STRUCTURAL REFORMS IN EMU AND THE ROLE OF MONETARY POLICY

A SURVEY OF THE LITERATURE

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EUROPEAN CENTRAL BANK
EUROSYSTEM

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In 2007 all ECB publications feature a motif taken from the €20 banknote.

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ABSTRACT

The need for structural reforms in the euro area has often been advocated. These reforms would improve the welfare of euro area citizens and also, as a welcome side-effect, facilitate the conduct of monetary policy. Against this background, a particularly relevant question that can be posed is whether monetary policy should help implement structural reforms. The objective of this paper is to provide a review of the existing literature on structural reforms in Economic and Monetary Union (EMU) and to discuss the possible ways in which monetary policy could support the structural reform process. In the context of EMU, the main conclusions that emerge are that the monetary policy for the euro area is not the appropriate tool for mitigating the potential and uncertain short-term costs of reforms or for providing incentives for structural reforms at the national level. However, credible monetary policy aimed at price stability can improve the functioning of the supply side of the economy and contribute to an environment which is conducive to welfare-enhancing structural changes. In addition, the ECB's contribution to the implementation of structural reforms takes the form of analysis, assessment and communication.

I   INTRODUCTION

Since the inception of the euro area, the need for structural reforms has often been advocated. These reforms would increase flexibility and competition, thereby enhancing productivity, employment and the ability of the euro area economy to absorb domestic and external shocks. All this would improve the welfare of euro area citizens and also, as a welcome side-effect, facilitate the conduct of monetary policy. Against this background, a particularly relevant question that can be posed is whether monetary policy should help implement structural reforms, as some observers have recently suggested (e.g. Gros et al., 2004), and if so, how.

The objective of this paper is to provide a review of the existing literature on structural reforms in Economic and Monetary Union (EMU) and to discuss the possible ways in which monetary policy could support the structural reform process. While this paper mainly focuses on product and labour market reforms, it also refers, when appropriate, to the role of reforms in fostering the integration and the efficiency of the euro area financial markets.[1]

The remainder of this paper is structured as follows. Chapter 2 analyses the effects of structural reforms on output and inflation. Chapter 3 tackles the issue of why it is apparently so difficult to implement structural reforms, despite the broad consensus regarding their beneficial effects. In particular, this chapter reviews several explanations offered by the political economy literature, which analyses the influence of politically motivated governments on economic outcomes. Finally, taking into account the institutional framework of the euro area, Chapter 4 investigates whether macroeconomic policy should support structural reforms. Finally, Chapter 5 suggests some possible policy conclusions.

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1   For an extensive treatment of the current state of the euro area financial market integration process, likely future developments and the ECB's involvement in this process, see ECB (2004a, 2004b).

2 THE RELEVANCE OF STRUCTURAL REFORMS

2.1 BENEFITS OF LABOUR AND PRODUCT MARKET REFORMS

LABOUR MARKET INSTITUTIONS AND PRODUCT MARKET REGULATIONS

The functioning of labour and product markets is largely determined by the features of labour market institutions and product market regulations. Although these are difficult to define precisely, labour market institutions include trade unions, wage bargaining systems, taxes on labour, minimum wages, regulation on working conditions, employment protection legislation, unemployment benefit systems as well as active labour market policies. Product market regulations for their part include measures such as state control, regulatory and administrative opacity, government regulation on competition as well as barriers to trade and investment.[2]

These institutions and regulations affect the setting of wages and prices and may as a result have an impact on inflation and its dynamics. To the extent that they affect inter alia labour supply and demand via labour mobility, human capital accumulation, innovation as well as the rates at which low productivity companies are replaced by high productivity firms, these institutions may influence productivity, employment and output growth. In the same vein, to the extent that they have an impact on the search effectiveness of unemployed persons (e.g. via the level of benefits), on the strength of workers in the bargaining process or on the elasticity of product demand by firms, they may affect equilibrium unemployment and thus productivity and potential output growth in turn.[3]

Labour market institutions and product market regulations can give rise to so-called structural rigidities when they prevent firms and workers from flexibly reacting to changing supply and demand conditions. These structural rigidities may, for example, take the form of nominal and real wage rigidities, or price rigidities.

