VIII. ADJUSTMENT AND SURVEILLANCE ISSUES

Summary

Recent adjustment experience sheds light on policy priorities that can enhance the functioning of the euro area. With the competitiveness channel emerging as a key to efficient adjustment, one set of issues concerns structural reforms and wage determination. Labour and product market reforms have contributed to wage moderation and lower structural unemployment, but challenges seem to remain in terms of the responsiveness of wages to cyclical conditions, especially in some economies. There is a need to provide high quality and forward-looking information to social partners about the evolving euro-area adjustment setting, and perhaps to re-examine wage-setting mechanisms in some cases. Continuing labour and product market reforms can enhance the responsiveness of markets, and by promoting faster productivity growth they can improve the efficiency of adjustment. Fiscal policy, too, can contribute importantly. A core concern is to ensure sufficient consolidation during "good times" – thus avoiding any amplification of country-specific booms, and assuring greater resilience during downswings. This requires a deeper analysis of underlying fiscal positions during booms, when revenues may be swollen by transient factors not captured in cyclical adjustment calculations. Moreover, interactions between the fiscal stance, wages and financial market trends emerge as potentially important. This means that the fiscal stance needs to be assessed carefully in light of the inter-country adjustment context, including any risks of overshooting in the real effective exchange rate. Recent euro-area experience underscores also the role of financial markets – both in opening new opportunities for investment and growth and, at times, in complicating the adjustment process. But the benefits of financial integration are only just starting to be tapped. Growing cross-border asset holdings can make a major contribution to smoothing incomes during adjustment episodes, and market integration can dampen local credit shocks. In a monetary union with a small budget at the EU level and low labour mobility, these financial market mechanisms hold particularly important potential.

TABLE OF CONTENTS

ADJUSTMENT AND SURVEILLANCE ISSUES

1. Enhancing adjustment dynamics

Previous chapters have described and analysed the nature of economic adjustment in the euro area and have uncovered opportunities and challenges for policy-makers in order to improve the functioning of the euro area. This chapter elaborates on policy challenges in the areas of structural reforms and wage determination, fiscal policy, and financial market integration, and discusses some possible issues related to surveillance.

1.1 Structural reforms and wage determination

Wages are the crucial factor in equilibrating demand and supply on the labour market. Wage setting mechanisms strongly contribute to determining the level of equilibrium unemployment in an economy; they are decisive for an efficient allocation of labour resources across economic activities; and, obviously, the wage formation process plays a key role in absorbing macroeconomic shocks and cyclical disturbances in a smooth way. It is a widely held belief among both pundits and policy-makers that EU wage formation systems suffer from significant shortcomings in almost all of these respects which, in consequence, could seriously impair the efficient working of the euro area.

Conceptually, two different dimensions of wage adjustment mechanisms need to be distinguished: (i) nominal wage and price flexibility is key in responding to country-specific aggregate demand shocks that alter real equilibrium exchange rates: flexible money wages, if combined with flexible prices, should impact on the cyclical sensitivity of output and employment, bringing about the required changes in real effective exchange rates and allowing for equilibrating current account dynamics; and (ii) real wage flexibility to bring wages in line with productivity developments at the regional, sectoral and occupational level; flexible real wages will allow for a smooth reallocation of labour resources across economic activities in the event of industry-specific or supply-side shocks, thus lowering equilibrium unemployment.

Obviously, in the EMU framework, it is even more important than in the past for wage developments to be in line with both the macroeconomic framework set at the Community level and the individual country-specific requirements. Overall nominal wage developments must be consistent with the goal of price stability. Excessive nominal wage increases triggering inflationary risks for the euro-zone as a whole – as will hold true, in particular, in the case of larger countries – will inevitably provoke a tightening of monetary conditions with adverse effects on growth and employment in the entire monetary union. Moreover, while inflationary wage pressure may not significantly affect overall euro-area inflation when confined to one – smaller – country or region alone, it will sooner or later, via its effect on relative unit labour costs, depress competitiveness and employment in this country or region.

Thus, in economic and monetary union, nominal wage flexibility becomes even more significant because there is a need for alternative adjustment mechanisms to substitute for domestic monetary policy. The argument rests on either the risk of asymmetric demand shocks or the risk that a common monetary policy could affect the various economies differently. With nominal exchange rate devaluation no longer an option, any substantial error in wage setting would ultimately translate into a deterioration in labour market conditions and painful adjustment thereafter. While this may have provided some incentives for more bargaining co-ordination to promote nominal wage flexibility, it has also been argued that inherent in the integration process are forces such as non-benign wage convergence mechanisms, for example wage imitation effects, which could actually increase nominal rigidity. This implies that more protracted

output adjustment may follow, even though the equilibrium level of employment may increase and structural unemployment may be lower.

Indeed, a second dimension of the wage formation mechanisms concerns the impact of economic and monetary union on equilibrium real wages (measured in labour efficiency units), and thus on equilibrium unemployment, or more loosely speaking on the average levels of real wages and unemployment over the business cycle. It has been widely held that, in general, EMU should provide improved framework conditions for employment-compatible wage bargaining. Indeed, with all the elements of the Marshall-Hicks rule of labour demand likely to operate, the wage-elasticity of labour demand can be expected to rise and, thus, the link between wage and employment trends becomes more evident and stringent. Increased product market competition results in fewer rents that could be distributed in wage bargaining. Moreover, trade unions that recognise the impact of higher goods market competition on the elasticity of labour demand are likely to reduce the claimed mark-up of effective wages over the competitive wage outcome. And, last but not least, many structural labour market reform efforts work precisely in the same direction.

Obviously, real wage moderation, in the sense of reducing the mark-up of effective wages over competitive wages, helps to increase employment and lower structural unemployment over the medium term, without necessarily compromising domestic demand in the economy. This assertion is not only solidly backed by standard economic theory, but also by the factual experience of many euro-area countries, in particular in the second half of the 1990s. However, it is important to bear in mind that the relationship between real wage moderation and observed wage and productivity developments is anything but straightforward. The textbook dynamic adjustment path following an employment-friendly shift of the wage-setting curve, for example, implies an initial fall in real efficiency wages followed by a period of real wages rising faster than trend productivity until equilibrium is restored. It should also be noted in this context that aggregate real wage moderation is a fairly poor substitute for wage differentiation when it comes to helping to price the low-skilled back into jobs.

From a bird's eye perspective, structural wage pressures have been subdued in the early years of the euro area. Indeed, the most recent assessment by the Directorate General for Economic and Financial Affairs indicates a decline of the NAIRU for the euro area by about 1½ percentage points, suggesting therefore that about half of the improvement in actual unemployment could be considered structural in nature. By and large, other international bodies such as the OECD and the IMF have arrived at pretty similar conclusions. In terms of having a better understanding of the nature of the observed wage discipline as reflected in the fall of the NAIRU, the second half of the 1990s has indeed witnessed relatively widespread product and labour market reforms in most euro-area countries, spurring competition in goods and services markets and cracking down on insider-outsider divisions in the labour markets. As a result, the potential for rent-sharing behaviour between workers and firms tends to be strongly reduced, an effect equivalent – in the context of the Calmfors-Driffill hypothesis (Calmfors and Driffill, 1988) – to a forced decentralisation of wage bargaining, thus flattening out the 'hump'.

While it is certainly difficult to establish precisely the contribution of the various reform efforts, there can be little doubt that they have left their traces in a reduction of the NAIRU by helping to keep a lid on wage demands. However, it must also be acknowledged that reform progress has been fairly uneven across countries – with all the major economies of the euro area still plagued by relatively high structural unemployment – and rather piecemeal in nature. Moreover, rising concerns about the slow working of the competitiveness channel as a critical adjustment mechanism in economic and monetary union suggest a need to take a fresh look at the role and the evolution of wage bargaining systems in the euro area.

The evolution of wage bargaining systems in the early years of the euro area has been characterised by, at first sight, somewhat contradictory, tendencies. Firstly, the trend towards de-unionisation has continued with wage bargaining being gradually decentralised to the firm level, but often these changes have occurred through opening clauses in sector-specific agreements rather than through the complete abandonment of such structures. Notwithstanding this trend towards decentralisation, there was also an increase in national level bargaining beginning in the 1990s with the renaissance of social pacts, particularly in the run-up to the launch of economic and monetary union. While such incomes policies are not structural reforms per se, they can have an important role to play in encouraging wage restraint. Moreover, trade unions have made efforts to co-ordinate wage agreements across countries, in order to avoid “races to the bottom” in wage bargaining in the context of monetary union, but these have been mostly informal and seem to have only had a limited impact.

As argued above, in the euro area, there are indeed some clear incentives working in the direction of co-ordinated bargaining, since substituting nominal wage flexibility for monetary policy autonomy – which may be required to smoothly absorb asymmetric shocks – may be easier under such conditions. However, experience suggests that a number of other conditions must also be met to uphold such bargaining arrangements. Among these, trading tax cuts

for wage restraint have figured prominently, but flanking policy measures to increase labour supply availability and some degree of in-built wage differentiation flexibility appear to be crucial as well. [1]

It is worth noting in this context that co-ordinated bargaining did not necessarily run counter to delivering fairly differentiated wage outcomes across sectors, regions and qualifications. Moreover, recent years have seen a move towards "organised decentralisation" in wage bargaining in several countries, for example, in the form of so-called opening clauses allowing for some degree of firm-level differentiation. With labour market policies geared to mobilise the labour force potential, overall wage pressures may indeed remain subdued and, thus, the infant years of the euro area may well see sustained wage moderation supported by co-ordinated wage bargaining at national level.

However, wage bargaining co-ordination and social pacts face a fundamental problem of time consistency, making it difficult to lock in the bargain since there are strong incentives for the individual actors to deviate ex-post from prior agreements. Moreover, governments may find it increasingly difficult to design supportive policies deemed acceptable by the main actors in wage bargaining. Thus, given an inherent fragility of social pacts over the medium to long term, and against the background of strong trends towards more decentralisation of bargaining to firm and local levels, wage bargaining co-ordination efforts may ultimately fail. Unfortunately, it cannot be ruled out that such a failure may result, at least temporarily, in wage bargaining outcomes that tend to be less employment-friendly. Indeed, it is by no means straightforward to see how wage determination mechanisms could deliver the necessary degree of wage flexibility and differentiation at the disaggregated level, while at the same time ensuring that overall wage developments are consistent with intra-euro-area real equilibrium exchange rate requirements.

Obviously, from the perspective of intra-area realignments of real effective exchange rates, which may be required to adjust to asymmetric shocks and/or to correct for unsustainable relative competitive conditions that may have gradually built up over time, nominal wage flexibility is crucial. The available empirical estimates suggest that nominal wage flexibility in the euro area as a whole is fairly similar to that in the US. However, given the much weaker other adjustment mechanisms, such as labour mobility and fiscal transfers, the necessary degree of nominal wage flexibility in euro-area countries may actually be significantly higher. It is unclear whether wage bargaining systems can be expected to deliver such an outcome, except perhaps in a situation of obvious and deep crisis. The alternative/complementary route to realign real equilibrium exchange rates via supply-side measures is, while indispensable, admittedly cumbersome and in addition only works slowly. Consequently, there is a real risk that the correction of intra-area imbalances in competitive positions will imply protracted periods of adjustment with fairly high costs in terms of output losses and unemployment.

Against that background, the first-best policy option is of course to avoid any substantial errors in wage setting in the first place. As the responsibility for well-adapted wage-setting – closely reflecting productivity developments – continues to fall primarily into the domain of the social partners, it appears essential to strengthen the social dialogue at all the appropriate levels and to ensure that the actors in the wage bargaining process have the necessary information about adjustment challenges and the implications of different lines of action. It seems particularly important to analyse whether current wage and price developments are benign in terms of adjustment needs in order to avoid any significant overshooting in intra-euro-area real effective exchange rates. This can be illustrated by the example of an economy returning towards equilibrium after a shock that had caused a country-specific boom and a phase of appreciation. Once the phase of depreciation begins, wage adjustment that lagged significantly behind cyclical developments could result in the real effective exchange rate continuing to depreciate beyond the point needed to bring the relative output gap in the national economy back in line with common monetary conditions.

More flexible wage-setting mechanisms, however, need to be supplemented by an appropriate degree of price flexibility. The creation of more integrated and competitive product markets helps raise the speed with which prices within the euro area adjust to economic shocks. Sufficiently strong competition in euro-area product markets also helps ensure that wage moderation and productivity gains are reflected in lower price levels. With rigid prices, on the other hand, stronger nominal wage rigidities are likely to emerge as flexible money wages would result in larger real wage losses and will not translate into lower adjustment costs in terms of output and employment.

Since the establishment of the euro area, a number of reforms aimed at opening up product markets to competition have been introduced and competition rules have been modernised. Nevertheless, sectoral enquiries show that in spite of measures taken effective competition in network industries and other services sectors is still limited. A more effective implementation of agreed reform measures and a more ambitious reform programme are therefore essential to reduce inflation inertia, particularly in services. Thus, ensuring competitive product markets, including services, does not only foster the medium-term growth potential, but it is also an indispensable element of any strategy to reduce the welfare cost of cyclical adjustment processes.

