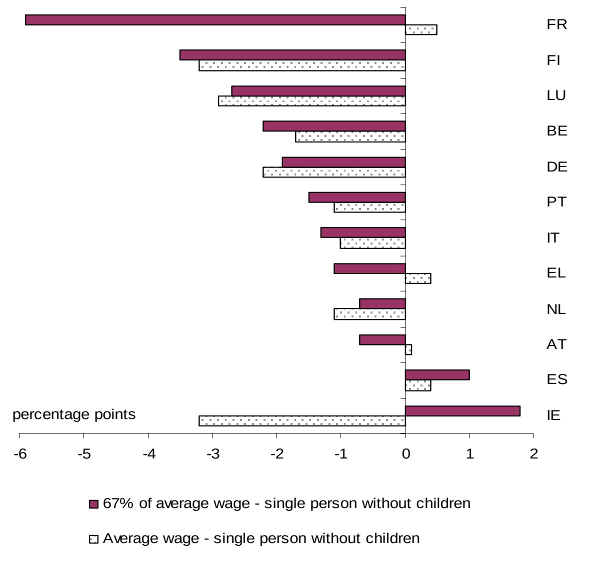
Source: OECD

Such a broad overview conceals many country-specific details of course.[15] For the euro area as a whole, though, there is no doubt that progress over the seven years since 1999 has been disappointing. Where progress has continued, it has tended to be in somewhat ‘easier’ areas, such as selective tax cuts, reducing the tax burden on low-paid workers (Graph 10), active labour market policies and strategies for lifelong learning.[16] But in the politically more difficult areas highlighted in most empirical studies of labour market institutions as key influences on unemployment and employment – especially wage bargaining, benefit systems, employment protection legislation and unemployment benefits – there has been only little progress in reforms to improve the design of the instruments/measures and the interactions between them.

[15] For example, the reform of the unemployment benefit system introduced in the Netherlands in 2005 involved a sharp cut in the unemployment benefit maximum duration (from five years to 38 months), a new system of calculation of the duration of the unemployment benefit on the basis of actual employment history (one month's benefit for each year worked after the third month of unemployment) and more stringent employment-history requirements. The reform of the unemployment benefit system was accompanied by support measures aimed at preventing people from being discouraged to accept work because it could adversely affect their income. Similarly, a sort of "combi-wages" was introduced in Austria, in the form of in-work-benefits for long term unemployed younger than 25 and older than 45. In France reform of the employment placement services involved the abolition of the monopoly of the public employment services and the introduction of the possibility for the PES to create subsidiaries that will be able to charge employers for the service provided or to purchase a stake in other entities, as well as the possibility for temporary employment agencies to offer recruitment services for both fixed-term and open-ended contracts.

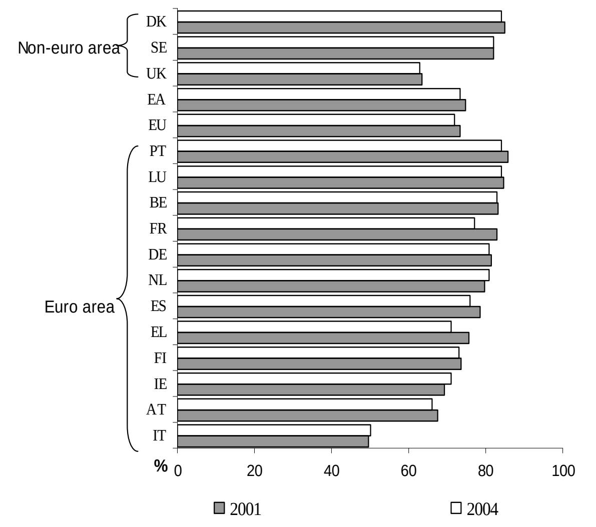
[16] According to the information available form the LABREF database (DG ECFIN), about 50% of all policy interventions in relevant areas for the labour market performance were implemented in the area of ALMPs, Taxation and Pensions systems.

Graph 10: Changes in the tax wedge between 2000 and 2005



Source: Commission services and OECD

Graph 11: Net replacement rates for a single person on a low wage level, 2001-2002



Source: Joint European Commission-OECD project, using OECD Tax-Benefit models

Graph 11 provides the latest figures on net replacement rates (i.e. the ratio of net out-of-work income to net in-work income).[17] The data show little change between 2001 and 2004. Of course, net replacement rates are by no means the only relevant aspect of benefit systems – eligibility criteria, the duration of benefits and the enforcement of job-search requirements are also crucial, although as noted above, there has been only limited progress in these areas.[18]

So far, therefore, it must be concluded that the evidence of the effect of participation in the euro area on the pace of labour market reforms has been mixed. It had no noticeable impact on the ambition of labour market reforms. However, one should not be too pessimistic. The trend towards more flexible work organisation and the recognition of the need for education and training systems to foster adaptability are positive signs.

As noted earlier, there is evidence of moderate structural improvements throughout the second half of the 1990s, in particular due to wage moderation, perhaps partly in anticipation of euro-area membership. Moreover, one should not assume that all countries need to move in the same direction in a given policy area – this will depend on the mix of policies and institutions at national level.[19] For instance, although many would argue that net replacement rates are too high in the euro area as a whole (see Graph 11), this may not be the case in Italy. This in turn means that movements in EU or euro-area averages must also be interpreted with particular care.

Conclusions

Expectations on the part of some commentators that participation in the euro area would prompt radical labour market reforms have not been realised. While the case for reforms is widely recognised, and euro-area participation may in some respects act as a further encouragement, there are countervailing forces. In particular, if euro-area participation increases the demand for economic adjustment, it (together with the acceleration of globalisation process) also increases the demand for protection against the risks associated with adjustment. Although this may not be a barrier to reforms, it does need to be taken into account in designing them.

In the euro area as a whole, progress on labour market reforms remains steady but slow, with no noticeable acceleration since 1999. Large countries tend to undertake fewer reforms than small countries. There is little hard evidence that membership of the euro area alone has substantially hardened policy-makers' resolve to address the euro-area's labour market problems.

Of course, it is difficult to identify any causal impact of membership of the euro area on the reform process. Perhaps recent developments merely reflect the paradox that periods of slow growth or even recessions often seem necessary

17 These are derived from a joint Commission and OECD project; figures are not available for the earlier years.

18 See also Hasselpflug (2005).

19 The interaction between different policy institutions is discussed at length in European Commission (2003a, 2003b, 2006g).

to prompt reforms in the right direction, even though in theory these should be easier to undertake in an upturn.[20] On the other hand, it might be argued that it is precisely in a downturn that the implications of membership of the euro area for labour market functioning will be clearest to policy-makers, and so reforms in 2003-2005 may be due to a combination of these factors.

3.2 Product markets

Product market reforms cover a wide range of areas such as Internal Market and competition policies, the liberalisation and regulation of network industries, and measures aimed at creating a more business-friendly environment. The need for product market reforms in EU countries is generally acknowledged. As the third stage of EMU has deprived the national authorities in the participating countries of monetary and exchange rate instruments, it has increased the need for product market reforms to enhance market-based adjustment to shocks. Indeed, by improving integration, efficiency and flexibility of product markets, product market reforms can contribute to improving economic adjustment in the euro area.

However, in spite of progress made over the past ten to fifteen years, euro-area countries are rarely among the best performers in the EU in terms of the functioning of their goods and services markets. Therefore, one may get the impression that participation in the third stage of EMU has had a negative influence on the intensity and speed of structural reforms. In theory, monetary union has an ambiguous effect on structural reform efforts. On the one hand, by increasing price transparency, the single currency intensifies product market competition, which in turn reduces resistance to labour market reform. On the other hand, the gains from structural reform in terms of lowering risk premiums are lower in the euro area, which reduces the incentive to reform. Econometric investigations on the effects of structural reforms in the early euro-area years are non-conclusive (see Duval and Elmeskov, 2006).