Downward nominal wage rigidities, for example, may be due to labour market institutions such as minimum wages, reservation wages determined by the level of unemployment benefits or long contract durations. Real wage rigidities may arise in the presence of wage indexation clauses or under certain wage-bargaining settings. Finally, price rigidities may appear for example in the form of "menu" and information costs impeding adjustments in product and consumer prices.

REMOVING STRUCTURAL RIGIDITIES

Structural reforms in product and labour markets are supposed to improve the functioning of markets by removing the structural rigidities associated with labour market institutions and product market regulations.[4] In this regard, they particularly aim at facilitating firms' and workers' entry into product and labour markets in order to enhance employment by reducing the profit and wage rents that develop in the presence of oligopolistic market structures (see e.g. Blanchard and Giavazzi, 2003). In the same vein, a reduction in the level of unemployment benefits is supposed to enhance incentives to work, increasing the search activity of the unemployed and lowering workers' reservation wage, thus reducing nominal and real wage rigidities and enhancing equilibrium employment.[5] A reduction in the level of employment protection legislation may increase labour demand in particular by lowering employers' hesitance to hire so-called marginal groups in the labour market (such as young school leavers without work experience or

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2 See OECD (2007) for an overview of structural indicators measuring progress with structural reforms in OECD countries.

3 For a survey of this issue, see Nickell and Layard (1999).

4 Often, this is tantamount to reducing the impact of governments on market behaviour. For a discussion of the concept of structural reform, see IMF (2004).

5 The potential ability of structural reforms to contribute to increasing employment and reducing unemployment basically formed the starting point of the OECD Jobs Study (1994), which triggered the discussion of how structural reform could address the problem of high and persistent unemployment in European countries. In its reassessment of the 1994 OECD Jobs Strategy, the OECD has shifted its focus more onto employment. For more details, see Brandt et al. (2005) and OECD (2006b).

women after long career breaks), whose abilities are not directly observable by firms.

As a consequence, in the medium to long run, and given the resulting changes in wage and price signals, in a first-best setting, labour and product market reforms should increase the mobility of production factors and improve their allocation in the economy towards their most efficient use. By creating new production and employment opportunities, this raises productivity and the economy's aggregate output. However, during the adjustment process following the implementation of structural reforms, the input of labour relative to capital may rise when employment increases, resulting in lower labour productivity.[6] In the long run, however, more competition and flexibility in labour and product markets should trigger innovations and reduce rents in profits and wages, raising an economy's total factor productivity, employment and real incomes. Generally, different structural reforms affect potential output growth and prices through different channels and to a varying extent, as they also depend on the cross-market effects of labour market reforms on product market outcomes and vice versa, as well as on each country's starting position in the reform process.[7] Consequently, the impact of structural reforms generally needs to be evaluated on a case-by-case, country-by-country basis.

SELECTED EMPIRICAL EVIDENCE

A number of empirical studies have attempted to estimate the degree of downward wage rigidity in European countries. Their results suggest that fairly significant downward nominal wage rigidities do exist, although there is considerable variation across European countries.[8] With regard to real wage rigidities, Dickens et al. (2006) find that these appear to be more common in European countries than in the US, and are associated with the degree of union presence, suggesting that participants in collective wage bargaining focus more on real than on nominal wage changes.[9] To the extent that wages affect firms' marginal costs, such wage rigidities affect the dynamics of inflation,

with more rigid wages tending to lead to more persistent movements in inflation.[10, 11]

Against a background of high and rising levels of unemployment in Europe over the last few decades, many empirical studies have focused on identifying the impact of labour market institutions on unemployment and growth in European countries.[12] These studies differ with respect to the institutions analysed and also, partly significantly, with respect to the results obtained on the role of institutions in explaining developments in unemployment. Several of these studies have pointed to high net replacement rates[13] as being an important factor contributing to unemployment, in addition to the impact of unions. The impact of employment protection legislation and active labour market policies is, however, less clear.[14]