[1] In the past few years formal or informal agreements on wage policy have (again) been reached in several euro-area countries, typically committing the actors in collective bargaining to some form of wage discipline in order to meet EMU stability goals and to improve competitiveness. Government involvement may take various forms, for example trading tax cuts and/or specific labour market policy measures against wage restraint, as has been the case in Finland and Ireland.

1.2 Fiscal challenges

Macroeconomic developments and asset market fluctuations which are related to competitiveness and adjustment processes in the euro area affect fiscal developments, as well as the indicators for measuring consolidation efforts and the underlying fiscal position. The Stability and Growth Pact (SGP), which was revised in 2005, allows this knowledge to be taken into account in order to set appropriate budgetary targets and assess compliance with the letter and spirit of its requirements. The increasing experience with economic developments and adjustment within the euro area allow for developing knowledge and understanding. This may provide useful information to improve fiscal policy behaviour and minimise the risks of erroneous fiscal policies and contribute to enhancing fiscal surveillance in the context of the SGP framework.

This section discusses fiscal policy and the EU fiscal framework in the context of adjustment in monetary union. It discusses in particular, peculiarities of fiscal stabilisation with possible protracted adjustment dynamics and the effects on the budget balances. Firstly, it looks at the desirability of fiscal stabilisation in the context of such adjustment dynamics. Secondly, as the safety margins of the SGP are based on the assumption of normal cyclical developments, it discusses the budgetary effects of automatic stabilisers considering adjustment dynamics. Thirdly, it looks at successful and unsuccessful fiscal consolidation under adjustment dynamics. Fourthly, it raises challenges for fiscal surveillance stemming from difficulties to measure fiscal consolidation efforts and to assess the soundness of the fiscal position. And finally, it discusses how the revised SGP can be implemented to ensure effective fiscal surveillance in this context.

1.2.1 Some theoretical considerations on the effectiveness and desirability of fiscal stabilisation in EMU

Theory suggests that short-run fiscal multipliers should increase when countries participate in economic and monetary union. The effectiveness of fiscal policy is higher under a fixed exchange rate regime or in a monetary union due to reduced crowding out via the interest rate channel. In the longer run, as the extent of real crowding out grows through increasing trade integration in monetary union, the size of the fiscal multipliers gradually decreases again.

Fiscal policy impacts directly on current income, under one or more of the following assumptions: sluggish price or wage adjustment, slack productive capacity, and myopic or liquidity-constrained firms and households. If prices are flexible, fiscal action is relatively ineffective at demand management, but also less likely to be desirable because output would generally be close to its potential. Similarly, if economic agents are forward-looking the effects will generally be muted as the future tax implications of fiscal policy are taken into account in their decisions. The effect of fiscal policy on aggregate demand also depends on the fiscal instrument used. In general, stabilisation on the expenditure side is more effective than on the revenue side.

The strength of the automatic stabilisers depends on: the size of the government; the progressiveness of the tax system; the generosity of the benefit system; the sensitivity of employment to output fluctuations; and the composition of government revenues (share of cyclically-sensitive tax bases). Automatic stabilisers can be strengthened by adjusting these elements. However, ways to strengthen the stabilisers can have a negative impact on economic efficiency or undesired distributional effects. Distributional and economic efficiency based arguments for the taxation and government expenditure structure are likely to be generally considered more important than some increase in the automatic stabilisation effect. The room for manoeuvre to increase their strength is therefore limited.

As the automatic stabilisers do not distinguish between the sources of shocks, nor whether they are permanent or temporary, a very persistent adverse shock could lead to systematic, unsustainable budget movements that can only be offset with a discretionary fiscal change.

Blanchard (2001), using a standard static (Mundell-Fleming type) framework, analyses the need for fiscal policy stabilisation in the euro area in the cases of Spain and Ireland. In both cases, if the economy is let to run its course unhindered, inflation leads to a real appreciation such that demand eventually falls to the level of equilibrium output. What differs is the real exchange rate and thus the composition of demand, *internal* versus *external*. The more use of fiscal contraction, the smaller the real appreciation and the more favourable the external balance. The desirability of fiscal policy stabilisation in an overheating phase depends on the source of overheating: internal or external demand. In the case of overheating caused by internal demand (Spain), fiscal stabilisation may be more desirable than in the case of overheating caused by external demand (Ireland).

Such analysis on the basis of simple macro-models is useful to improve understanding of fiscal policy stabilisation in the context of adjustment in the euro area. However, the simplifying assumptions underlying the model should be kept in mind when assessing the desirability of fiscal policy stabilisation. Firstly, a balanced current account may not be the right objective or benchmark when assessing the need for external or internal adjustment. Substantial current-account deficits may be sustained and desirable to allow for efficient inter-country and inter-temporal allocation of consumption and investment, especially in the context of catching-up dynamics. Secondly, when considering the desirability of fiscal policy stabilisation, the initial budgetary position matters as budgetary sustainability and continuity should be preserved. Thirdly, the desirable role of fiscal policy depends on the type of shock: real

exchange rate adjustment may be a slow and painful process, sometimes more requiring structural reform than fiscal adjustment, in particular when a real depreciation is required.

Taking account of adjustment dynamics and price and wage rigidities, a trade-off arises when assessing the desirability of fiscal stabilisation. Considering for example the case of downward price and wage adjustment, countercyclical fiscal policy or automatic stabilisation would reduce the depth of the output effect associated with the adjustment by dampening demand fluctuations at the expense of lengthening the adjustment process. At the same time, the inflation effect is dampened. There may be a trade-off in this case between minimising either the depth or the length of the ensuing output fluctuations, as fiscal stabilisation slows down the pace of adjustment leading to a more protracted but shallower growth slowdown. The overall cost in terms of output and inflation, with and without fiscal stabilisation, will depend on the degree of price and wage responsiveness to negative output gaps of different sizes. When the social welfare implications are considered, not only the difference in the overall loss of output needs to taken into account, but also the social preferences as regards the depth and length of slowdown. Moreover, and maybe more importantly, the initial fiscal position may play a role, as the budgetary position may deteriorate towards apparently unsustainable levels. In such case, the intention to reduce the depth of the output fluctuations by fiscal policy stabilisation may not reach its objective as, eventually, pro-cyclical discretionary fiscal policy may be required to maintain sustainability.

1.2.2 Automatic fiscal stabilisation considering budgetary risks and uncertainty

Discretionary measures and automatic stabilisation

Academic researchers have been sceptical for a long time about aggregate demand management on the ground that fiscal fine-tuning does not work due to decision and implementation lags, and irreversibility, as well as uncertainty about the real-time and future state of the economy.[2] This is reflected in the EU budgetary policy framework that envisages achievement of medium-term budgetary objectives in cyclically-adjusted terms, which are to be maintained over the cycle. It then relies on the (full) working of the automatic stabilisers for budgetary stabilisation. It should be recognised that automatic stabilisers are also subject to criticism, including: the lack of an optimal degree of smoothing; their belated effect not preventing a downswing; destabilising effect in the event of a supply shock; and possible change of sign of the stabilisers beyond a certain tax threshold.[3] Box 1 describes the concept of the minimal benchmarks in the fiscal stabilisation philosophy of the EU fiscal framework.

2 See, for instance, European Commission (2002a).

3 Given large tax and welfare systems, free operation of automatic stabilisers would ensure sizeable cyclical smoothing at the national level. For estimates on the smoothing power of automatic stabilisers with various shocks, see Brunila, Buti and In't Veld (2003).

Box 1: The philosophy of budgetary stabilisation in the EU fiscal framework

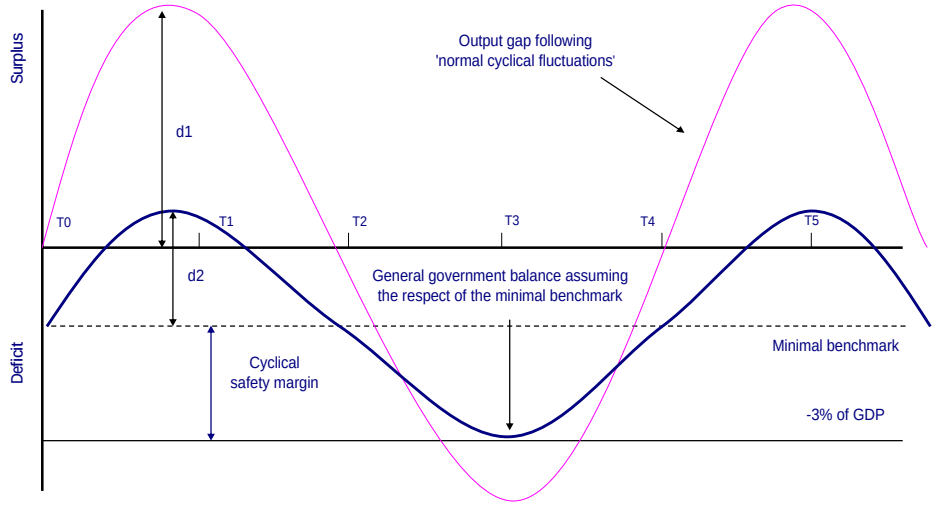
Under the rules of the EU fiscal framework, Member States are required to achieve medium-term budgetary positions which are intended to provide a sufficient safety margin towards the 3% of GDP reference value for the nominal budget balance and to ensure a rapid decline in the government debt-to-GDP ratio in order to prepare for the upcoming challenge of ageing populations. The medium-term budgetary positions are measured in cyclically-adjusted terms. Nominal budget balances are allowed to fluctuate around the medium-term objectives by letting the automatic fiscal stabilisers play fully as long as they do not risk breaching the 3% of GDP reference value.

With a view to providing Member States with an indication on the minimal structural budgetary position that should be attained in order to avoid reliance on pro-cyclical policies in bad cyclical times, the Commission introduced in 2000 the concept of 'minimal benchmark'. This indicator corresponds to the 'structural' general government budget balance (i.e. the budget balance adjusted for the cycle and other elements having a temporary influence on the budget balance such as one-off measures) which allows a country to let automatic stabilisers work freely with little risk of requiring pro-cyclical fiscal tightening to avoid breaching the 3% of GDP reference value under normal cyclical circumstances. Note that for most Member States, the medium-term budgetary objectives are more ambitious than the minimal benchmarks as they also need to ensure a rapid decline in the government debt-to-GDP ratio.

The minimal benchmark is calculated taking into account, for each Member State, the size of the cyclical safety margin needed to withstand business cycle fluctuations without infringing the 3 % of GDP deficit limit. The size of the safety margin depends on two elements: First, the magnitude of cyclical fluctuations; Member States with pronounced cyclical fluctuations, i.e. typically reaching high and low output gaps values over a cycle, will need to achieve a more demanding structural budgetary position in order to ensure that the 3% ceiling is not breached in the low phases of the cycle. Second, the sensitivity of the budget balance to cyclical fluctuations; this sensitivity will tend to be larger in Member States with a large general government sector. It will also tend to be more pronounced in Member States where tax revenues react strongly to cyclical developments, e.g. in Member States with a large share of progressive taxes.

Graph 1 illustrates the concept of minimal benchmark. The bold line shows developments in the general government balance of a country maintaining its underlying budgetary position at the minimal benchmark and letting automatic stabilisers play fully over the cycle. For such a Member State, the deterioration in the general government balance in bad cyclical times (period T3) does not trigger a breach of the 3% reference value. In the graph, d1 and d2 provide measures of the amplitude of 'normal' cyclical fluctuations for, respectively, the economic activity and the fiscal balance. The reaction of the budget balance to the cycle, i.e. the budgetary sensitivity to the cycle, is measured by the ratio d2/d1.

Graph 1: Minimum benchmarks – an illustration



Source: Commission Services

The concept of the minimum benchmark relies strongly on what can be considered as "normal cyclical fluctuations". This qualification depends on the measurement of the cyclical element of economic developments and in particular the output gap. In case of adjustment in the euro area, it is possible that "cyclical" developments may be longer lasting and may therefore be mistaken for structural. The output gap could be underestimated in the case that part of the cyclical developments is attributed to have a structural nature. As a consequence, the required safety margin calculated on the basis of conventional output gap measures may not provide an adequate safety margin to let the automatic stabilisers play fully in the context of (real exchange rate) adjustment in the euro area.