This section provides some further arguments on this issue, focusing on product market reforms in particular. It reviews evidence on the measure of price flexibility and the degree of product market regulation in the euro area, as compared with its main competitors and describes the effort made to reform product markets in the euro-area countries. The section first defines product market reforms and identifies the channels through which these reforms can improve the adjustment capacity of the euro area. Following a (supply- or demand-side) shock, price adjustment comes before quantity adjustment, since it is the changes in price that generate the changes in quantity. This is why the second subsection focuses on analysing the degree of price flexibility in the euro area. A third subsection describes the evolution of product market regulation in the euro area since the second half of the 1990s. The section concludes with some illustrations of progress (or lack of progress) in important areas of product market reforms since the start of the third stage of EMU.

Product market reforms and capacity of adjustment to shocks

Product market reforms are defined as changes in product market regulation, i.e. the regulatory framework determining the functioning of goods and services markets. Product market regulation includes economic regulations, which affect the market behaviour of businesses and influence decisions on pricing, market entry and exit, investments, etc., as well as administrative regulation (or ‘red tape’) through which governments collect information in support of public policies.

Product market reforms can be divided into four main categories: measures to open up to competition goods and services markets previously sheltered from competition from abroad (the Single Market Programme, e.g.), measures to open up markets previously sheltered from competition from newcomers (liberalisation of network industries, in particular), measures to reduce the state's involvement in the economy (state aid control, e.g.) and regulatory reforms creating a more business-friendly environment.

[20] Boeri (2001), using the Fondazione Rodolfo Debenedetti database on reforms, shows that slow growth does not prevent reforms and, moreover, in periods of slow growth it is more common to reduce generosity of pensions and unemployment benefits and to relax employment protection, whereas in periods of faster growth there seems to be more pressure to increase generosity and to tighten protection. The few radical reforms between 1986 and 1997, however, occurred mostly in periods of faster growth.

Box 3: Competition, mark-ups, price stickiness and productive efficiency

This box describes some stylized facts regarding the impact of competition on mark-ups, price flexibility and productive efficiency.

1. Product market regulations can create barriers to competition, allowing firms to charge customers a mark-up

Product market regulations can create barriers to competition such as entry barriers and price controls. These barriers to competition give firms additional market power, allowing them to charge a mark-up over costs.

2. An increase in competition encourages firms to reduce mark-ups

The size of a mark-up, generally measured by the Lerner Index, depends positively on the degree of concentration in the market and negatively on perceived elasticity by firms of demand for their products. An increase in competition will reduce the degree of concentration since the number of competing firms should increase, and it will increase the elasticity of demand as the choices of consumers widen. Thus, the effect of an intensification of competition is to reduce the size of mark-ups.

3. Price stickiness is greater on markets with imperfection competition

In a static situation, the greater the degree of competition in markets the greater the likelihood that industry-wide cost savings, for example due to wage moderation or technology improvement, are more fully passed on to consumers. In less competitive markets, firms will rather appropriate a large share of the cost reduction and increase their profits. Similarly, an industry-wide increase in input prices is normally more completely passed through to downstream markets when the latter are more competitive. This is because the lower mark-ups in more competitive markets leave less room to absorb the cost increase.

4. An increase in competition should reduce downward price stickiness

An increase in competition will be reflected in an increase in the perceived elasticity of demand. As a result there are more benefits to be reaped from a reduction in prices. At the same time, there is a higher risk of losing market share if competitors reduce their prices. As a result, firms will lower prices more rapidly in response to a positive supply-shock or a negative demand-shock.

5. Theoretically, an increase in competition has an ambiguous effect on upward price stickiness

Increased competition reduces the capacity of firms to absorb the consequences of a negative supply-shock (an increase in production costs, e.g.) because mark-ups are lower. At the same time it will be more difficult for the firm to pass on the cost increase to its customers due to the higher demand elasticity associated with the increased competition. On the basis of these arguments one would conclude that stronger competition has an ambiguous effect on upward price stickiness. Therefore, the **question** needs to be resolved empirically.

6. Monopoly and oligopoly are often characterised by considerable productive inefficiencies

Productive efficiency is the capacity for any given firm to allocate its resources in such a way that makes it possible to reduce or eliminate the under-utilisation of its production factors, i.e. capital and labour. Productive or technical efficiency gains come from the introduction of new or better production methods within the firm, and this could lead to increased productivity. Competition puts continuous pressure on firms to contain or reduce their costs, while monopolies and oligopolies are often characterised by considerable productive inefficiency.

7. An increase in competition should raise productive efficiency

The increase in competition can provide incentives for firms to increase their efficiency via different channels. First, competition reduces information asymmetry and creates greater opportunities for comparing performance. This makes it easier for the shareholders to monitor managers and hence reduces slack. Second, in highly competitive markets where price elasticity of demand is high, cost-reducing productivity improvements are likely to generate large increases in market shares and profit. Third, the probability of bankruptcy is likely to be higher in a more competitive environment. Consequently, managers have an incentive to step up their efforts to avoid such a failure. Finally, competition may also influence the effort of workers, as they are likely to capture a part of product market rents in the form of higher wages.

Product market reforms may facilitate adjustment in the euro area because they contribute to the creation of better integrated and more competitive markets. Moreover, they have the effect of raising the benefits of labour market reforms.

First, the better integrated markets facilitate the reallocation of goods and services in the case of more permanent supply shocks (such as technology shocks). This reallocation of resources can take place within industries via a process of entry and exit and a shift in market shares towards most efficient firms. Alternatively it may occur via a process of industrial specialisation and geographic concentration according to competitive advantages (see Dierx, Ilzkovitz and Sekkat, 2004). More integrated markets also allow a more rapid dissipation of asymmetric shocks, as excess demand (or supply) for goods and services in one region within the euro area can by satisfied by supply (or demand) from another region.

Second, more competitive product markets ensure that companies adjust in the face of shocks by adapting mark-ups, prices and productive efficiency. Box 3 describes the effects of an increase in competition on mark-ups, price stickiness and productive efficiency. The implications of these effects for the adjustment mechanisms in the euro area are described below.

In the case of a positive supply-shock (technology improvement) or a negative demand-shock, prices will be forced down. An increase in competition pressures will speed up adjustment. If the pressures of competition are sufficient, domestic producers may react to these shocks by reducing their margins and their prices. If these pressures are insufficient, downwards price stickiness may result in employment losses. For example, if prices are flexible, productivity gains from technological progress will be translated into lower prices, which will then drive up demand and prevent the negative impact on employment in the short term. A recent paper by Marchetti and Nucci (2005) using firm level survey data for Italy has found evidence in favour of this argument. They find a negative impact of productivity shocks on employment for firms with stickier prices but this effect is weaker or not significant for firms with more flexible prices.

In the case of a **negative supply-shock (increase in input prices) or a positive demand-shock**, prices will be forced up. As explained in Box 3, the intensification of competition reduces mark-ups and thus increases the incentives of firms to pass on increases in input prices to consumers. However, the price elasticity of demand increases as well, raising the threat of a loss in market share. Firms may therefore decide to temporarily reduce their mark-ups and increase the effort to become more efficient in order to be able to restore their margins in the medium-term. There is indeed some evidence showing that, in the medium-term, EU companies adjust to the pressures of competition by increasing their productive efficiency (Sauner-Leroy, 2003).