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6 In turn, the input of capital may rise relative to labour when investment picks up, thus leading to lower capital productivity.
7 See OECD (2002) for the implications of cross-market effects created by structural reforms.
8 For a brief survey of the literature, see the "Wage rigidities in the euro area and the United States" Box in the January 2007 ECB Monthly Bulletin article entitled "Changes in the structural features of euro area labour markets over the last decade".
9 At the same time, Bewley (1999, 2006) finds that there is a clear reluctance to cut nominal wages for reasons of fairness and morale.
10 For more details on models assessing inflation dynamics in the presence of wage rigidities, see Christoffel and Linzert (2005), Christoffel, Kuester and Linzert (2006), and Blanchard and Gali (2006).
11 Improving job mediation and raising the workforce's educational attainment tends to reduce bottlenecks in the labour market and helps align wage developments with labour productivity growth, thus lowering potential inflationary pressures. For an analysis, see ECB (2002).
12 For a survey, see Nickell and Layard (1999), Bassanini and Duval (2006) and Blanchard (2006).
13 Net replacement rates are a measure of the net income that unemployed persons receive while out of work. See for example Nickell (1997), Elmeskov et al. (1998), Nickell and Layard (1999), Blanchard and Wolfers (2000) and Nickell et al. (2005).
14 Blanchard and Wolfers (2000) show that the interaction of some labour market institutions with cyclical and structural shocks contributes to explaining the increase in European unemployment over time as well as the heterogeneity of unemployment developments across EU countries. Their results indicate that whereas cyclical and structural shocks contribute to the general increase in unemployment, the interaction of these changes with different national labour market institutions seems to explain some of the heterogeneity of unemployment trends.

2.2 BENEFITS OF FINANCIAL MARKET REFORMS

Financial market reforms designed to achieve greater efficiency, increased competition and further integration would also help increase the euro area's long-term potential growth rate. To the extent that reforms lead to efficient and more "complete" financial markets, the possibility also increases that individual investors will finance projects and hedge investment risk, thereby contributing to higher potential output (see Hart, 1975). Moreover, by ensuring equal access to financial instruments and services, the process of financial integration will eliminate some of the barriers to trading, clearing and settlement platforms, therefore enhancing capital allocation towards the most productive investment opportunities.[15]

In addition, potential output growth may benefit from more efficient financial markets and higher levels of financial integration, as the latter should foster additional opportunities to share risk among investors, thus encouraging private saving flows into investment opportunities that present higher returns and that would not be undertaken if the risk could not be spread efficiently. In particular, Hartmann et al. (2007) argue that there remains significant scope for further growth in European financial securitisation, which would improve the allocation of risk as well as free bank capital for further lending to firms. Furthermore, as shown by Kalemli-Ozcan, Sorensen and Yosha (2001), sharing risk across regions enhances specialisation in production, resulting in clear productivity increases.

Greater financial integration and enhanced competition also encourages further financial sector development, which in turn leads to higher levels of economic growth. As noted by Gianetti et al. (2002), provided a proper framework for prudential regulation exists, financial integration should increase competition among the financial sectors of different countries or economic regions, thereby increasing their efficiency by reducing intermediation costs and attracting more capital

from domestic and foreign investors. This leads financial intermediaries to specialise in the collection and dissemination of information so that the allocation of resources can be performed more efficiently and at a lower cost (see Levine, 1977). Rousseau (2002) finds empirical evidence that financial development promotes investment and business by reallocating capital, while industry-level studies like that of Jayaratne and Strahan (1996) show that financial development results in economic growth.[16] Moreover, Bekaert et al. (2004) find that equity market liberalisation – defined as the right of foreign investors to trade in domestic securities and of domestic investors to trade in foreign securities – increases subsequent average annual real economic growth.

Finally, financial market reforms also impact the way that firms react to changes in financial conditions. For example, financial market frictions make external finance more expensive owing to informational and agency problems, leading to the External Finance Premium (EFP) for external funds, especially for smaller firms. Frictions in financial markets therefore have firm-distributional effects, as finance becomes relatively more expensive for small firms than for large ones, which has further consequences for competition and hence output and employment.

With regard to the euro area, the introduction of the single currency has enhanced the liquidity and the efficiency of the euro area financial markets, especially in the unsecured money market segment, which is now completely integrated.[17] However, some scope remains for structural policies that could increase the efficiency of the euro area financial markets in

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15 See also Bekaert, Harvey and Lundblad (2004, 2005).

16 In the euro area, ECB (2006) finds that the limited development of the capital markets is one important factor hindering their efficiency. In particular, venture capital financing – which typically provides start-up financing for entrepreneurs to develop their ideas and encourages the emergence of new firms – is very low in many European countries compared to the US. Public ownership and participation in the banking sector also limits the growth and development of the financial sector.