In the context of adjustment dynamics in economic and monetary union, some deviations from the principle of full reliance on automatic stabilisers could be contemplated. Discretionary fiscal tightening on top of the automatic

stabilisers may be called for especially if an economic boom is being fed by perverse local effects from low real interest rates. In particular, when a Member State enters the euro area or is in the convergence process towards entering the euro area and some of the monetary and financial impulses can be anticipated, discretionary fiscal restrictions can be put in place well in advance. In this case, some arguments against fiscal fine tuning do not hold. It should also be considered that if the entering Member State experiences a decline in the exchange-rate risk premium, growth may be more domestic-led for some period, with a deteriorating current account position, implying revenue-rich growth. In such case, the headline and structural budget balances may improve considerably, without tightening the fiscal stance. Allowing and pursuing improvement in the fiscal balances and surpluses in good times will help in reducing the risk of overheating, while at the same time improving the budgetary position to deal with possible downward adjustment or normalisation of revenue growth. A challenge in this context may be to preserve fiscal surpluses and continue a countercyclical policy when the budgetary position exceeds the medium-term budgetary objective.

The desirability of the full working of the automatic stabilisers during a prolonged downswing in a context of downward price and wage adjustment is not always straightforward. Fiscal stabilisation could slow down the price and wage adjustment and lengthen the downswing. The desirability of full fiscal stabilisation in this context boils down to a social-welfare question: are protracted but shallow downturns to be preferred over short but deep downturns? In the event of persistent shocks, a high degree of fiscal stabilisation, by keeping output at around the old potential level, is actually destabilising. It should also be considered that the possibility of a more protracted downturn puts the budgetary position at risk of deteriorating sharply. In case the budgetary deterioration leads to deficit levels which can be perceived as being unsustainable go beyond the reference value of the SGP, some pro-cyclical tightening is required.

There is uncertainty about whether a country is in a phase of building up of imbalances or converging towards equilibrium. The equilibrium real effective exchange rate, which is a central variable in the euro-area adjustment process, is notoriously hard to estimate. In addition, it is moving with developments in world trade (demand and prices) and euro-exchange rate developments, due to differences in geographical and sectoral specialisation in the Member States. Another difficulty caused by this uncertainty is that adjustment processes in economic and monetary union may lead to biased and pro-cyclical potential growth estimates (see also section 2.3.4.). Consequently, ex-ante and in real time, fiscal policy may seem to be countercyclical or a-cyclical, while ex-post, fiscal policy turns out to have been pro-cyclical (e.g. case of the Netherlands or Portugal in the late 1990s). Therefore, when output and prices increase more than the euro-average, a prudent fiscal stance needs to be considered.

Budgetary risks of protracted periods of downward adjustment

Economies in a monetary union hit by asymmetric shocks may be exposed to periods of exceptional output and asset price developments.[4] In such an event the sensitivity of the budget may undergo important changes which, if not taken into account, may exacerbate the cyclical developments. One of the findings of Chapter VII on country adjustment experience is that the current account balance plays an important role when countries are adjusting to a change in the exchange risk premium. Countries in which the risk premium declines (e.g. Spain, Portugal, Ireland and Greece) experienced sharp deteriorations in their current account balance, while other countries like Germany saw their current account balance improve drastically. The adjustment of the current account is rather long-lived. During the adjustment, the composition of demand is tilted towards either revenue-rich domestic demand in the first group of countries or revenue-poor external demand in the second group.

Taking account of these dynamics, protracted periods of downward adjustment may require more room for budgetary manoeuvre than provided by the current minimal benchmarks in order to avoid breach of the reference value or the need to rely on pro-cyclical fiscal tightening. Not only the length of downward adjustment, but also its relation to tax elasticities should be considered. As long as the current account position deteriorates (improves), tax-to-GDP elasticities will be generally high (low). To the extent that the fiscal stance is assessed and budgetary policy is designed on the basis of 'normal' elasticities, such a temporary change in revenues may be considered permanent, leading to undesirable fiscal behaviour. As growth composition changes during downward adjustment periods, and windfall revenues – especially from assets and corporate profits – may fade, the budget balance may deteriorate significantly more than would be estimated by applying estimated budget sensitivities to the cyclical fluctuations and the estimated output gap. In this regard, full automatic stabilisation does probably not imply an unchanged cyclically-adjusted balance. This implies that a larger margin may be required than that provided by the current minimum benchmarks in case of overheating in a context of adjustment dynamics in order to avoid excessive deficits in the adjustment phase thereafter. Countries should in good times (with high tax elasticities, high inflation and high growth) achieve and maintain significant surpluses. Possibly, the “minimal benchmarks” which are currently on

[4] The tax structure and ownership of housing is likely to affect the relation between asset prices and tax revenue. Moreover, financial market institutions that enhance the ability to turn paper wealth into consumption determine the size of the wealth effect. The presence of international companies and the diversification of their activities and assets across countries may affect the volatility of fiscal variables.

average at a deficit of around 1½% of GDP (varying from 0.5% to 2%) could be reconsidered taking account of the effect of adjustment dynamics on the measurement of potential growth and the output gap and of possibly anticipated developments of tax elasticities. Alternatively, considering the uncertainty around the identification of adjustment dynamics and its budgetary risks and the ensuing difficulty to develop a different calculus for the minimum benchmark that would capture such risks, they could be applied as true "benchmarks" requiring judgement in their assessment. The budgetary targets could consequently be set more ambitiously when a Member State experiences (idiosyncratic) good economic times. Careful consideration of the extent to which the budgetary position benefits from real exchange rate appreciation and low real interest rates may contribute to avoiding a sharp deterioration of budget balance towards excessive deficit levels.

1.2.3 Fiscal consolidation in a context of adjustment dynamics

Indicators for consolidation efforts and underlying fiscal positions

The cyclically-adjusted balances (CAB) net of one-off and temporary measures (structural balance) and the change therein are the core indicators of the fiscal analyses of the SGP. In particular:

- Changes in the structural balance measure annual compliance with the adjustment path in the excessive deficit procedure or towards the medium-term budgetary objective[5];
- The deviation of the structural balance from the medium-term objective determines the need for fiscal adjustment in the medium-run in order to secure a sustainable debt development and provide an adequate safety margin to the 3% of GDP reference value;
- The structural balance is also a major factor in the assessments of long-term sustainability as its position is extrapolated into the future to determine the projections for debt developments when the costs of ageing are incorporated.

The structural balance is the key indicator to identify an appropriate fiscal position or consolidation path. The change in the structural balance provides the main indicator to assess the fiscal effort or lack of it. Its accuracy relies crucially on the potential growth and output gap estimates. In this context, uncertainty about the current and future state of the economy is a major challenge for fiscal surveillance. The effectiveness and appropriateness of fiscal policy measures and hence, the length or amplitude of economic adjustment depends, *inter alia*, on the reliability of real time data and diagnostic methods on which the policy decisions are based. Section 1.2.4 below discusses the issue of potential growth and output-gap measures and their importance for fiscal policy.

Fiscal consolidation and the real exchange rate in the context of adjustment in the euro area

A glance at recent successful and unsuccessful fiscal consolidation episodes in EU Member States seems to indicate some correlation between the occurrence of real exchange rate appreciation and successful consolidation (e.g. Spain, Ireland, Netherlands) and depreciation with difficulties in achieving necessary fiscal consolidation (e.g. Germany). As the real exchange rate is one of the main elements in the adjustment process in the euro area, it is notable that economic literature confirms the importance of real exchange rate developments for the success of fiscal consolidation.[6]

These findings seem to indicate that the changes and the level of the real exchange rate determine to a significant extent the future development of budget deficits and the likely success of budgetary consolidation efforts. It also indicates that deviations from real exchange rate equilibrium affect the underlying budgetary position. In a world of perfect knowledge and foresight, taking account of deviations of the real exchange rate from its equilibrium could enhance fiscal policy making and fiscal surveillance importantly.

The importance of adjustment and (real) exchange rate dynamics for fiscal consolidation can be illustrated with an example. Consider the case that a euro-area Member State has benefited from a prolonged period of high growth and

---

5 The excessive deficit procedure is initiated when a nominal budget deficit rises above – or is planned to rise above - the reference value of 3% percent of GDP. It may also be initiated if the debt-to-GDP ratio exceeds 60% and is not declining at a satisfactory pace. The objective of the procedure is to correct the excessive deficit promptly. The medium-term budgetary objective is set by the Member States to ensure sufficient safety margin towards 3% of GDP and to ensure medium and long term sustainability of public finances. It is measured in "structural terms", i.e. cyclically-adjusted, net of one-off and temporary measures.

6 See for example Lambertini and Tavares (2003) on the link between (real) exchange rate developments and fiscal adjustments. They find that successful fiscal adjustments are preceded by large exchange rate depreciations, whereas unsuccessful adjustments are preceded by appreciations. Depreciation before fiscal consolidation is a significant and quantitatively important predictor of the success of fiscal adjustment. Other authors also pointed to the potential role of (real and nominal) exchange rate developments before and during fiscal adjustments. Giavazzi and Pagano (1990), when investigating the role of expectations of future policy (non-Keynesian effects) find that disentangling the effects of wage moderation and the effects of fiscal variables on the supply side and the cost of firms, versus the effect of the exchange rate is crucial.

high inflation vis-à-vis euro-area competitors, for example in the context of adjustment towards its equilibrium real exchange rate in case of an initial undervaluation. Without changing fiscal policy, the measured *structural budget balance*, which is the main indicator of fiscal effort and the fiscal position in the revised SGP, may be significantly affected as the adjustment effects are not fully captured in the measures of cyclical adjustment. In periods of an adjustment characterised by a prolonged period of high growth and inflation, measures will generally overestimate potential growth, because potential growth estimates are partly determined by actual growth outcomes. The assumptions made about the length of cycles in the filtering of cyclical effects from structural effects determine the size and risk of such measurement errors (see next section). Ex-post downward revisions in potential growth estimates put continuous downward pressure on the measure for the structural budget balance, as growth declines towards and below its true potential. Portugal suffered from such downward revisions of potential growth after the boom in the run-up to euro-area entry. Currently, Spain may possibly be at risk of similar dynamics when the domestically-led boom comes to an end. In case the prolonged period of high growth and inflation has lead to some degree of overheating and overshooting of key economic variables (e.g. equilibrium real exchange rate), the mis-measurement of the fiscal position would be more pronounced. The country would require a period of downward relative price and wage adjustment and unwinding of imbalances with repercussions on domestic growth and possibly asset prices. In such an adjustment period, the nominal growth rate and revenue growth could drop considerably more, further hampering effective fiscal consolidation. The German experience since 1999 illustrates these dynamics. While in Germany, nominal expenditures were virtually frozen since 1999 (with the exception of 2001), headline and structural budget balances continued to deteriorate.[7]

1.2.4 Uncertainty and measurement issues in the fiscal framework

Uncertainty about the state of the economy and the origin and nature of shocks

In theory, knowledge about adjustment dynamics could be taken into account to improve fiscal surveillance and fiscal policy. These considerations assume that policy makers have detailed a priori knowledge about the length of the adjustment process and/or the origin (supply or demand) of the country-specific shock. However, as a practical matter, economic shocks do not come with a label and different shocks may hit the economy at the same time. Systematic assessment of past real exchange rate developments and real interest rates may give an indication as to how much Member States' budgetary indicators have benefited or suffered from effects related to adjustment dynamics in the euro area as described above. Projecting future risks and trends is more difficult. Equilibrium real exchange rates are notoriously hard to estimate and there is a very large degree of uncertainty as to the existence and the extent of internal and external imbalances related to competitiveness adjustment (real exchange rate overvaluation and overheating). Often, only *ex post* their existence can be determined with some degree of certainty. Complementary systematic analysis and consideration of a wider set of economic indicators may improve fiscal surveillance.

Consider for example the case of a Member State which has benefited from high growth and high inflation (and booming asset prices) for a prolonged period (e.g. Netherlands 1993-2000 and Spain 1997-now). Similarly, a country which has experienced a prolonged period of low growth and depreciating real effective exchange rate could be considered (e.g. Germany 1995-2005). Looking forward, several paths for growth and the real effective exchange rate are possible. First, the trend is sustained into the future, either temporarily if the real effective exchange rate is still converging to its equilibrium, or over a longer period of time, if other effects put the equilibrium real exchange rate vis-à-vis euro-area competitors on a trend increasing/decreasing path (Balassa-Samuelson effects, quality improvements or trend shifts in preferences). Even in case of a sustainable increasing trend real effective exchange rate, a Member State is susceptible to overheating pressures, as nominal growth is permanently significantly higher than nominal interest rates, leading to capital inflows (investment opportunities). If financial markets channelling is not efficient, overheating pressures may arise and capital flows are for example largely finding their way to housing/dwelling investment.

Second, the trend will end and inflation and wage developments will converge to the euro-area average, in case external and domestic imbalances have resolved and the real exchange rate has converged to its (steady) equilibrium. This would still imply a growth and inflation slowdown, associated with a deteriorating budgetary position.