Finally, product market reforms can contribute to amplifying the effects of wage moderation. An improvement in wage-setting behaviour in less regulated markets may generate fiercer competition for market share. In the process, output and employment increase more in these markets. In more regulated markets, softer competition pressures may lead existing firms to appropriate a larger share of the cost reduction in the form of higher profits (see Estevão, 2005).

A measure of the degree of product market flexibility: price setting behaviour in the euro area

The analysis above shows that product market reforms may contribute to increasing the responsiveness of domestic prices to shocks. It is thus interesting to shed some light on the dynamics of prices in the euro area. Recent surveys on price-setting behaviour in the euro area have been conducted by the Eurosystem of Central Banks (see ECB, 2005c and Fabiani et al., 2005). These surveys show that prices change infrequently in the euro area: on average, only 15% of consumer prices and 20% of producer prices change every month. In comparison with the US, patterns of price setting are similar for producer prices but different for consumer prices, with US consumer prices being more flexible. In the United States, 26% of consumer prices change every month and a typical consumer price changes on average every two quarters against every four to five quarters in the euro area.

There is much more heterogeneity regarding the frequency of price changes across sectors than across euro-area countries. The frequency of price changes is stronger in sectors where demand, supply or input costs substantially fluctuate, such as energy products (78% of consumer prices changing every month) and unprocessed foods (28%). At the other end of spectrum, prices of services change less frequently (6%). Price decreases constitute a large share of all recorded price changes: around 40% of both consumer and producer price changes are price reductions. This pattern is apparent in all sectors, with the exception of services where only 20% of price changes are price decreases.

These results, which seem to indicate that prices of services are less flexible downwards, are corroborated by recent work on the causes of inflation in services (see European Commission, 2006a). Services inflation in the euro area has generally been higher than headline inflation, and much higher than non-energy industrial goods inflation. Since 1999, services inflation in the euro area has averaged 2.3%, while inflation in non-energy industrial goods has averaged about 0.7%. Amongst euro-area Member States, services inflation has been highest in fast-growing or catching-up countries such as Ireland, Portugal, Spain and Greece, but it has also been well above average in Italy, Luxembourg and the Netherlands. While real convergence, long-term supply and demand changes for specific services, policy reforms (e.g. healthcare reforms) and changes in administered prices explain a sizeable part of the higher inflation in services compared to goods, it also appears that some services sectors, such as the network industries, retail trade, and professional services, suffer from regulatory distortions, downward price rigidities and insufficient competition.

The surveys on price-setting behaviour also show that euro-area firms do not yet set competitive prices and continue to price discriminate. First, mark-up pricing by firms is the dominant price setting behaviour adopted by firms in the euro area (54%) and the lower the level of competition, the more frequently this method is used. But prices of around 30% of euro-area firms are also shaped by the prices of their competitors. Second, price discrimination is a common practice among euro-area firms: around 80% of euro-area firms set their prices on a case-by-case basis or based on the quantity of the product sold. One can regret that the survey does not allow one to determine whether price discrimination continues to take place across countries.

These surveys also investigated the reasons for price rigidities in the euro area. The most prominent factors preventing immediate price adjustments are the existence of implicit and explicit contracts with customers. This indicates that firms want to establish long-term relations with their customers in order to make their sales more predictable. Other reason relates to "cost-based pricing", which assumes that prices do not change unless the costs incurred by firms change, and to "competitors' prices", which implies that firms may prefer not to change their price unless one of their competitors moves first.

Finally, the surveys have provided some empirical evidence corroborating the assumption made above that an increase in competition should improve the price adjustment in the euro area. Survey results show that price dynamics are positively related to the degree of competition on product markets.[21] However, there appears to be an asymmetry in price adjustment to shocks, depending on the source of shock and the direction of adjustment.[22] Cost shocks (raw materials and labour costs) are more relevant in driving prices upwards than downwards, while shocks to market conditions (changes in demand and in competitors' prices) matter more for price decreases than for price increases. Firms in highly competitive markets are more likely to react more strongly to price-reducing and price-increasing shocks. However, this effect is stronger in the case of price-decreasing factors, especially those resulting from the demand side.

Evolution in the intensity of product market regulation

Despite the fact that the EU has initiated significant reforms over the past decade and a half, there remains a widespread perception that EU product markets are heavily regulated. In order to verify whether this is indeed the case and to assess recent changes in the intensity of product market regulation in the euro area, this section presents and analyses three main sources of information on regulatory reforms carried out in different countries (see Box 4 for the definition of these three sources of information).

Box 4: Measurement of product-market regulation

The degree of product market regulation is difficult to measure as it covers a wide range of policy measures. Therefore, summary indicators are generally used to measure the degree and the changes in product market regulation over time in different countries. Three types of summary indicators are used here:

- First, the indicator of general economic freedom and its different components as presented by the Fraser Institute. This indicator combines data summarising the degree of regulation of credit markets, labour markets and business with information on the strength of property rights, the state involvement in the economy, financial stability and freedom of trade. For a discussion of shock transmission mechanisms, the information on business regulation, state involvement in the economy and freedom of trade is particularly relevant. The indicator has been calculated every five years since 1970 and annually since 2000. However, the comparability over time of the indicator is limited and comparisons can only be made at a relatively disaggregated level.
- Second, the World Bank's database “Doing Business”. This database includes indicators on the cost of doing business by identifying specific regulations that enhance or constrain business investment, productivity and growth. Annual data are available for the period 2003-2006.

Third, the product market regulation database constructed by the OECD. The information contained in this database is based on the answers provided by OECD Members to a questionnaire containing 805 questions in the following domains: general policies (antitrust, control, market access, etc.), regulatory and administrative policies, administrative requirements for business start-ups, regulation of professional services, regulation in transportation industries, and regulation in the retail distribution industry. Data have been collected for two years only: 1998 and 2003. Nevertheless, the data allow to indicators of product market regulation to be constructed at various levels of aggregation, using weighting techniques such as principal component analysis (see Nicoletti et al., 2000).

Fraser index of general economic freedom

According to the Fraser ranking of general economic freedom calculated for the year 2004 (the latest year for which data are available) the US is tied for third place. Ireland and the UK, which are tied for sixth place, are the highest

21 For producer prices, the more competitive the environment, the more frequently prices change. For consumer prices, there is substantial evidence that the frequency of price changes depends on the outlet type and is higher in super/hyper markets than in traditional corner shops.

22 Prices react more when costs increase than when they decrease. The development of labour and raw material costs may lead to price increases but financial costs are of relatively minor importance. Prices decrease more when demand falls than they increase when demand rises. Price decreases are mainly influenced by weakening demand and decreasing prices charged by competitors.

ranked EU Member States (see Gwartney, Lawson and Easterly, 2006). Large euro-area countries such as Germany (17), France (24) and Italy (45) take up lower positions.

The more specific Fraser index measuring business regulation is designed to identify the extent to which regulatory restraint and bureaucratic procedures limit competition and the operation of product markets. It consists of five components: (i) price controls; (ii) extent of administrative procedures; (iii) time spent with government bureaucracy; (iv) the difficulty of starting a new business; and (v) the need to make irregular payments. According to this index, the intensity of product market regulation in the euro area is higher than that in the US but slightly below that in the EU as a whole. The euro area has fewer price controls and irregular payments than the EU as a whole. A closer look at the different components shows that it is more difficult to start a new business in the euro area than in the EU as a whole and that the time spent with government bureaucracy is longer. Amongst euro-area Member States, Finland, Austria and Ireland are the least regulated with levels of regulation even below that of the US (see Table 6). Business regulation in countries such as Greece, Portugal and Spain and Italy, on the other hand, appears to be rather onerous, which serves to illustrate the large disparities between EU Member States in terms of product market regulation.