---

[7] Similarly, the effect of an overvalued real exchange rate and adjustment dynamics on the debt-to-GDP ratio can be considered. These effects can be disentangled as follows. Firstly the numerator, nominal debt is affected by the impact of adjustment dynamics on the structural and nominal budget balance (and thus net lending) as discussed above. Secondly the denominator, nominal GDP deviates from potential (nominal) GDP and will need to adjust downwardly, as both real GDP and the price level is above its potential. The deviation of prices from the equilibrium price level is reflected by the overvaluation of the real exchange rate. The downward adjustment process decreases the denominator and increases the nominator, leading to a higher debt to GDP ratio when imbalances have been unwound. In fact the direct effect of downward real exchange rate adjustment on public finances can be considered similar to the nominal depreciation of a currency in a country with largely foreign denominated debt. Instantaneous adjustment of the imbalances would lead to an increase of the debt-level to that level. Ironically, this could be considered a best case scenario which would occur if prices were fully flexible.

Third, the trend will reverse (temporarily), in case the equilibrium real exchange rate (and domestically the price and wage level) have overshot their equilibrium. This would occur if the past years should be characterised as overheating/overcooling. The reversal would imply a sharp growth and inflation slowdown (similar to the development in the Netherlands that build up imbalances in the second half of the 1990s), associated with a sharp deterioration in the budgetary position.

The number of possibilities is large, more so as there is no stable trend and the Member States are subject to shocks and a continuously changing (external) environment. The remarkable growth performance of Spain, for example, is unlikely to exclusively mark a long period of overheating vis-à-vis its growth potential. Catching-up effects, immigration and other structural processes are likely to have lifted the 'speed limit' of the Spanish economy for a prolonged period which in turn may allow an increase in discretionary expenditure without compromising the long-term sustainability of public finances. On the other hand, the bias of private investment towards housing may not bode well for TFP and potential growth. A clear quantification of the structural vis-à-vis the cyclical component, which would be key for policy purposes, remains difficult. Similarly, yet with a different sign, the protracted slowdown of economic growth in Germany and Italy is unlikely to be solely the result of temporary country-specific shocks or entry conditions into the euro area requiring one-off adjustment, with no effect on the long-term growth potential of the countries. In fact, there has been a broad consensus that the dismal growth performance of Germany and Italy to a large extent reflects structural problems. On the other hand, the restructuring of "corporate Germany" and the strong recovery in competitiveness in the last several years may be the prelude to higher potential growth rates. A careful analysis of these phenomena should be factored in policy surveillance at EU level.

Origins of uncertainty about potential growth and the output gap

The uncertainty that policy makers are confronted with is also related to difficulties related to the measurement of current and past economic developments, which affect the ability to forecast. Measurement issues are typically not addressed in economic analysis. The current state of the economy, in particular, potential output and the output gap are assumed to be given and the appropriate policy recommendations are easily identified. In practice, however, both potential output and the output gap are unobserved variables the measurement of which is subject to a considerable degree of uncertainty. The difference between real time estimates and estimates for the same period derived later is generally significant. Hence, there is a considerable risk of implementing the wrong policies or to apply the wrong dosage thereby affecting the economic dynamic. The uncertainty originates in three different sources: (i) statistical revisions of data, (ii) inherent uncertainty about the future course of the economy, (ii) uncertainty about the model of the economy.[8]

The issue can be illustrated as follows. Estimates of the output gap are typically obtained by extracting an unobserved trend or potential GDP from real GDP. While different methodologies generally yield different estimates the most popular methods, such as the Hodrick-Prescott (HP) filter, share a common and arguably sensible feature: trend or potential GDP reflect some kind of weighted moving average of past and forecast real GDP. This means that periods of low or high economic growth will work its way into detrended output and hence the output gap. The responsiveness of trend or potential GDP with respect to actual GDP depends on the technical specificities of the method and should explicitly or implicitly reflect our understanding of the typical length of the business cycle and more generally, the underlying model of the economy. In case economic development is thought to be determined by temporary shocks around a stable trend the responsiveness should be relatively low. By contrast, if economic development is largely determined by permanent shocks the responsiveness should be higher.

[8] In the field of monetary policy, the implications of those uncertainties for the assessment of the state of the economy have been examined by Orphanides (2003) and Orphanides and van Norden (2002). More recently, similar work has been carried out in the field of fiscal policy for instance by Forni and Momigliano (2004) and Larch and Salto (2005).

Box 2: What is the degree of uncertainty in real time output gap estimates?

Table 1 reports some summary statistics concerning the reliability of the output gap estimates produced by the Commission services and the OECD for the euro-area countries in 2000-2005. Using the latest available estimate of the output gap as a benchmark, the statistics refer to the size of the revisions with respect to real time estimates, in particular with respect to the forecast of the output gap in year t produced in the preceding year and the estimate of the output gap for year t produced in autumn of the same year.

Table 1: Revisions of Commission Services' output gap estimates, 2000-2005

Summary statistics

Country	Mean			SD			MIN		
	Latest	Real time	Forecast	Latest	Real time	Forecast	Latest	Real time	Forecast
BE	0.2	-0.4	-0.5	1.0	0.6	0.2	-0.8	-0.8	-0.8
DE	-0.1	-1.0	-1.0	1.0	0.4	0.6	-1.1	-1.6	-1.5
EL	0.6	1.3	1.3	1.3	0.8	0.6	-1.2	-0.2	0.7
ES	1.2	0.2	-1.2	1.1	1.2	1.1	0.0	-1.3	-2.7
FR	0.7	-0.2	-0.3	1.2	0.4	0.4	-0.5	-0.7	-1.1
IE	1.9	1.1	0.2	2.4	2.3	2.3	-1.6	-1.6	-1.9
IT	0.3	-1.1	-1.0	1.3	0.5	0.3	-1.5	-1.5	-1.3
NL	0.1	-1.0	-1.1	2.2	1.3	1.4	-2.2	-2.2	-3.0
AT	0.2	-0.6	-0.4	1.1	0.4	0.3	-0.8	-1.1	-0.8
PT	0.4	-1.4	-1.6	2.2	1.4	1.6	-2.0	-2.9	-3.4
Overall	**0.6**	**-0.3**	**-0.6**	**1.6**	**1.4**	**1.3**	**-2.2**	**-2.9**	**-3.4**

	MAX			COR			OPSIGN		
	Latest	Real time	Forecast	Latest	Real time	Forecast	Latest	Real time	Forecast
BE	1.8	0.8	-0.1	1.0	0.7	0.5			
DE	1.1	-0.5	0.0	1.0	0.8	0.7			
EL	2.0	2.0	2.0	1.0	0.7	0.9			
ES	2.5	2.2	0.2	1.0	-0.1	0.7			
FR	2.3	0.3	0.0	1.0	0.9	0.7			
IE	4.9	4.0	3.3	1.0	0.9	0.9			
IT	1.8	-0.3	-0.5	1.0	0.9	0.2			
NL	3.3	0.6	0.4	1.0	1.0	0.9			
AT	2.1	0.0	0.1	1.0	0.8	0.5			
PT	3.0	0.5	0.4	1.0	0.9	0.9			
Overall	**4.9**	**4.0**	**3.3**	**1.0**	**0.7**	**0.6**	**0.0%**	**34.5%**	**37.9%**

Note: The statistics shown are: MEAN the mean, SD the standard deviation, MIN and MAX the minimum and maximum values, COR the correlation with the latest estimate (Autumn 2005) of the output gap. OPSIGN denotes the percentage of cases in which the estimate has changed sign with respect to the latest estimate.

Source: Commission Services

Table 2: Revisions of the OECD output gap estimates, 2000-2005

Summary statistics

Country	Mean			SD			MIN		
	Latest	Real time	Forecast	Latest	Real time	Forecast	Latest	Real time	Forecast
BE	-0.2	-1.0	-1.1	1.3	0.7	0.7	-1.5	-1.9	-2.1
DE	-0.6	-2.0	-1.8	1.7	1.0	1.2	-2.4	-3.3	-3.5
EL	0.6	0.4	0.6	0.5	0.6	0.5	-0.1	-0.8	-0.2
ES	-0.1	-0.6	-0.4	0.8	0.3	0.7	-0.8	-0.8	-1.0
FR	-0.7	-1.0	-0.8	1.4	1.2	1.3	-2.1	-2.4	-2.8
IE	2.0	2.4	2.0	2.6	2.3	2.7	-0.6	-0.6	-0.6
IT	0.2	-1.6	-1.8	1.3	0.5	0.9	-2.0	-2.0	-2.8
NL	-0.4	-1.5	-1.1	3.2	2.1	2.3	-4.0	-4.0	-3.7
AT	0.0	-1.2	-0.8	2.2	1.0	1.2	-2.2	-2.2	-1.9
PT	-1.2	-2.2	-1.8	3.1	1.9	1.6	-4.4	-4.4	-3.5
Overall	**0.0**	**-0.8**	**-0.7**	**2.0**	**1.7**	**1.8**	**-4.4**	**-4.4**	**-3.7**

	MAX			COR			OPSIGN		
	Latest	Real time	Forecast	Latest	Real time	Forecast	Latest	Real time	Forecast
BE	1.7	-0.1	-0.2	1.0	0.7	0.7			
DE	1.6	-0.7	0.1	1.0	0.9	0.8			
EL	1.4	1.1	1.3	1.0	0.9	0.9			
ES	1.0	-0.1	0.7	1.0	0.9	0.9			
FR	1.0	0.4	1.0	1.0	1.0	0.8			
IE	5.4	5.5	5.5	1.0	0.9	0.8			
IT	1.6	-0.6	-0.4	1.0	0.0	-0.7			
NL	4.0	1.6	2.0	1.0	0.9	1.0			
AT	3.3	0.3	0.8	1.0	0.9	1.0			
PT	3.1	0.1	0.2	1.0	1.0	1.0			
Overall	**5.4**	**5.5**	**5.5**	**1.0**	**0.8**	**0.8**	**0.0%**	**27.3%**	**25.8%**

Note: The statistics shown are: MEAN the mean, SD the standard deviation, MIN and MAX the minimum and maximum values, COR the correlation with the latest estimate (Autumn 2005) of the output gap. OPSIGN denotes the % of cases in which the estimate has changed sign with respect to the latest estimate.

Source: Commission Services

In line with expectations, the figures reported in Table 1 and Table 2 highlight a relatively high degree of uncertainty concerning the level of the output gap estimates of both the Commission services and the OECD. The average difference between the forecast of the output gap and the output gap derived from the latest available information is slightly higher than 1 percentage point for the Commission services' estimates and around ¾ of a percent for the OECD estimates. Second, in a relatively large number of cases the algebraic sign of the output gap estimate changes as additional information becomes available. There also seems to be a clear pattern concerning the direction of the revisions. The cyclical conditions seem to have turned out systematically better or less unfavourable than expected. This pattern is broadly consistent across all euro-area countries. The degree of (un)reliability does not change significantly if attention is focussed on the estimated change in the output gap instead of the level.

While it cannot be excluded that the relatively short time dimension of our sample may somewhat affect our results (especially in view of the fact that the years after 2000 where characterised by a series of negative growth surprises in a number of euro-area countries), the statistics in Table 1 and Table 2 are broadly in line with the empirical evidence in the literature (see for instance Orphanides and van Norden (2002) for the US and Rünstler (2002), European Commission (2006b) for the euro area.

The role of tax elasticities and changes in the cyclical sensitivity over time

The current state of the economy as measured by output gap estimates is only one key element in the assessment of the underlying budgetary position. The other key elements are the budgetary elasticities gauging the link between the economic cycle and the nominal budget. For instance, the cyclical sensitivity of the budget varies with the composition of economic growth depending on whether it is stronger in tax rich (poor) components such as private consumption (exports) or whether it goes along with a marked or shallow movement of asset prices. It may also vary due to the behaviour of tax payers which within the limits provided by the tax code may chose to distribute tax payments or to claim tax credit across time in different ways. Like in the case of the output gap, the measurement of budgetary elasticities is subject to uncertainties which impact on the assessment and formulation of fiscal policy and in turn affect the economic dynamics. All these elements are difficult to predict or to assess from an *ex ante* point of view, in particular in the planning phase of the budget. For instance, underestimating the sensitivity of government revenues during an economic upswing may lead to an overoptimistic assessment of the underlying budgetary position and induce policy makers to enact tax cuts or expenditure increases producing a pro-cyclical impulse. Conversely, in the subsequent economic downturn fiscal policy may then be forced to increase taxes or reduce expenditure again thereby deepening or lengthening the adjustment dynamics. The experience of the Netherlands since the second half of the 1990s provides an example of such revenue dynamics. The empirical relevance of such patterns and their implications for economic dynamics is reported in Jaeger and Schuknecht (2004) and OECD (2004). In particular, both works show that during the ITC-boom at the end of the 1990s in some euro-area countries extra revenues linked to pronounced asset-price cycles where perceived to be permanent and went along with tax cuts and/or expenditure increases.

1.2.5 Fiscal policy and fiscal surveillance

These considerations highlight the need for a very careful judgement of the underlying stance of fiscal policy when economies in the euro area are responding to country-specific shocks. The stance of policy is particularly important in this adjustment context because of its influence on the real effective exchange rate within the euro area. Where there are risks of overshooting in the real exchange rate at turning points in the adjustment process, the fiscal stance can play a role in dampening such overshooting by offsetting trends in the private sector saving-investment balance. The analysis of adjustment experience in Chapter VII, moreover, underscored that fiscal, financial market and wage developments can interact in a mutually-reinforcing manner, and fiscal policy is the only one of these channels under the direct control of the authorities. Thus a careful management of fiscal policy in this context can benefit the efficiency of adjustment in the economy, and can also contain negative spillovers to other members of the monetary union.

The revised SGP allows taking better account of economic developments. In particular, the report of the European Council of 20 March 2005, which lays out the foundations of the reformed SGP, refers to the need to improve the *ex-post* assessment of the fiscal position net of cyclical factors. In particular, the report stresses that policy errors should be clearly distinguished from forecast errors in the implementation of the excessive deficit procedure.

Consideration and anticipation of adjustment dynamics could enhance the economic rationale in fiscal surveillance and policy recommendations within the SGP framework. In particular, in case a Member State has experienced a prolonged period of high growth with inflation significantly above the average of its competitors and a deteriorating current account balance, a structural balance at the medium-term objective would not necessarily provide a sufficient safety margin towards breach of the 3% reference value. Also the debt developments in the medium and long-run could be less positive than projected. In case of downward adjustment, even if consolidation measures are fully implemented, the improvement in the cyclically adjusted balances observed *ex post* could fall short of plans due to the downward revisions of potential growth, low inflation, increasing interest payments and low tax-to-GDP elasticities. For example, Germany demonstrated a remarkable degree of nominal expenditure restraint since 2002 in an effort to improve the budgetary position, while the budget balances, both nominal and structural, did not improve.

Fostering fiscal prudence in good times and during periods of loss of competitiveness and, using very cautious (potential) growth assumptions in the design of budget laws helps in reducing the risk of feeding overheating dynamics building-up of imbalances, while at the same time creating more fiscal room for manoeuvre when growth and inflation return to normality or in case downward adjustment would be required. This implies tough judgement on countries growing fast with high inflation. Attention should be focused on high tax revenues (elasticities) that go beyond the normal cyclical sensitivity of the budget. As regards countries which are experiencing a process of economic adjustment characterised by adverse economic conditions, 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.

As the existence and the extent of domestic and external imbalances are hard to estimate, systematic consideration of a broad set of indicators can enhance fiscal surveillance and the assessment of the fiscal position and fiscal efforts. This allows determining whether - and to what extent - the budgetary position has benefited from appreciation or

suffered from depreciation. Looking ahead, such broad assessments may indicate whether the past developments are likely to continue, fade out in the case adjustment is completed, or even reverse in the case of overshooting. The budgetary stance may then be assessed in the light of these risks.

A broad set of fiscal indicators could be considered. In the revised SGP regulations, tax elasticities are explicitly mentioned in the context of economic good times. Changes in tax elasticities cause major fluctuations in the structural balances. The growth composition changes during the adjustment process. Periods of downward price and wage adjustment are *ceteris paribus* characterised by export-intensive growth and low/disappointing tax elasticities, while upward price and wage adjustment and overheating are characterised by high tax elasticities. Not only the growth composition affects the tax revenues, but also country-specific items related in particular to asset price taxes (including related to housing, pension fund and general wealth and capital gains). Tax elasticities should be regarded closely with the other indicators. Systematic assessment of the changes in the cyclically-adjusted primary balances in high debt countries in addition to the structural budget balances provides additional information on the underlying budgetary developments, especially in a period of overheating in which the level of nominal GDP is above its potential. Macroeconomic indicators of external and internal imbalances should be considered together with the fiscal indicators to assess the risk of a reversal of economic fortunes in a context of adjustment dynamics.

In order to enhance fiscal surveillance in the context of the SGP, budgetary surveillance is continuously evolving. Many innovations and improvements to the assessments and policy recommendations have already been incorporated in ongoing practice. A careful analysis of adjustment-related phenomena is being factored into policy surveillance at the EU level. For example, the Commission's technical assessments of the Stability and Convergence Programmes now include a systematic analysis of tax elasticities. Moreover, the macro-economic scenarios in the latest vintages of the Stability and Convergence Programmes reflected more prudence than earlier versions.

1.3 Financial market integration

Earlier chapters in this study: reviewed financial developments under monetary union; discussed progress with financial market reforms; and highlighted the significant role that financial flows have played in adjustment dynamics. The financial market dimension of the adjustment process emerges as more prominent than foreseen in the run-up to monetary union – both in creating favourable opportunities for investment and, in some cases, amplifying problematic real interest rate developments.

To complete these assessments it is important to consider the potential – so far not fully realised – for deep financial integration to enhance the working of monetary union through income smoothing and other risk-sharing effects. Experience in the United States illustrates that monetary union can precede financial union by a long period. But, as financial integration catches up over time, it can bring major gains not only to growth but to the adjustment process as well. Cross-border asset holdings, and the integration and securitization of mortgage markets, exemplify mechanisms that can play a powerful stabilising role in the face of asymmetric shocks.

In this forward-looking perspective, it is valuable to explore the role that deeper financial integration can play in enhancing the adjustment process. It is also important to review the challenges that ongoing integration can pose, including the possibility that the changed nature of adjustment mechanisms, in tandem with deeper integration, may subtly change the nature of systemic risk. Finally, there is the question of implications for policy, if the full benefits of financial integration are to be reaped.

1.3.1 The contribution of financial integration

There is a wide literature on links between the financial sector, economic growth, and the sustainability of imbalances. Although difficult to measure quantitatively, the benefits of a well-developed financial system and financial integration are well documented,[9] and in particular it is recognised that the deepening of financial systems and economic development go hand in hand. Moreover, recent years have seen heightened attention to some aspects of the financial sector's role in monetary unions – including the contribution of risk-sharing and income-smoothing across national borders or state lines. This literature suggests that there is scope for the financial sector to play an even greater role in the future in enhancing adjustment processes under the euro, both by dampening shocks and by fostering economic regeneration.

As noted earlier in this study, euro-area financial markets have responded robustly to *common shocks* that ranged from the dotcom bubble: to the events of September 11, 2001; to the recent increase in oil prices; and to the

[9] Articles in the Handbook of Economic Growth provide the basic argumentation; for evidence and references, see Levine (2004). See also box III.1 in European Commission (2004a). Financial market integration in particular is expected to yield a range of economic benefits. This are surveyed for example by Agenor (2001). For example, foreign direct investment leads to a rationalisation of production as firms aim to exploit their firm-specific technological advantages internationally. Financial market integration is expected to lower the cost of capital, thus enhancing economic growth. On the other hand, financial integration may strengthen domestic financial imbalances, as discussed in this report.

emergence of wide global imbalances. Under monetary union, the market volatility and nominal exchange rate shocks experienced among the currencies of participating countries in earlier decades are precluded. Moreover, financial market confidence in the euro has remained strong.

Also key to the successful functioning of the euro area, however, is the resilience of the adjustment process within the area in the presence of country-specific shocks. Further financial market integration has the potential to support this through several routes.

Firstly, adjusting well to shocks means having a financial system that helps to reallocate resources efficiently across sectors and firms. When euro-area members experience country-specific shocks, the financial sector is crucial in assuring a rapid regeneration of productive capacity and growth. In the euro area, with low labour mobility across countries, adjustment to country-specific shocks relies heavily on wage and price adjustments, in the context of skill availability. It is critical that capital moves fluidly to take advantages of such shifts, creating new businesses and new jobs. The benefits of risk-sharing are important here: by insuring incomes against asymmetric shocks it raises the willingness of agents to commit to specialisation. This can be a strong force helping to reshape the industrial and commercial landscape of the euro area.

Second, diversification in the financial system also plays an important role in assuring resilience. The diversification of portfolios disperses claims more widely, so that risks are better spread. The expansion of hedging mechanisms has also been key in ensuring that the system is robust in the face of shocks. Moreover, the expansion of derivative markets has increased the depth of information on market expectations, providing a richer feedback to policy-makers as they seek to embed economic and financial stability. In addition, a diverse institutional structure in financial markets is potentially more robust than one resting on a few pillars. Alternative intermediation channels can avoid the risk that stress in one part of the financial system starves firms or sectors of funds at a time of adjustment stress. In this respect, financial developments in the EU, such as corporate bond market boom and growth of equity financing in the euro area, have not yet led to a significant shift of corporate financing from the traditional bank-based structure to a more market-based structure. This is mainly because loan financing has grown as well. At the same time, non-bank financial intermediaries have grown in importance in Europe, often by firms with close cooperation or owned by banks. Interestingly Hartmann, Maddaloni and Manganelli (2003) argue that financial structures across euro-area countries have been diverging during the second half of the 1990s, with the notable exception of the bond sector.

Third, financial integration can dampen the negative effects of localised financial shocks, through market integration on the side of suppliers of capital. Some recent research at the IMF suggests that securitisation of the U.S. national mortgage market may have halved the amplitude of local real estate cycles by diluting "credit crunch" effects in local downswings.[10]

A fourth potential contribution lies in income smoothing through cross-border asset diversification: the scope for this to serve as a stabilising mechanism across the euro area deserves special consideration. Risk sharing and income smoothing through the cross-border ownership of assets is of great potential importance for the working of a monetary union. It is an aspect of the adjustment process in the face of asymmetric shocks that so far has been given relatively little attention, by comparison with the role of fiscal transfers and of labour mobility. To a degree, this was because the literature on currency unions developed in a setting where capital flows were still restricted.

The theoretical basis of income and consumption smoothing through risk sharing is well-established. Capital markets and thus the holding of financial assets allow individuals to separate production and consumption decisions. If an individual is the subject of a shock such as loss of employment and labour income, he or she may draw on financial assets (or borrow) to maintain consumption. In addition, income from asset holdings serves as a buffer or insurance in the face of disturbances.

The same argument can be extended to hold for a region or a country. Through financial market diversification and integration across borders, regions and countries can separate production and consumption. Capital markets thus provide a mechanism for risk spreading or "macroeconomic insurance" by achieving international income insurance and thus also increased consumption smoothing over time. Improved international portfolio diversification and decreased home bias help countries to attain higher welfare by smoothing consumption in the face of asymmetric or country-specific shocks. For example the increased cross-border asset ownership can curtail changes in income surprisingly well. Aghion et al. find that a lower degree of financial development predicts a higher sensitivity of both the composition of investment and mean growth to exogenous shocks, as well as a stronger negative effect of volatility on growth.[11]

Financial market liberalisation has indeed led to a more international investment strategy on the part of institutional as well as individual investors. Inside as well as outside the euro area, foreign ownership of assets – including bank

[10] See Schnure (2005).

[11] See Aghion et al. (2005).

deposits, bonds and equities – is increasing steadily. Recent research indicates that financial integration in Europe has begun to have a clear impact on macroeconomic risk sharing (Box 3). Home bias is declining. However, this process is relatively recent: these effects should become more pronounced in the future.

Financial markets can be compared with other institutional channels as a route for risk sharing. A more familiar route is the fiscal system, operating through taxes and transfers. In the United States, the role of private risk sharing has been compared to that of fiscal transfers, and according to some estimates has an even greater impact. Plausibly, some two-fifths of real shocks are smoothed through cross-border asset holdings, and less than one-third through fiscal channels. At this stage it is difficult to assess the quantitative importance of this type of adjustment, in particular when comparing it with other types of adjustment processes. As the EU budget is much smaller than the federal budget in the United States, and does not respond to cyclical swings, it is logical to assume that risk-sharing through financial asset holdings could play by far the predominant role as financial market integration continues. More broadly, it is clear that risk-sharing and resource reallocation through financial markets can play a critically important role in a monetary union where labour mobility is low and there is not a large federal budget.

In sum, many of the benefits of financial integration are indirect and hard to quantify. This is inherent in the kind of channels involved – for example: cross-border risk sharing; the impact of capital inflows on domestic investment and growth; and an increased efficiency, as well as greater stability, of the domestic financial system associated with diversification and cross-border banking.[12]

Indeed, summarizing literature related to financial globalisation, Kose et al. (2006) conclude that "main benefits to successful financial globalization are probably catalytic and indirect rather than simply enhanced access to financing for domestic investment". They argue that more important than direct growth effects of access to more capital is how capital flows generate what they call "potential collateral benefits" of financial integration. The argument of Kose et al (2006) extends beyond the channels of benefit discussed in this report, into other areas that are intangible but also relevant to adjustment in the euro area. They cite broad support in the literature for the thesis that "financial openness can promote development of the domestic financial sector, impose discipline on macroeconomic policies, generate efficiency gains among domestic firms by exposing them to competition of foreign entrants, and unleash forces that result in better government and corporate governance."[13]

[12] See Agenor (2003).

[13] See Kose et al. (2006).

Box 3: Evolving patterns in risk-sharing and income smoothing

Several recent studies have examined to what extent growing financial integration in Europe – including cross-border financial claims and corporate ownership – has contributed to risk sharing and income smoothing.