Table 6: Fraser index of business regulation 2004[1]

	United States	EU25	Euro area	Low level of regulation in euro area		High level of regulation in euro area	
Price controls	6.0	5.8	5.7	Austria	9.0	Spain	3.0
				Finland	9.0	Greece	5.0
						Portugal	5.0
Burden of Regulations	4.3	3.1	3.0	Finland	5.8	Italy	1.8
				Ireland	4.6	Belgium	2.0
				Spain	4.1	Germany	2.8
Time with government bureaucracy	7.1	7.4	7.2	Finland	9.7	Portugal	4.6
				Luxemburg	8.6	Netherlands	5.8
				Ireland	8.3	Greece	6.5
Starting a new business	8.5	6.7	6.3	Finland	8.2	Portugal	4.6
				Netherlands	7.6	Spain	4.8
				Luxemburg	7.0	Greece	5.0
Irregular payments	8.5	8.1	8.1	Finland	9.1	Greece	6.2
				Luxemburg	8.8	Belgium	7.3
				Austria	8.7	Italy	7.5
Business regulation in general	6.9	6.2	6.1	Finland	8.4	Greece	5.2
				Austria	7.2	Portugal	5.3
				Ireland	7.1	Spain	5.4

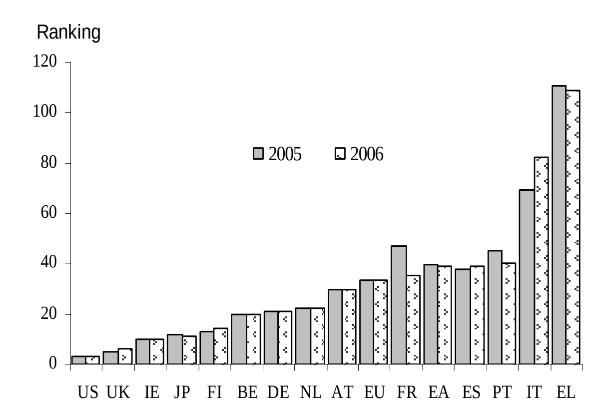
Note: 1- a low value indicates a high level of regulation. For EU25 and the euro area, the GDP-weighted average is shown. The EU25 and EA aggregates take account of the fact that no data are available in 1998 for CY, LT, LV, MT, and SI; and in 2000 for CY, LU, and MT.

Source: Gwartney, Lawson and Easterly (2006)

World Bank measure of the ease of doing business

The 'ease of doing business indicator' of the World Bank (2006) is based on information about how laws and regulations affect the ease of (i) starting a business; (ii) getting licences; (iii) hiring and firing workers; (iv) registering property; (v) getting credit; (vi) protecting investors; (vii) paying taxes; (viii) trading across borders; (ix) enforcing contracts; and (x) closing a business. It therefore covers a whole range of factors that reflect market regulation. According to this indicator (see Graph 12) most of the euro-area Member States do not perform particularly well, especially in comparison with major competitors such as the UK, the US and Japan. Amongst the euro-area Member States the situation in Italy and Greece appears most problematic, while Belgium, Germany, the Netherlands and especially Ireland and Finland appear to do a better job of facilitating business operations.

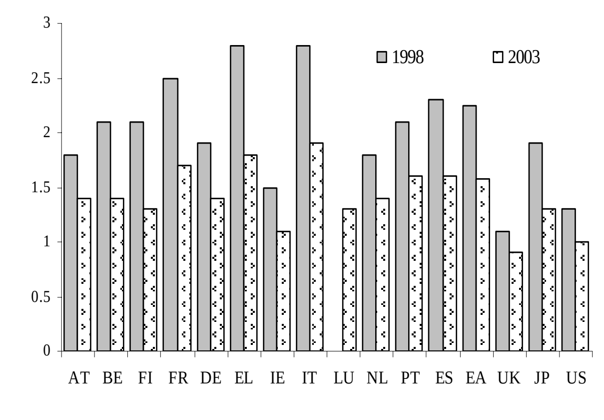
Graph 12: Ease of doing business (ranking, 2005 and 2006)



Note: For the EU25 and the euro area, the GDP-weighted average is shown.

Source: World Bank (2006)

Graph 13: Product market regulation, 1998 and 2003



Note: For the euro area, the GDP-weighted average is shown.

Source: Conway, Janod and Nicoletti (2005)

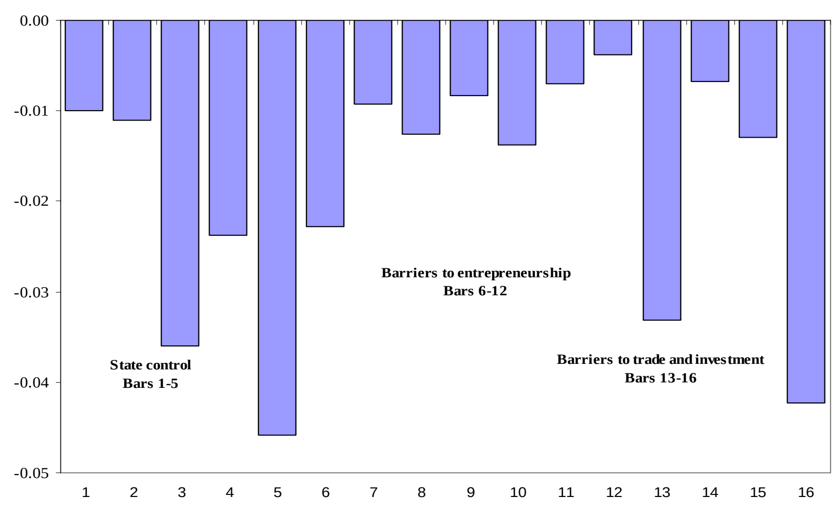
OECD product market regulation database

The OECD product market regulation database contains indicators of barriers to entrepreneurship, state control and barriers to trade and investment. Conway, Janod and Nicoletti (2005) describe the changes observed in product market regulation in OECD countries between 1998 and 2003. Graph 13 illustrates the visible progress that has been made in reducing the regulatory barriers in euro-area countries. It appears that on average those countries that had the highest level of product market regulation are those that have carried out the most substantial reforms.

The relative positions of the different euro-area Member States, however, have not changed much between 1998 and 2003. The regulatory regime in Spain appears to have become less restrictive, while Ireland has moved in the opposite direction. France, Italy and Greece consistently have the highest level of product market regulation. The OECD database also confirms the observation already made on the basis of indicators calculated by the Fraser Institute and the World Bank that product markets in the euro-area countries are generally more regulated than those in the UK and the US. The OECD associates this with higher levels of state control and greater barriers to entrepreneurship in the euro area, while the barriers to trade and investment are similar in the US and the euro area.

A comparison of regulatory change in different domains show that the overall decline in the level of product market regulation in euro-area countries over the period 1998-2003 is mostly due to a decline in state control (via a reduction in price controls and in direct government control over businesses) and to the elimination of barriers to trade and investment (via lower tariffs and fewer restrictions on foreign investment). Barriers to entrepreneurship have decreased less (see Graph 14). However, as indicated in the next section, the gap with the in terms of business start-up conditions has narrowed.

Graph 14: Source of change in euro-area product-market regulation (1998 – 2003)



Key to horizontal axis
1. Scope of public enterprise sector
2. Size of public enterprise sector
3. Direct control over business enterprises
4. Use of command and control regulation
5. Price controls
6. Licence and permits systems
7. Communication and simplification of rules and procedures
8. Administrative burdens for corporations
9. Administrative burdens for sole proprietor firms
10. Sector-specific administrative burdens
11. Legal barriers
12. Antitrust exemptions
13. Ownership barriers
14. Discriminatory procedures
15. Regulatory barriers
16. Tariffs

Note: Contribution of each of the 16 low-level euro-area average PMR indicators to the change of the euro-area overall PMR indicator.

Source: Conway, Janod and Nicoletti (2005)

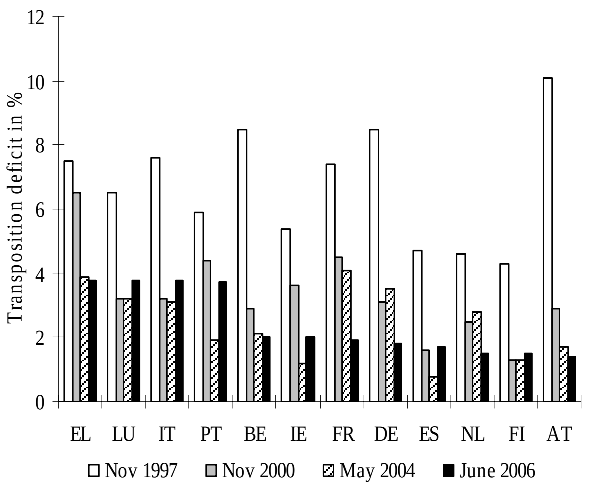
Important product market reforms since 1999

This section reviews the progress (or lack of progress) made in a number of important areas of product market reforms since the introduction of the euro in 1999. The focus will be on reforms that facilitate the adjustment to shocks in the euro area, as discussed above.

Reinforcing the Internal Market

A better functioning Internal Market allows a more rapid dissipation of asymmetric shocks, as excess demand (or supply) for goods and services in one region within the euro area can by satisfied by supply (or demand) from another region. Adoption and implementation of Internal Market Directives is the main policy tool specifically targeted at creating a better functioning Internal Market. Over the period 1999-2006, a number of important Directives have been proposed by the Commission, agreed with Council and Parliament, and started to be implemented by the Member States: the legal framework for electronic commerce (adopted in 2000); modernising legislation in public procurement (2004); consolidation and modernisation of rules regulating the recognition of professional qualifications (2005); and, political agreement within the Council for a draft services directive (2006). However, all these new Directives need to be implemented in order to be effective. The poor performance of many euro-area Member States in transposing and applying Internal Market legislation remains a source of concern. For example, only three euro-area countries (Netherlands, Austria and Finland) currently meet the 1.5% transposition deficit target. In four euro-area countries (Greece, Luxemburg, Italy and Portugal), the transposition deficit is particularly high (around 4%). Nevertheless, Graph 15 also shows significant progress made by Germany, France and the Netherlands.

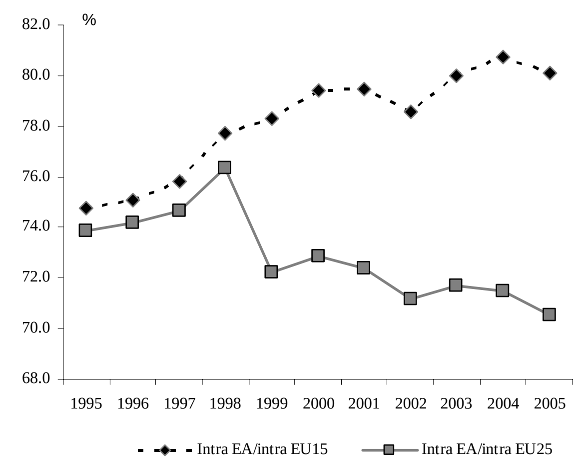
Graph 15: Transposition deficits[1]



Note: 1 - percentage of Internal Market Directives not yet communicated as having been transposed. For the euro area, the GDP-weighted average is shown.

Source: Commission Services; Internal Market Scoreboard

Graph 16: Share of intra-euro-area trade in intra-EU15 and intra-EU25 trade (%)



Note: The trade ratio is defined as (exports + imports)/GDP.

Source: Commission services based on EUROSTAT data

In goods, increased use is made of the new approach to standardisation, which has served to reduce non-tariff barriers within the Internal Market. In areas where no common standards have been agreed, the principle of mutual recognition applies, which allows goods legally manufactured and/or sold in one country to be sold elsewhere without further formalities. In 2003, the Commission published a Communication clarifying this principle and aiming to help businesses and national administrations make it work better. The fact that the Commission saw the need to publish such a Communication illustrates the continued problems with the practical application of the mutual recognition principle. It also illustrates the need to make faster progress with standardisation. The new approach is an important step forward in this respect.

Progress in creating a more integrated market can also be assessed *ex post*, for example through investigation of developments in terms of intra-euro-area trade flows or price dispersion. Since 2000, the ratio of intra-euro-area trade (defined as the sum of exports and imports) to GDP has remained pretty much unchanged within the range of 26-28%, following a rather more rapid rise in the 1990s. The positive trade effect associated with the introduction of the euro[23] appears to have been offset by the dampening effects of the relatively subdued economic growth rates in the euro area. However, one can also observe an overall increasing trend in the share of intra-euro-area trade in total intra-EU15 trade, confirming the importance of the euro for the deepening of economic integration in the EU. The trade-boosting effect of the introduction of the euro has however been far less pronounced than the trade effects of enlargement, as illustrated by the decreasing ratio of intra-euro-area trade to intra-EU25 trade since 1998 (see Graph 16).

The dispersion of consumer prices within the euro area (11.6 in 2004, as measured by the coefficient of variation) is well below that of the European Union as a whole (27.7), indicating that the euro-area economies are relatively well integrated. Nevertheless, the speed of price convergence within the euro area has slowed down, in particular in comparison with the hey-day of the Single Market Programme in the early 1990s. This slowdown in price convergence should not come unexpected. Price levels are already much more harmonised than across the EU 25 and a large part of the remaining dispersion is structural and associated with differences in indirect taxation and transport costs. However, as shown above, price discrimination continues to be a common practice and barriers still hamper the tradability and market access in certain sectors, particularly in services.

Liberalising network industries

The on-going process of liberalisation in the network industries implies a stepwise opening up of the telecommunications, postal services, energy and transport sectors to competition. Disentangling the effects of liberalisation from those of other influences poses many problems. Nevertheless, one may argue that the transition

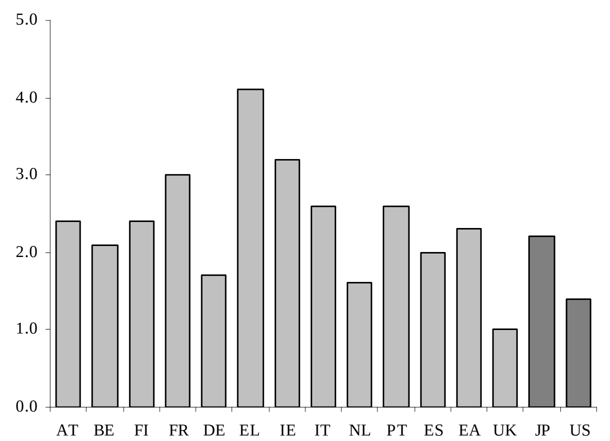
23 Baldwin (2006) suggests that the introduction of the euro has raised intra-euro zone trade by between 5% and 10%.

from national monopolistic markets dominated by an incumbent supplier to more contestable markets with many players should speed up the adjustment to shocks. When a monopolist is exposed to a negative supply side shock implying, for example, an increase in production costs, there is no need for immediate adjustment as he will be able to absorb the shock through a reduction in his mark-up. In a more competitive market, however, suppliers do not have the means to wait as the threat of lower mark-ups requires an immediate response.