The progressive emergence of risk-sharing and income smoothing in EU economies was confirmed by Kalemli-Ozcan, Sørensen and Yosha (2005), in one of the first studies of these developments in the EU. Their analysis is based on net factor income flows between countries, derived as the difference between GDP (aggregate production within a country) and GNP (aggregate production owned by its residents). They find that in recent years financial integration across EU Member States has begun to play a role in buffering asymmetric shocks that follows the pattern reported for the United States. Risk-sharing in the EU is far less pronounced, but has increased and appears set to rise further in the future. Kalemli-Ozcan, Sørensen and Yosha recommend measures to foster financial integration, improve risk insurance, and thus facilitate adjustment to country-specific shocks.

The question whether the monetary union in Europe has had an impact on cross-border risk-sharing within the euro area is explored by Balli and Sørensen (2006), who consider the period 1970-2003. They start from the literature on optimum currency areas, more specifically from the discussion on the endogeneity of a monetary union. Once the euro has been established, we should expect it to foster capital market integration in the euro area through a number of channels. This pattern has been documented by many studies. In a number of empirical analyses, Balli and Sörensen conclude that income smoothing via cross-border factor flows has risen sharply in the euro area.

The role of financial integration in stimulating cross-border risk-sharing in Europe and elsewhere is examined by Artis and Hoffmann (2006), who confirm a rising role for risk sharing internationally in the 1990s. They note that this process has been stronger in Europe than elsewhere, suggesting that this is due to increased financial integration in the 1990s in the future euro area member countries, and specifically to capital income flows. They argue that the elimination of exchange rate risks within the euro area since 1999 has further changed the environment for risk sharing. Investors now tend to hold foreign assets longer than before. Before the introduction of the euro, valuation effects tended to be important, fostering portfolio rearrangements and thus driving the purchases and sale of foreign assets. Once the foreign exchange rate risk was eliminated by the euro, the character of international portfolio holdings may change – being based more on risk sharing via income flows from equity and bond holdings, and less on capital gains from market transactions. Whether or not this expectation is entirely confirmed, it is clear that risk sharing is on its rise in the euro area, but is currently far less advanced than between states in the United States.

A further implication of rising risk-sharing, identified in the literature, is that home bias would diminish and imbalances across economies will increase. Artis and Hoffmann (2006) argue that their findings have a bearing on the literature on home bias originating from the seminal contribution by Feldstein and Horioka (1980). The latter examined the correlations between domestic saving and investments, where low correlations were regarded as a sign of high international capital mobility and high correlations as the outcome of a financially closed economy. In a similar vein, Blanchard and Giavazzi (2002) document a decline in the correlation of savings and investment in Europe and in particular in the euro area. This evidence appears consistent with the view that the euro has increased risk sharing. Kalemli-Ozcan, Sørensen and Yosha (2005) reveal a close link between international risk sharing and home bias. They show that home bias in bond and equity holdings has been falling recently while international risk sharing has been rising.

When commenting on policy conclusions, authors of the reports above recommend measures to foster financial integration within the EU. Such measures will lead to improved macroeconomic insurance, thus facilitating adjustment to country-specific shocks in the EU, thus proving welfare enhancing. Financial market integration has already yielded significant benefits in terms of higher productivity and more effective international risk diversification. Further gains will be realised in the years to come, as private individuals, companies, investors and pension funds continue to adjust to the reality of international capital mobility.

1.3.2 Challenges in financial integration

The integration of financial markets under monetary union has some strong "risk-reducing" features. Monetary union has accelerated the integration of wholesale financial markets. Moreover, the euro-denominated government bond market provides a uniform yield curve throughout the area as well as a base of liquid assets for the creation of new, tradeable financial products. Equity issuance and venture capital should also benefit from deep and integrated markets. The advent of the euro has also promoted area-wide markets in hedging products. Through these channels, monetary union tends: to facilitate a geographic and issuer-based diversification of portfolios; to enhance the area-wide risk capital base; and to promote the hedging of risks. Such trends may influence favourably the level and management of financial risk in the system. But, as evidenced in earlier chapters, financial integration brings risks as well as benefits in terms of an efficient and stable adjustment process.

One important issue is the changed nature of market discipline over policies. The response of financial markets to policy is significantly different under monetary union. The key aspects of this are the elimination of exchange risk and the ease of financing imbalances in highly integrated markets. In this environment, and a global setting of low risk premia, signals from financial markets to policy-makers may be very muted, for example, when fiscal policy moves off track. Moreover, the fact that public and private sector imbalances are easier to finance is only an advantage if foreign savings are well-used.

A second issue is that deep and integrated financial markets will tend to amplify both favourable events and distortions. If real estate borrowing is tax deductible, for example, there are risks of distorting resource allocation on

a major scale. Moreover, as monetary union accelerates financial integration in converging economies – including through a relaxation of credit constraints on households – there are potential risks as well as gains. Experience confirms that rising housing investment is one likely result. But if weak institutional structures or governance inhibit lending to firms, or the investment climate and human resources are not sufficient to attract resources to the traded goods sector, then growth may be unbalanced and external competitiveness impaired.

A third issue is whether there have been subtle changes in the nature of systemic risk in the euro area as a result of changed adjustment mechanisms that accompany membership of monetary union. While financial market integration can influence adjustment, causality does not run in one direction only. The nature of real sector adjustment under the euro area can also have important feedbacks to financial markets. In terms of growth and inflation divergences, adjustment to asymmetric shocks under the euro area is proving to be a gradual process. Realignments of intra-euro real effective exchange rates through relative price changes may occur over a protracted period. This contrasts with earlier experience in which acute pressures for adjustment could develop in the exchange or public debt markets. In this respect, for countries in the euro area, risks of an exchange or public debt market crisis have, in a sense, been transformed into risks of a “growth crisis.” The impact of changed adjustment dynamics means that banks and their clients will experience a different type of adjustment cycle, including possibly some overshooting at the turning points.

Under monetary union, furthermore, asymmetric shocks affecting national credit and asset markets are no longer met with a domestic interest rate response. Hence swings in these financial markets may be wider and more prolonged, possibly contributing to amplified cycles in economic activity and the real exchange rate. However, as noted above, the income effects of shocks will over time be diluted by financial integration, with the growth in holdings of cross-border financial assets and access to wider and deeper loan markets. And the securitisation of mortgage markets, for example, may dampen possible "credit crunch effects" in the downswing of local asset price cycles.

It seems too early to form a definitive assessment of how far such factors will alter the nature of systemic risks in ways to which financial institutions and supervisors need to respond. Recent experience is complicated by exogenous developments in financial markets, whose effects cannot fully be disentangled from euro-specific changes. These exogenous developments include: the balance sheet adjustments underway in the euro area in the aftermath of the 1990s investment boom; a prolonged period of very low risk premia in global markets; and a rapid development of credit derivatives and complex capital market instruments. This latter change is part of a broader growth in risk transfer instruments that has been spreading risk more widely, but has made ultimate repositories more opaque.

Thus the management of financial risk has become more important, since problems in the financial system could have wider consequences, while risks have become more complex to monitor. On the supervisory front, meanwhile, the introduction of Basel II/CRD III – partly in response to market trends – is itself a factor that may affect market behaviour in a range of ways.

In other words, there have been many changes underway in the global financial system during the early years of monetary union. Nonetheless, it is useful to highlight possible implications of specifically euro-related factors, to assess feedbacks between the adjustment process and financial markets. In this respect, a dominant leitmotif runs through the risk factors identified above. It is that financial market behaviour might become more pro-cyclical following country-specific shocks, at least during a learning period. Strong and protracted asymmetric booms could lead markets to underestimate the build-up of lending risks, which might then crystallise in an extended downturn. Asset market movements could be pronounced at times of "negative local real interest rates, possibly giving rise to a financial accelerator based on rising collateral values, followed by a protracted downturn. Easy deficit financing and weaker market discipline could allow sizable imbalances to accumulate. These elements could increase the amplitude and length of adjustment cycles, and heighten systemic risk.

1.3.3 Policies to tap the full gains of financial integration

Experience with financial integration in the early years of monetary union suggest that, in essence, it "raises the stakes" for good policies, effective policy co-ordination, and sound institutions. The financial sector has a capacity to: respond to news; articulate expectations; transmit, buffer or amplify shocks; with an order of magnitude that is faster than other markets. This argues for policy frameworks that will steer expectations successfully and pre-empt stress. In the context of adjustment within the euro area, there is scope for each of the main branches of policy to contribute.

Policies towards the financial sector need to press integration forward, including fostering efficient adjustment. The integration gains from introduction of the euro are well-documented. But progress has been uneven across different markets and market segments. There has been major progress in the single markets for wholesale financial services but very little in the EU retail financial markets. Short term money markets are considered fully integrated, and in bond and equity markets integration is also deep. In financial market infrastructure, like settlement and payment

systems, there is still a lot to be done and retail banking integration is creeping much more slowly.[14] Moreover, taking into account the scale of capital flows in the euro area, it is surprising how little this development has touched financial institutions. It seems that the benefits of a wider and more efficient financial system in Europe are not acknowledged widely enough.

Accelerated progress with integration involves action on a broad front. It means implementing the Financial Services Action Plan through national legislative measures. But it also includes supervisory convergence, and giving assurance to market users through investor and consumer protection. Competition policy plays an important role too. Moreover, achieving full integration requires important national efforts that go beyond the immediate sphere of financial products, venturing into areas of national private law, an arduous long-term task. International dialogues on financial markets will also be important, while parallel progress in areas such as governance and accounting can make a key contribution.

More specifically, as detailed in Chapter VI, the Commission has outlined areas where there may be a need for further efforts to promote market integration, in addition to full FSAP implementation. Among key priorities are: clearing and settlement systems; a new Solvency Directive to overhaul insurance regulation and supervision; three key initiatives in the retail sector – relating to mortgage credit, consumer credit and payment services; further work, potentially, in the investment fund sector; and EU supervisory arrangements, with the goal of fostering further increases in financial-system efficiency and stability.

As markets in the euro area continue to integrate, challenges will continue to arise for supervision. Supervisors need to take due account of changes in systemic risk as they evaluate institutions' control systems and financial soundness, buttressed by steps to strengthen market discipline. An important issue in integrating euro-area markets is to ensure that supervision and liquidity support keep pace with ever more complex linkages across functions and borders. The spread of area-wide financial institutions will pose new challenges to supervisors.

This is not to suggest using supervision as a surrogate for the national monetary policy, but to internalise adequately the changed adjustment process and its impact on credit and market risks. A concrete way of addressing these issues is to ask what instruments in the conventional supervisory armoury may be relevant. One possibility might be techniques that help capture risks emerging over extended credit and asset price cycles. Such techniques may include: stress-tests for credit and market risks; surveillance of loan-to-value ratios in real estate lending; and use of counter-cyclical techniques such as provisioning over the course of the cycle – while noting tax and accounting concerns (see Box 4).

Structural policies are important if resource allocation is to benefit from more integrated financial markets. These policies interact with financial integration in several ways. Both favourable and unfavourable structural features may be amplified by integration, so distortions need to be addressed, including in the microeconomic side of fiscal policy. Flexible labour and product markets will help ensure that shocks to euro-area members trigger timely adjustment through shifts in competitiveness, swiftly dominating any perverse effects in real interest rates and asset markets.

Sound fiscal policy also is crucial to maintain discipline in the face of changed market responses, in line with the reformed SGP. When Member States experience a strong financial boom, it will be especially important to be vigilant that the underlying strength of the fiscal position is not over-estimated. As highlighted above, experience in the early years of monetary union underlines the risk of allowing the fiscal stance to ease inadvertently as a result of: transient revenues from asset market gains; a tax-rich composition of GDP (with strong consumption and lower net exports); and a tendency to upgrade estimates of potential growth pro-cyclically. Also, if stresses emerge in the financial system or real economy, budgets must be well-placed to underpin stability.

If there were increased pro-cyclicality in financial market behaviour, that would be very relevant to the adjustment issues discussed earlier. It would reinforce the message that policy-makers need to guard against actions that could amplify, or fail to internalise, such trends – e.g., in setting nominal fiscal goals. It may be wise, also, for market participants and supervisors to pay special attention to heightened risks of pro-cyclicality. Concerted policy strategies incorporating these elements can help shape financial market expectations and ensure that these markets do not exacerbate adjustment stress – either through a market crisis or through the impact on growth of balance sheet pressures. In such a policy setting, markets can play a balanced role in facilitating adjustment under the euro area.

[14] The available evidence suggests that the degree of integration varies greatly depending on the market segment. The unsecured money market has been fully integrated since shortly after the introduction of the euro. The repo market is highly integrated albeit to a lower extent. Government bond markets were significantly integrated even before the start of the third stage of EMU, although some yield differentials remain. The indicators for the corporate bond market, which has grown considerably since the advent of the single currency, point to a high degree of integration. Progress has also been made in the integration of euro area equity markets, where equity returns are increasingly determined by common factors. Banking markets are generally much less integrated ECB (2005b).