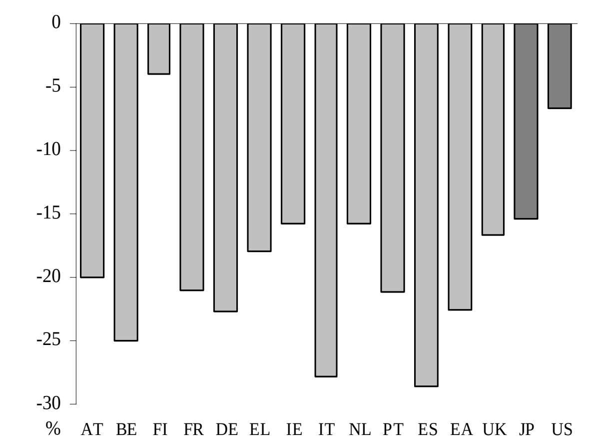
Progress with liberalisation varies significantly between sectors. While regulatory conditions have remained tight in rail transport, they have loosened up considerably in telecommunication and air transport. Looking at the different industries in turn, we find that in spite of progress made, the incumbents often still hold a very large share of the market in the fixed telecommunications segment. Nevertheless, the number of players is increasing and the market share of the incumbent is falling almost everywhere and in each market segment (local, long-distance and international). In mobile telephony, the market shares of the leading operators have continued to fall. In postal services, liberalisation has also fostered competition by gradually opening up the market for different product items. The 2002 amendment of the Postal Directive defined further steps in the liberalisation process. The electricity and gas directives of 2003 required full market opening by 1 July 2007 at the latest. Many Member States are ahead of this time schedule. In some Member States, market entry in the energy sector, notably by incumbents from neighbouring countries, has had an effect. Nevertheless, energy markets remain highly concentrated for both historical and technological reasons. Regulatory weaknesses also limit the degree of competition. Despite the ongoing opening of the rail sector (the second railways package adopted in 2004 foresees a full opening up of the freight sector by January 2007), the market share of new entrants is still rather low (around 10% on average).

The OECD has calculated an indicator to track regulatory conditions in seven network industries. This indicator is based on different industry characteristics including entry regulation, public ownership, market structure, vertical integration and price controls. It shows a relatively high level of regulation in France, Greece and Ireland and lower levels in Germany and the Netherlands (see Graph 17). While in 2003 network industries in the euro area were still more heavily regulated than in the US, the process of deregulation (over the period 2000-2003) was more rapid in the euro area. This process was particularly fast in Belgium, Italy and Spain (see Graph 18).

Graph 17: Product-market reform-intensity in selected sectors, 2003



Graph 18: Changes in product-market intensity in selected sectors, 2000-2003 (in percent)



Note: The indicator of product market regulation is measured as an arithmetic average of regulation in seven non-manufacturing sectors (rail, road, airlines, gas, electricity, telecom, and post). The indicators are normalised, ranging from 0 to 1, expressed as a percentage of the maximum score across OECD countries, where 1 reflects a relatively regulated product market. For the euro area, the GDP-weighted average is shown (excl. LU).

Source: REGREF database and OECD

Strengthening competition policy

As already mentioned, more competitive markets should lead to a more rapid adjustment to economic shocks. Stronger EU competition policy should therefore contribute to the capacity of the euro area to adjust. Over the past couple of years, the guidelines governing the three main elements of EU competition policy (anti-trust, merger and State aid policies) have been reconsidered in the light of economic principles.

The modernisation of the EU anti-trust enforcement system, which became effective on 1 May 2004: strengthened the Commission's powers to obtain information; allowed higher fines for anti-competitive behaviour; increased incentives for "whistle-blowers" in cartel cases; and improved coordination between national competition authorities and the Commission. The sharing of work between Commission and national authorities was to be determined on the basis of which institution was best placed to investigate and prosecute a case. The new system also encouraged firms (and consumer groups) to make more use of the national courts for private enforcement of competition law. So far, little follow-up has been carried out on this latter initiative. Finally, the Commission has started to devote more resources to own-initiative investigations of problem markets, such as, for example, the still on-going inquiries into financial services and energy markets.

The new merger regulation, which entered into force in May 2004, clarified that the Commission and the national competition authorities had the power to investigate all types of harmful scenarios in a merger, ranging from dominance by a single firm to the effects stemming from a situation of oligopoly that might harm the interests of EU consumers. It also explicitly recognised the possibility of an efficiency defence to be used by the merging parties.

Finally, the June 2005 State Aid Action Plan outlined the guiding principles for a comprehensive reform of state aid rules over the next five years. In particular the document set out how the Commission intends to use EC Treaty state aid rules to encourage Member States to contribute to the Strategy for Growth and Jobs by reducing overall aid levels while focusing remaining aid on improving the competitiveness of EU industry, creating sustainable jobs, ensuring social and regional cohesion, and improving public services.

Facilitating market entry and exit

Economic adjustment in case of exposure to shocks can also be encouraged by measures that make it easier for firms to enter or leave the market. Within the context of the Lisbon strategy for growth and jobs Member States have taken various measures to facilitate market entry (by SMEs in particular): improved access to venture capital or other modes of financing; the setting-up of one-stop-shops to help reduce the time and costs required for setting up a new business; the easing of the regulatory burden on business start-ups, tax reform, etc. Some Member States have also launched initiatives aimed at reducing the costs associated with market exit (e.g. by changes in bankruptcy legislation or through labour market reform).

In spite of this, the performance of euro-area Member States in terms of facilitating market entry and exit leaves room for improvement. This point may be illustrated by the indicator measuring the difficulty of starting a new business as calculated by the Fraser Institute. While for most business regulation indicators differences between the euro area and the US are not particularly large, this is not the case for the "starting a new business" indicator (see Table 6). While the conditions for business start-ups in the best performing EU Member States (Finland, the UK and Sweden) are rather similar to those of the US, most other euro-area Member States tend to lag behind the best performers (see Table 7). This observation should be a cause for concern as market entry and exit are important not only as an instrument to speed up the adjustment process, but also as a key determinant of innovation and growth (see European Commission, 2006c).

Nevertheless, the measures recently taken to facilitate market entry are starting to be reflected in the Fraser index. While the value of the start-up indicator in the US has remained basically unchanged over the last decade, it has improved significantly in the euro area and even more so in the EU as a whole. France and Italy, in particular, have made a significant effort to improve business start-up conditions (see Table 7). This is an indication of an increased awareness of the importance of facilitating business start-ups.

Table 7: Fraser index of business regulation "starting a new business"

	United States	Japan	United Kingdom	EU25	Euro area	Most favourable value / Highest positive variation in the euro area		Most unfavourable value / Highest negative variation in the euro area	
2004	8.5	6.3	8.0	6.7	6.3	Finland Netherlands Luxemburg	8.2 7.6 7.0	Portugal Spain Greece	4.6 4.8 5.0
2000	8.4	5.9	7.7	6.3	5.9	Finland Netherlands Ireland	8.8 7.6 6.9	Greece Italy France	4.1 5.1 5.2
1995	8.4	4.7	8.1	5.2	4.7	Finland Ireland Netherlands	8.5 7.6 7.5	France Austria Italy	3.4 3.7 4.1
Change 2000 - 2004	0.1	0.4	0.2	0.4	0.5	France Italy Austria	1.7 1.2 0.9	Portugal Belgium Spain	-1.1 -0.8 -0.8
Change 1995 - 2000	0.0	1.1	-0.3	1.1	1.2	Belgium France Austria	1.8 1.7 1.7	Ireland Greece	-0.7 -0.1

Note: Change over time is measured by the variation in the indicator. A positive (negative) value points to a decrease (an increase) in regulation over time. For EU25 and the euro area, the GDP-weighted average is shown. The EU25 and EA aggregates take into account the fact that no data available in 1998 for CY, LT, LV, MT and SI; and in 2000 for CY, LU, and MT.

Source: Gwartney, Lawson and Easterly (2006)

Conclusions

Product market reforms speed up adjustment in the euro area by increasing the incentives for firms to adapt prices and quantities to changing market conditions. A better functioning Internal Market facilitates the reallocation of goods and services across the EU territory and helps create a more competitive business environment. More competitive product markets also ensure that companies adjust to supply and demand shocks by adapting their prices. The degree of competition also matters in shaping price behaviour when it comes to the driving forces of price adjustment. In particular, prices are less sticky in more competitive markets. Firms in highly competitive markets are more likely to react more strongly to price-reducing and price-increasing shocks. However, surveys show that this effect is stronger in the case of price-decreasing factors, especially those resulting from the demand side. Finally, product market reforms can contribute to amplifying the effects of labour market reforms. In less competitive markets, firms may appropriate a large share of the cost reduction in the form of higher profits.

While product market reforms can contribute to a smooth adjustment in the euro area, product markets in the euro area remain highly regulated, at least in comparison with major competitors such as the UK, the US and Japan. Moreover, there are significant differences between euro-area Member States. Nevertheless, in recent years visible progress has been made in reducing regulatory barriers. Over the period 1999-2006, a number of important Internal Market directives were adopted, but progress in terms of implementation has been somewhat disappointing. Data on price dispersion and trade integration seem to indicate that progress has indeed slowed down in comparison with the early 1990s. For the future, an effective implementation of the services directive would seem essential. In network industries, the euro-area process of deregulation has been more rapid than that in the US, but according to the latest figures regulation levels in the euro area are still above those in the US. EU competition policy rules have been reviewed to better reflect the principles of economic theory. Member States have taking various measures to better facilitate market entry and exit. Nevertheless, it remains more relatively difficult to start a new business in the euro area. This is a cause for concern as market entry and exit are important not only as instruments to speed up the adjustment process but also as key determinants of innovation and growth. To end on a more positive note, it has to be signalled that the gap with the US has narrowed over recent years and the efforts of euro-area Member States to improve business start-up conditions are starting to be recognised.

3.3 The financial sector

Reform through integration

Structural reform in the EU financial sector, which has intensified markedly since the creation of the euro area, has mainly taken the form of measures to facilitate cross-border integration. This focus on reform through integration reflects a two-step rationale whereby integration promotes financial development and financial development in turn enhances economic performance. The introduction of the euro has acted as a powerful catalyst to the process of financial integration by removing exchange rate risk on the bulk of financial flows within the EU and stimulating demand for cross-border financial services.

Economic rationale for EU financial integration

The financial sector plays a key role in the economy by allocating economic resources efficiently in time and space, thereby enabling real-sector activity to expand and develop optimally. In playing this role, a well-functioning financial sector must provide the means to:

- execute financial transactions on a cost-effective and safe basis through the appropriate mechanisms for trading, clearance and settlement;
- pool investor resources and subdivide shares in available investment opportunities, thereby overcoming issues of scale in the resource allocation process;
- price and manage effectively the risks related to financial transactions through providing liquidity;
- reflect available information efficiently in prices so as to overcome problems of co-ordination in decentralised decision making; and
- address possible incentive problems created by the existence of information asymmetries and the principal-agent relationship in the financial intermediation process.

To the extent that the financial sector is constrained in the performance of these various functions, there is a consequent cost in terms of sub-optimal economic performance and welfare loss.

Within the European Union, the financial sectors of the Member States have evolved to reflect specific national conditions and preferences. While these systems are generally efficient from a national perspective, they are much less so when viewed from the perspective of a progressively integrating EU economy. At the EU level, a divergence has emerged between the real sector which increasingly operates on a cross-border basis (see above) and a still highly fragmented financial sector. The degree of fragmentation is such that the EU financial sector cannot function efficiently and so acts as a drag on the overall performance of the EU economy. The costs and risks associated with cross-border financial transactions are unnecessarily high, thereby discouraging the conduct of financial activity on a pan-EU basis. The result is an inefficient allocation of economic resources due to unexploited scale/scope economies, sub-optimal risk management, inefficient pricing and reduced opportunities for investment/consumption smoothing. In light of these inefficiencies, financial integration has become an EU policy and now forms an integral part of the Lisbon strategy as a means to deliver a more productive use of capital and higher output potential.

Blueprint for an integrated EU financial market

The blueprint for an integrated EU financial sector is the Financial Services Action Plan (FSAP). The FSAP comprises 42 separate measures targeted at a wide range of financial activities. These measures relate to both wholesale and retail levels and can be related to the various financial-sector functions described above – for example, by improving the inter-operability of national clearing and settlement systems (Communications on clearing and settlement), establishing common rules for integrated securities and derivatives markets (the Market in Financial Instruments Directive), facilitating the raising of capital on an EU-wide basis (the Directive on Prospectuses), ensuring legal certainty in the cross-border use of collateral (the Directives on Settlement Finality and Financial Collateral Arrangements), setting common standards for financial reporting (the Regulation on International Accounting Standards), promoting investor confidence and market integrity (Directive on Market Manipulation) and facilitating cross-border retail payments. The FSAP is now fully implemented at EU level, while some of the legislative measures are still to be transposed into national law by Member States.

Quantifying the economic benefits of EU financial integration

It will be a considerable time before the impact of the euro and the FSAP on the functioning of the EU financial sector and broader economy can be assessed directly. Any assessment at this stage must rely on more indirect approaches using model-based estimations. In this context, the results of two independent studies undertaken on behalf of the Commission are of interest.

- A study by London Economics (2002; henceforth LE) adopts a macroeconomic approach to quantifying the economic effect of financial integration in the EU. The study focuses on the benefits of integrating the set of fragmented national systems into a pan-EU system by estimating the *static* efficiency gains from deeper and more liquid equity and bond markets. These gains are supplemented by improvements in the functioning of market infrastructure and greater competition between sources of direct and indirect financing. The study concludes that fully integrated markets could – in the medium-to-long term – lower the cost of capital for EU companies by about 0.5 percentage points, and that this could bring about: (i) a rise in the level of GDP of 1.1% in the long run; (ii) a 6% increase in the level of investment; (iii) a 0.8% increase in the level of private consumption; and (iv) a rise of 0.5% in the level of employment. The authors suggest that introducing *dynamic* adjustments would greatly increase the output and employment gains. The study also presents the results of a survey of market participants, which is used to confirm the assumptions underlying the empirical analysis.

- The second study by a group of CEPR (Gianetti et al., 2002) researchers adopts a more microeconomic approach and focuses on the relationship between financial-market integration and corporate growth. A three-stage approach is used. First, the authors screen the available measures of financial development – related for instance to efficiency or the size of the financial system. Second, they examine the impact of financial integration on financial development, which is expected to be positive, both quantitatively (larger market and access to foreign markets and lenders) and qualitatively (importing better institutions, e.g. relating to creditor rights and investor protection). Third, an econometric analysis, at both industry sector and firm level, provides estimates of the output growth effects of greater financial development due to integration. In a scenario in which EU manufacturing companies would have the same access to finance as US companies, value-added growth in EU manufacturing is estimated to increase by 0.75–0.94 percent on a durable basis.