Box 4: Supervisory tools and possible shifts in the pattern of systemic risk

Traditionally, supervisors have a microeconomic approach, and have given limited attention to macro-financial stability. However, the need to improve safeguards against instability, in a financial system that is larger and more interconnected, is increasingly recognised. Some tools in the conventional arsenal, as various adjustments to Basel II that addressed concerns about procyclicality, highlight an increased attention to macrofinancial stability - although supervisors have encountered some hurdles (for instance opposition of accountants and tax authorities to dynamic provisioning, seeing an income smoothing mechanism that would leave too much leeway for discretion and arbitrage). A number of supervisory approaches may help pre-empt the potential systemic risks the euro area faces.

- Testing the sensitivity of capital ratios to changes in the economic environment. Under Pillar 2 of Basel II/CRD, national supervisors can request banks to comply with higher than minimum capital requirements when deemed necessary. Supervisors may wish to do so to address the procyclicality of capital ratios or if stress tests reveal the inadequacy of capital ratios against macroeconomic shocks. Under Basel II/CRD, banks are required to conduct stress tests for their major positions. The stress tests are a tool for them to gauge the sensitivity of the capital ratios to changes in the economic environment. They also enable supervisors to assess the overall adequacy of banks' capital in relation to the totality of their actual and potential risks and can serve to assess the size of the capital "buffer" that banks should maintain in excess of regulatory minimums in order to enable them to weather economic downturns. To contain systemic risk, two sources of vulnerability deserve special attention: the effect of fluctuations in real estate valuations (both directly and as collateral); and the risk of loss of liquidity on large interbank exposures.
- Ensuring that loan loss provisions are built up over the cycle. In some countries, supervisors have gone one step further by adopting statistical provisioning. Against current accounting rules which permit provisioning only for realized losses - which leads to a concentration of provisions at the low point of the cycle and thus amplifies the financial cycle - banks are called on to anticipate and assign provisions for expected but not yet realized losses. In this context, the Spanish statistical (or dynamic) loan loss provisioning has attracted considerable attention. It is designed to acknowledge the latent risk in loan portfolios, counterbalance the cyclical behaviour of traditional loan loss provisions, and correct the excessive cyclical bias in profits which could distort profitability and solvency. Though it is compulsory only in Spain and Portugal, some sort of forward looking provisioning is used in a number of international banks.
- Use of conservative adjustments in loan-to-value ratios. Arrangements vary across countries as regards norms for loan-to-value ratios in real estate lending. Basel II/CRD leaves the prudential criteria for real estate (including loan to value ratios) to be determined by national regulators, and supervisors are entitled to increased risk weighting for real estate loans if data warrant. There should be scope through normal supervisory assessments to verify that banks are adopting prudent approaches – or else to require higher capital cover. This was used in Denmark as a discretionary tool, but apparently financial system diversification has made this less effective in the present cycle.
- Liquidity monitoring. The critical concern (illustrated in Portugal) is that short-term cross-border interbank borrowing is perceived to carry an implicit host country guarantee. Hence, if deficit funding becomes more relaxed, strong supervisory attention is needed to ensure that it does not become a subsidized source of funding for domestic credit expansion, resulting in vulnerability.

Use of these instruments does not imply seeking to adjust them in a counter-cyclical fashion, on a discretionary basis. Some economists have proposed that supplementary capital required under Pillar 2 could serve as an explicit countercyclical instrument. Others have also proposed that, without changing the methods used to calculate capital requirements, the result should be adjusted down during periods of recession in order to improve access to credit and stimulate a rebound in economic activity. Such countercyclical action, however, presents major drawbacks, in particular: (i) how to deal with banks that operate across national boundaries or may be specialised in some markets or sectors and therefore have different exposures, raising level-playing fields concerns; (ii) imposing standards that are tougher than those demanded by the market which might simply encourage innovative ways to avoid them; and (iii) it may not be advisable that supervisors become excessively involved in the management of risk of individual institutions. Discretionary adjustments in supervisory instruments in response to changes in the business cycle or system-wide risk are also difficult to implement and should not occur on a regular basis.

Further progress could be made also in terms of dialogue and co-operation. For instance, the dialogue with central banks could be reinforced as analysis by central banks of financial stability highlight, for instance, how the credit risk inherent in loans to certain sectors can increase as a function of market or macroeconomic trends. Practice in advanced economies is beginning to hint toward regular coordination meetings among the key official actors to discuss stability developments, band more generally, supervisors may have scope to internalise more fully the risks pertaining to absence of a national monetary policy. In a euro area context, the cross-border dimension of such dialogues could also be very important.

2. Economic catching-up within the euro area

Are there unique features or special lessons in the experience of euro-area members that relate specifically to the process of catching-up? This is an important question for the future, since a majority of the Member States (and candidate countries) that are committed to adopt the euro in due course are engaged in an extended process of catching-up. It is helpful at this point to highlight some of the lessons about adjustment and policy management under the euro that may be especially relevant to future euro-area members.

Several of the present euro-area members have been experiencing economic catching-up in terms of GDP per capita. Among the members specifically focused on in this report, these are Ireland, Portugal and Spain. In previous chapters, their adjustment performance was explored in terms of: trends in consumption, investment and financial markets; the competitiveness and real interest rate channels; and interactions between shocks and policy initiatives. But the specific catching-up dimension that is common to their experience has not been systematically considered so far. [15]

To set this issue in perspective it is helpful to address in turn three aspects:

- The first aspect concerns the general inter-country adjustment process under monetary union, which applies in these three catching-up cases as in others.
- The second aspect relates to initial conditions in each of these three Member States at the time they adopted the euro. These conditions – such as changes in risk premia, or productivity disturbances – varied across present euro-area members (along lines unrelated to income level), and may vary across future area members.
- The third aspect is whether, or how far, the process of catching-up in these three countries implied, of itself, policy challenges that are special in kind or degree under the euro.

Together, the first two aspects may go far to explain adjustment experience in all euro-area members, particularly when feedbacks from policy responses are taken into account. It will thus be easier to isolate the catching-up element in Ireland, Portugal and Spain, if we first explore how their experience maps to the general dynamics of euro-area adjustment and their own initial conditions.

Of course, the state of market integration and flexibility in the early years of the euro area is not yet that of a mature monetary union, and any lessons from national experience in recent years need to be qualified strongly in these respects. Moreover, recent developments must be seen against the background of globally low real interest rates and risk premia, a context that has been evolving in the recent past and may not be a good guide to the future.

2.1 Adjustment dynamics in the euro area and initial conditions on euro adoption

For the present discussion it is helpful to concentrate on the general features that differentiate the adjustment process under monetary union from adjustment with a national monetary policy. Each of these features, derived from modelling and empirical work in previous sections of the report, helps to explain the adjustment experience in the "catching-up" area members, among others.

First, the absence of exchange rate risk clearly facilitated deficit financing by the public and private sectors; and market signals may have been more muted in cases where imbalances become problematic. Clearly, all three economies drew heavily on foreign savings, and there is evidence earlier in the paper that a release of credit constraints is a relevant shock. Only Portugal ran a fiscal policy of the kind that market signals might conceivably have checked (with an adjustable exchange rate); but, given the lags with which markets have traditionally responded to such developments, it is not clear whether this is a realistic counterfactual.

Second, at times when the common interest rate did not match cyclical conditions in these three economies, adjustment has taken place mainly through shifts in competitiveness. An asymmetric boom, for example, has led to real appreciation, and then – with lags – to a slowing of activity until the output gap again matches the euro-area average and hence the stance of the common monetary policy. Where a catching-up economy moves out of equilibrium, this competitiveness channel of adjustment emerges as dominant and stabilising over the medium term, though in the short run there may be some wide swings in real exchange rates. This process was evident over a period of a relatively few years in Portugal – in part because it was amplified by pro-cyclical fiscal policy. After a long period of equilibrium growth, a slowing along these lines – through the competitiveness channel – now seems to be taking place in Ireland. In Spain, competitiveness has been shifting in a direction consistent with slower growth at some point in the future.

Third, national real interest rate developments have potentially complicated this process in the short run. During an asymmetric boom, prices have risen more rapidly than area-wide inflation, and national real interest rates have to some degree fallen – potentially prolonging the boom in a pro-cyclical fashion Asset prices may have reinforced this effect. The impact of this is difficult to measure and assess (since it depends in part on asset portfolios, time horizons, and expectations), and will erode significantly as trade and financial integration progress. There are signs

[15] In this section, the term “catching-up” is used here rather than “convergence” because the latter can easily be confused with *nominal* convergence to meet the Maastricht criteria. Here, the focus will be on catching-up in real income levels and also in the depth of the financial sector. Financial system change is particularly relevant in so far as some Member States joined the euro area with financial sectors that were still relatively small and undiversified. Catching-up in this sector can be a key source of opportunities but also of challenges for policy: it deserves special attention when exploring implications about the monetary framework.

in all three economies under reference that this transitional mismatch of monetary conditions at times contributed to the sustained strength of domestic demand, and latterly in Portugal to its weakness. In Spain, asset price gains were an additional transmission channel, while in Portugal a strong supply response in housing dampened such effects.

It is possible that these transitional real interest rate effects may have affected resource allocation in euro-area members, including the catching-up members – because of country-specific booms but also in some cases because of "initial conditions" in their economies. During periods of cyclically “low” rates, allocation may have been skewed to consumption and real estate, and low rate-of-return projects more generally may not have been screened out. If so, that could impair potential growth and the smoothness of future adjustment (since productivity gains might play a lesser role in correcting unit labour costs, leaving the brunt to be borne by wages). This is a plausible story for Portugal and Spain, given trends in resource allocation. But the analysis earlier in this paper shows other influences also (e.g., shocks to risk premia) that would have triggered a shift of resources into the non-traded sector and notably to residential construction. The allocative role of real interest rates over the adjustment period is not fully clear.

It is worth noting, in addition, that extended booms may have complicated fiscal measurement during the catching-up process as in other cases – although this issue can arise during an extended boom under any monetary regime. There is some evidence in Portugal, for example, that the transient impact of the boom on revenues and growth may have been misunderstood, and that this contributed to policy errors. In Spain, estimates of fiscal elasticities and potential growth are currently receiving heightened attention.

These key factors in the general process of inter-country adjustment appear relevant in all three catching-up economies specifically studied in this review – Ireland, Portugal and Spain. Consistently with findings in earlier sections, they explain a good deal of the adjustment experience in these economies.

In these three countries, as in others, opportunities and challenges for catching-up under monetary union depended in part on the set of "initial conditions" at the time they embarked on the final push to euro adoption. This report has reviewed what theory and experience tell us about the impact such initial conditions in some Member States. These conditions varied greatly, and in ways that did not map systematically to levels of income levels or financial development.

Among the shocks considered in Chapter VII, the pure example of initial conditions that do not derive from catching-up lies in the decline in risk premia in the run-up to euro adoption. This depended on past monetary and fiscal credibility, and thus nominal convergence paths. It varied significantly across euro-area members in a manner not systematically related to income level. Among others, the three catching-up economies featured in this study all experienced declining risk premia – with Portugal having the largest positive impulse to activity and Ireland the lowest (as discussed in Chapter VII).

The other country-specific factors identified in Chapter VII are not entirely independent of catching-up. The potential impact of easier constraints on household borrowing was in some sense greater in cases where credit was initially small relative to GDP. Again, the scope for positive productivity shocks was presumably higher in these catching-up cases. But the scale of these effects is, empirically, not very different in some of the "steady state" economies. For example, the scale of credit constraint easing in the Netherlands is within (very high) range experienced in the three catching-up cases. Productivity shocks in Germany or Netherlands were of the same order of magnitude as in Spain or Portugal, with the differential between traded and non-traded goods being in the same direction.

In seeking to identify effects that are specific to catching-up under the euro, these are important caveats to bear in mind.

2.2 The specific dimension of economic and financial catching-up

To set in perspective any "specialness" of the catching-up condition, a useful step is to identify the counterfactual, based on the discussion of general adjustment processes and initial conditions set out above. The counterfactual – that developments can be explained independently of catching-up – can be illustrated in terms of the factors that stalled convergence in Portugal soon after euro adoption. Suppose that this stalling was due entirely to initial conditions that could prevail in any euro-area candidate, irrespective of income level or stage of financial development, and to the impact of poor national policy choices, under the euro-area adjustment process. How would the story run?

It would be that Portugal experienced a steep fall in risk premia, which stimulated the economy and led to a widening current account deficit. Credit conditions eased as a result of lower interest rates and abolition of exchange risk (which allowed substantial interbank borrowing to be channelled to households that otherwise could not have hedged externally-sourced borrowings). With a strong supply response in housing, there was no asset price bubble. But fiscal policy, at a critical juncture, became pro-cyclical. This contributed to accelerating credit and an appreciating real exchange rate, while wage and employment decisions in the public sector also hampered adjustment in the real economy. Overall, there were negative productivity shocks; and action was not taken initially to improve the working of the labour market. Wage persistence pushed up unit labour costs to an unwarranted degree in both the traded and

the non-traded sectors. Taken together, these factors preordained the profile of the adjustment that would set in (triggered in the event by an export shock). They meant that real adjustment under the euro was bound to be sluggish in terms of both wage and productivity contributions; and that all sectors of the economy would be trying to de-leverage simultaneously.