Quantifying the costs and benefits of financial integration is very difficult and is subject to significant data, statistical and model uncertainty. Accordingly, the results of these two studies can be considered only as indicative of the potential benefits of EU financial integration. In addition, exploiting these benefits fully will require flanking policies in the fields of competition, market transparency/integrity and financial stability. Nevertheless, the results of the studies tend to validate the rationale underlying the EU policy on financial integration

State of play in EU financial integration

The process of EU financial integration is well underway in a range of areas and particularly in wholesale markets. However, progress has varied across the different sectors of the financial system, with unsecured segments (where there is no transfer of collateral involved) very much in the lead.

- The euro-area derivatives market is highly integrated with a sharp expansion of euro interest swap activity and the rise of pan-European equity based index trading. As regards the integration of money markets, the market for interbank deposits is fully integrated, as witnessed by the acceptance of market participants of EONIA (Euro Overnight Index Average) and EURIBOR (Euro Inter-Bank Offered Rate) as uniform price references. On the other hand, various obstacles (i.e. technical, regulatory, fiscal and legal) related to the clearing and settlement are holding back the integration of the secured market segments, (e.g. commercial paper and treasury bills) which involve the exchange of liquidity against collateral.
- The launch of the euro created a much more homogenous EU bond market, with largely convergent prices among euro-area member states and evidence of cross-border portfolio diversification. A deeper and more liquid euro-denominated bond market has resulted in higher net and gross issuance volumes for the market as a whole, when compared to the combined issuance in the legacy currencies. Although a part of the rise in euro-denominated issuance has been accounted for by the public sector – where the euro sovereign debt market is beginning to rival the US Treasury market for issuers and investors - the introduction of the euro has also fostered a widening and deepening of the euro-area market for bonds issued by the private sector.
- In equity trading, the impact of the euro has so far been strongest at the level of the investor, with an overall reduction in “home bias” and a re-orientation of asset managers’ investment strategies towards a European-based approach. In consequence, a number of studies have found increased correlation among the performance of national stock markets. In contrast, with cross-border listings still exceptional, there is little evidence of a euro impact on the behaviour of issuers. Integration in the equity market is also particularly impeded by inefficiencies in the clearing and settlement process.
- There has been a significant amount of M&As in the banking sector – still the dominant sector in providing euro-area financing - although consolidation has mainly occurred along national lines due to a number of still existing legal and political barriers. The lack of cross-border banking integration is also reflected in the dispersion of national retail interest rates (for example for consumer credits or mortgages).
- Consolidation in euro-area market infrastructure can be witnessed in Europe’s stock exchanges, where notable examples would include the merger of exchanges in Amsterdam, Brussels, Paris, and Lisbon in Euronext, and the integrated Nordic-Baltic market, which includes the stock exchanges of Copenhagen, Stockholm, Helsinki, Tallinn, Riga and Vilnius. Some progress has been made in the integration of payment systems, such as through TARGET and in clearing and settlement systems.

Established priorities for EU financial integration

The Commission White Paper on Financial Services Policy in 2005-2010 has set the agenda for EU-level financial-sector reform in the coming five years. The White Paper affords high priority to transposition issues, as well as to continuous ex-post evaluation of existing policies and rules. In addition to the focus of the full implementation of the FSAP, the Commission has outlined areas where there may be a need for further efforts:

- Clearing and settlement, where cross-border clearing and settlement transaction are far more costly than domestic transactions, due to technical, legal and fiscal obstacles. The Commission will now assist the clearing and settlement industry to establish a voluntary code of conduct, which will be designed to eliminate sources of inefficiency in cross-border activities.[24]
- A new Solvency Directive, which will overhaul EU regulation and supervision in the insurance area.
- EU supervisory arrangements, where greater clarity and transparency is needed from the perspective of financial-system efficiency and stability;
- Retail sector, where three initiatives are underway: (a) a white paper on mortgage credit based on extensive consultations with stakeholders will be published in 2007; (b) a modified consumer credit directive; and (c) a proposal on payment services directive to enhance the competition and to facilitate the creation of a single EU payment area (SEPA) by 2010.
- The investment fund industry is another area, where further work may be needed. Three industry reports that analyses the main challenge facing different segments of the EU investment fund industry focusing on retail investment funds (UCITS), hedge funds and private equity recommending improvements to EU investment fund framework were published in July 2006.
- Looking globally beyond the EU, is the need for international dialogues on financial markets and their regulation with the United States and Japan, but also with the growing new economies in China and India.
- The White Paper acknowledges the significance of horizontal and complementary policy issues, such as corporate governance and accounting reform and mentions as well the necessity to debate the political accountability of the global accounting standard-setting bodies, such as the International Accounting Standards Board, where a strengthening of public oversight is demanded. In order to ensure financial stability, the Commission underlines the need for strengthening financial-sector supervision through an evolutionary, bottom up approach.

4. Possible interactions and spillovers

The analyses in this chapter and the previous two chapters have explored the working of three inter-country adjustment channels under monetary union. The workings of these channels cannot be viewed in isolation from one another. Indeed, interactions between them can potentially be important for the efficiency of the adjustment process. In the short to medium-term, it is helpful to focus on the adjustment process at the macroeconomic level, and in terms of mainly demand-side variables. It may be helpful to think of such adjustment channels in terms of a triangle:

- In the absence of a national monetary policy, shifts in the intra-euro-area real effective exchange rate are the equilibrating mechanism that brings a euro-area member back in line with area cyclical conditions and the stance of the common monetary policy.
- Real interest rate effects (while difficult to measure) can retard this adjustment to the extent that they behave pro-cyclically under country-specific shocks, and thus widen the amplitude of swings in the real exchange rate.
- National policies also affect the adjustment process: fiscal policy can influence cyclical conditions and the real exchange rate in the short to medium-term, while structural policies can enhance the efficiency of adjustment in the medium-term.

This raises several obvious – but quite complex – questions about adjustment experience and the scope for national policy action. One question is the degree and speed of dominance of the adjustment channel over the real interest rate channel. When one considers extended real exchange rate cycles and associated inflation divergences, do these result from the nature of economic shocks, or are they more accounted for by the perverse impact of real interest rates?

A second question concerns fiscal policy. Within the framework of the reformed Stability and Growth Pact, how far should national fiscal policy seek to contribute to necessary real exchange-rate adjustment. It is the obvious instrument to help guide the real exchange rate. Are the normal objections to fiscal activism less persuasive during

[24] Lowering transactions cost by 7 to 18% and raising GDP on average by 0.2 to 0.6% in subsequent years.

extended adjustment cycles? Or should the concern just be to avoid imparting a pro-cyclical impulse in the adjustment process?

Third, regarding labour and product market policies, where do the priorities lie to foster more efficient adjustment? The evidence above suggests, for example, wide variation in the responsiveness of wages and unit labour costs to the level of output gaps – especially at times of cyclical slack. What priorities could help improve this responsiveness? There are also major differences in efficiency in terms of the respective contribution of wages and productivity in achieving real exchange rate changes. This matters greatly: reliance on slow nominal wage growth may be costly in terms of output sacrifice as price levels are corrected.

Finally, there is a question whether experience suggests significant spillovers across economies in the euro area. This could make the contribution of national policies – including the role of structural policies – a matter of urgent common concern.

To understand these questions better, it is helpful to try to model the relative impact of different shocks, as well as real interest rate effects. But it is also necessary to place the resulting insights into a country context, to explore the interactions of these developments with national policy choices. This is the challenge taken up in the next chapter.