Elements in this story are well-supported by the earlier analysis. And it has clear lessons for any euro-area member, including those catching-up. Indeed, it highlights rather precisely several of the points suggested above about adjustment and initial conditions. But the story, in this truncated form, has apparently little to do with catching-up as such. Moreover, Ireland experienced no major problems with catching-up during this period – although it must be acknowledged at once that it benefited from productivity and labour market developments that would be hard to replicate.

Nonetheless, there are analytical reasons to suspect a "specialness" of the catching-up process under monetary union, and that such factors played a role in Portugal. And one *prima facie* reason to probe this issue further lies in the steep widening of Spain's current account deficit in recent years: this has prompted many diagnostic questions, but it emerged in a fiscal and structural policy setting far more benign than in Portugal. Under what circumstances could such a widening imbalance propose policy challenges, and are there clues to this in the nature of the catching-up process?

There are three factors that could imply special opportunities or challenges during the catching-up of real incomes and financial sector development under the euro:

- High rates of return will attract foreign savings, and net capital inflows are potentially very favourable for growth in the under-capitalised environment that is characteristic of catching-up economies. One concern is volatility, notably in a global market setting of volatile risk premia. Adoption of the euro (abstracting from hazards in the run-up to membership) does protect against nominal currency fluctuations. This is important, given the proneness of catching-up economies (including specifically in Eastern Europe) to unhedged currency borrowing. But if the allocation of capital inflows should be distorted (for example, by pro-cyclicality in risk premia), then the real adjustment costs could be felt over a protracted period. It is an example of exchanging market risk for growth risk, and of diminished market feedback. The trade-offs involved in terms of output loss will vary case-by-case: if real sector markets are rigid, then the absence of exchange rate flexibility as a route for adjustment is likely to be damaging to growth; but if there are large unhedged foreign currency exposures in the economy, then use of the exchange rate for adjustment may turn out to have a very serious impact on growth through balance sheet routes..
- Catching-up in real income levels is usually accompanied by rapid expansion and maturation of the financial sector. Here, supervision and regulation in EU Member States provide a framework based on the *acquis communautaire* and grounded in international standards and codes (which is not to deny that implementation issues may remain). Assessing risks to financial stability is, however, even more difficult than usual in a catching-up environment, since indictors such as credit, asset prices, and the real exchange rate will anyway be undergoing steep equilibrium shifts. Moreover, financial systems that are still developing are typically dominated by banks, and, where external lenders are highly concentrated, risks of contagion and/or a credit crunch need to be borne in mind (with high foreign bank ownership not necessarily eliminating this concern). There may also be a question how far home-host supervisory contacts capture or address issues such as sectoral concentration and risk in systemically-important local establishments that are foreign-owned.
- During economic catching-up, returns to capital are systematically high. But under a fixed exchange rate or monetary union, average national consumer price rises will be more rapid than inflation in the euro area. Thus national real base interest rates will be relatively lower than the euro area – not for reasons to do with temporary asymmetric shocks (as in the earlier discussion of real interest rate effects) but because of long-run productivity trends. In such a setting of very low or negative real interest rates, it may be hard for banks to price credit efficiently, and resources may be biased, for example, towards consumption or real estate. Sustained real appreciation makes it, in turn, critically important that resources are well allocated, so that a growingly negative net international investment position is serviced at satisfactory future rates of growth in domestic incomes. To say the least, the allocation stakes are high and the price environment quite complex. There is a question of whether, combined with the real interest rate effects discussed above, there could be a bias to real estate and consumption during boom periods, including an extended convergence boom. Looking forward, clues to the presence of such an allocation effect from real interest rates could be looked for in the composition of GDP, investment, credit, and the counterparts and financing of the external current account.

One way of interpreting these three issues is to recognise, in the first place, that they arise in the context of unique opportunities for catching-up in the policy environment of EU membership. In terms of political-economics, this membership embeds some degree of pooled economic sovereignty, as well as strong opportunities for trade and

investment integration: it thus strikingly different from the environment of concerns about policy and financial autonomy that have contributed to large net exports of savings exports in other regions of catching-up economies.

This said, the joint influence of the three factors identified above can be thought of as increasing to some degree boom-bust risks – or more accurately the risks of a boom and then a protracted period of slow or negative output growth.

There is nothing inherently troubling about a strong catching-up boom that is followed by a measured slowdown. This is a reasonable outcome of policy under any monetary regime. We also know that under any monetary regimes it can prove hazardous, due to inherent challenges in the catching-up process. The question here is more specific: what are the particular ways in which the inherent policy risks of catching-up are channelled, heightened or mitigated under monetary union, and how can national policy improve the chances of good outcomes?

The key issue here is that the opportunities and risks of catching-up need to be faced in a policy context where one instrument, national monetary policy, is unavailable. Of course, in a catching-up economy, monetary autonomy is always circumscribed, and in hard peg countries it will have been given up at an earlier stage. But the absence of a national policy still raises the stakes for other instruments – including fiscal and all structural policies. And it does so in a financial sector setting that is still maturing.[16]

A core challenge is to achieve a pattern of resource allocation in the economy that validates the protracted real appreciation and "deteriorating" net international investment position that correspond to sustained imports of foreign savings. This needs to be consistent with a soft landing from a catching-up boom. If there is misallocation of resources, then this will dampen productivity growth. That would be bad for catching-up, of course, but it would also hamper future adjustment. And it would mean that there is a smaller domestic pie from which to service a potentially large negative net international investment position. This is, to some degree, the story of Ireland versus Portugal – without suggesting that there were no sustainable gains in Portugal or that all dynamic problems have been forestalled in Ireland. For clarity it may be helpful to juxtapose the sectoral aspect of the three country cases (see box 5).

The key issue is not just that allocation matters for sustained catching-up, but that any distortions disturbing this pattern may be amplified by accelerated financial dynamics during catching-up. Under the euro, the elimination of exchange risk, and the related decline in interest rate premia, can contribute to an acceleration of financial dynamics during catching-up. This is reflected, *inter alia*, in the scope to import foreign savings at a more rapid pace over a longer period. This financial acceleration can have very favourable effects if the institutional framework is strong, including competitive domestic markets and an effective judicial and prudential system. But if there is misallocation then this too will be amplified. It is also very plausible that a low level of real interest rates, which is likely to prevail during catching-up under monetary union, in itself heightens risks to resource allocation.

One way of summarising this is to say that the process of economic catching-up has some inherent risks, which heighten the challenges for policy under any monetary regime. Monetary union influences the form that such challenges are likely to take. In particular, under monetary union the financial processes that accompany catching-up are likely to be accelerated, and this will amplify positive as well as the negative influences in the resource allocation environment. If the results turn out to be problematic, then the national interest rate will not be available to cut short the process. The results of misallocation may lead to a protracted adjustment process.

[16] In assessing these outcomes it is interesting to ask how developments would have played out under a floating exchange rate. Essentially, higher interest rates could have cut short a problematic boom, avoiding a potentially lengthy period of misallocation. On the other hand, inflows might well have given rise to significant unhedged foreign exchange risk in the non-bank sectors (including the government). Monetary union eliminates this balance sheet exposure during catching-up, just as it eliminated the interest rate flexibility, the exchange rate safety valve, and market signals related to it. To that degree, it substitutes risks of a "growth crisis" for risks of a "market crisis that could damage growth."

Box 5: Catching-up, productivity and the sectoral allocation of resources

Among the euro-area members selected for case studies in this Review, Ireland, Portugal and Spain are instances of economic catching-up, and the analysis in Chapter VII, in particular, sheds light on this experience under the euro. Based on the model simulations and surveillance analyses, the experience in Ireland illustrates catching-up (under monetary union) in the classic sense of high productivity growth in tradeables. Capital was attracted into Ireland in the first instance by, of course, high rates of return: these reflected predominantly the availability of human skills (which underpinned the ICT boom). Over an extended period, this pattern of productivity growth sustained competitiveness and generated resources to service Ireland's growingly negative net international investment position. One ripple effect of this process - with a lag - was a housing boom, which then developed its own dynamic. The case studies of Spain and Portugal, by contrast, highlight the fact that productivity growth in tradeables was not high. Inflation in Spain reflects a Balassa-Samuelson productivity differential, but this is because productivity in non-traded goods was relatively low. Again, capital flowed into Portugal and Spain, of course, because of high rates of return. But these were to a significant degree returns on residential housing. Allocation was quite different from Ireland, and this helps to explain why competitiveness deteriorated. The model simulations clarify that the drivers of housing activity also differed as between Portugal and Spain. In both cases the decline in risk premia and easing of borrowing constraints were major drivers of the initial housing boom. But the model suggests that this effect should have tapered off after about 3 years - as it did in Portugal. However, the sustained nature of the housing boom in Spain reflects the additional impact of a migration shock, tourism and demographics, which have contributed to the continuing demand for housing. Drawing together strands from these case studies, it is notable that, except in the immediate aftermath of the EMU-related decline in risk premia, the allocation of resources as between traded goods and residential housing in these three cases was not mainly driven by interest rate effects but by real shocks and resource endowments. To some degree this finding may however, reflect the structure of the model, and a stronger effect from the level of real interest rates cannot be excluded.

2.3 Policy management during catching-up

The discussion so far suggests that the catching-up process can be seen as heightening certain policy opportunities and challenges among those that face all euro-area members. It may be useful, therefore, to review in conclusion some of the possible "lessons for policy" that have emerged during the course of this report and to identify those that may be especially relevant in the setting of economic catching-up.

A first challenge is in the *domain of analysis*. A key message of this report has been the importance of *diagnosing accurately* the nature of the economic processes underway in a national economy and how they relate to inter-country adjustment dynamics. These analytical challenges are if anything more pronounced during catching-up. Risks to allocation and stability may be difficult to assess in a setting of trend rises in credit, asset prices and the real exchange rate, and these trends may also make it hard to diagnose whether aggregate wage and price developments are on an equilibrium path.

A second challenge relates to *underlying fiscal developments*, which may also be more difficult to evaluate in a catching-up environment. It will be especially important to avoid measurement errors that impart an inadvertently pro-cyclical bias to fiscal policy. (These factors are not caused by euro adoption, but they take on special importance in this setting.) First, revenues may improve transiently during a higher inflation upswing, as a result of a local asset price boom and/or buoyant consumption (versus exports, which are lightly taxed); and they may deteriorate all the more steeply in the correction. Second, there may be risks of overestimating potential growth, including if resource allocation strongly favours residential investment.

In calibrating fiscal policy, it will be important to bear in mind the dynamics of the inter-country adjustment process. Fiscal policy is a key instrument that can influence the real exchange rate in the short run. If there are risks of overshooting in the real exchange rate following an asymmetric shock, then it will be crucial to have assured full room for automatic stabilisers to operate. If asymmetric adjustment cycles prove to be deeper as well as more protracted than typical business cycles, then the room for stabilisers to operate under the SGP may need to be greater than in conventional cyclical calculations. In an asymmetric boom, moreover, it will be important not to cap the improvement in the fiscal balance by discretionary action, since that will exacerbate any real exchange rate overshooting. Whether discretionary action to lean against the wind could be effective is more debatable, given customary concerns about assessment and lags.

In many cases, a key initial “shock” during the move to euro adoption was a decline of risk premia relating to exchange rate/inflation risk. This decline influenced supply conditions in the economy, but the related fall in interest rates also resulted in a powerful demand stimulus. In some cases (e.g., Spain) the demand impact was counterbalanced by action to strengthen the structural fiscal position (i.e., improving the cyclically-adjusted primary balance). Since the cost of debt was falling, there was also the opportunity to further improve the nominal fiscal balance. Such actions moderated the demand boost from nominal convergence, and affected its composition: public expenditure played a lower role, and the extent of real exchange rate appreciation was more limited. In other cases, by contrast, policy was not tightened as risk premia fell, or initial tightening was later reversed (e.g., Portugal).

A third challenge relates to the implementation of *structural policies*. A crucial implication for national policy in the short run is that the flexible working of labour and product markets is essential not only for strong growth but also to ensure a smooth and rapid economic adjustment process in the absence of an exchange rate safety valve. This, of course, remains key during the catching-up process.

What takes on special importance is to ensure that the institutional setting for resource allocation is developed as effectively as possible, to realise the full opportunities (and avoid the risks) of accelerated financial development. The prudential approaches discussed earlier in this section will also be very important in reducing the risks of market tensions or distress as a result of excessive financial exuberance.

In sum, catching-up economies under monetary union will benefit particularly strongly where policy-makers are able to: improve flexibility in the real sector; caution about risky behaviour during financial booms; enhance the environment for lending decisions; and avoid a pro-cyclical fiscal stance.