17 See ECB (2004a).

three main ways.[18] First, euro area-wide competition policies may be beneficial for further banking integration, even though some of the inherent characteristics of traditional loan and deposit business constrain the cross-border expansion of commercial banking, even in a common currency area. Second, it would be desirable to promote open access to clearing and settlement systems, which remain highly fragmented in the euro area. Third, good corporate governance is required for the further development of the European single market because it contributes to fostering entrepreneurial activity.[19]

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18 See ECB (2004a) and ECB (2006).
19 ECB (2006) points out that in the area of corporate governance, there are a number of open issues that deserve attention. Minority shareholders' rights to enforce protection against self-dealing by controlling shareholders or company directors should be strengthened. In addition, firms' concentration should decline and the role of institutional investors should be enhanced, as should the efficiency of legal systems in solving financial conflicts in certain European countries.

3   THE IMPLEMENTATION OF STRUCTURAL REFORMS IN THE EURO AREA: WHY IS PROGRESS SO UNSATISFACTORY?

Despite broad consensus on the necessity of structural reforms in euro area product and labour markets, overall progress with the implementation of reforms has so far been insufficient. This is revealed, for example, by low productivity growth in the euro area compared to the US. Moreover, although the unemployment rate in the euro area declined by 2.6 percentage points between 1995 and 2006, it is still far too high, with a level standing at 7.9% in 2006. In a similar fashion, the share of long-term unemployed in total euro area unemployment, which is often used as an indicator of underlying labour market rigidities, also remains extremely high at 46.8% in 2006, even though it declined by 2.7 percentage points between 1995 and 2006.[20] At the same time, estimates of the non-accelerating inflation rate of unemployment (NAIRU), although having declined in recent years, still point to a high level of structural unemployment in the euro area.[21]

Against this background, continuation and speeding up of the reform progress is crucial if labour market conditions are to improve. However, resistance to reforms is particularly evident regarding labour market reforms, even if in a survey of EU citizens conducted by the European Commission in 2001, 90% said that fighting unemployment should be a priority policy action.[22]

Looking at the experience of other countries, it appears that significant structural reforms are often triggered by economic crises (the "back against the wall" hypothesis). Economic crises can promote reforms because bad economic conditions make it more obvious that the policies in place are no longer sustainable. In addition, crises introduce a sense of urgency in the decision-making process, tend to weaken opposition to reforms, and raise the cost of non-action.[23] Two examples of implementing reforms as a consequence of crises are the US

towards the end of the 1970s and the UK at the beginning of the 1980s. Between the late 1960s and the early 1980s, the US drifted into periods of high and volatile inflation with elevated and erratic interest rate levels, a declining dollar relative to most major currencies, as well as a gradual rise in unemployment. This situation gave rise to far-reaching policy changes. Monetary policy was reoriented, by an amendment to the Federal Reserve Act in 1977, towards a dual mandate that explicitly incorporated price stability, implying less emphasis on attempts to fine-tune the real economy. This monetary policy regime change, which was put in place from 1979 onwards by Fed Chairman Paul Volcker, was accompanied by the rigorous implementation of policies that aimed at improving the functioning of the supply side.[24] Turning to the UK, the recession after the first oil price shock in 1973, coupled with high inflation and a balance of payments crisis in 1976, led to a comprehensive programme of structural reforms following a period of economic decline vis-à-vis other industrialised countries.

The most recent literature identifies several explanations for the sluggish implementation of structural reforms and analyses how they could be overcome by gaining political support for structural changes; these are analysed in detail in sub-section 3.1 below.[25]

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20 The term "long-term unemployed" is defined as persons who have been unemployed for more than 12 months.

21 For a discussion of this issue, see European Commission (2006).

22 See European Commission (2001). In May 2007, unemployment still topped the list of issues European citizens are most concerned about. In the presence of improving labour market conditions, it was, mentioned by 34%, see European Commission (2007)

23 See for example Alesina, Ardagna and Trebbi (2006) and Hoj et al. (2006).

24 These policies included reductions in the marginal income tax rates and unemployment benefits, as well as the opening up of network industries such as telecommunication services, railways and surface mail.

25 See for example Lora et al. (2004) and Hoj et al. (2006).

**3 THE
IMPLEMENTATION
OF STRUCTURAL
REFORMS IN THE
EURO AREA: WHY
IS PROGRESS SO
UNSATISFACTORY?**

3.1 SOME ECONOMIC EXPLANATIONS FOR THE OPPOSITION TO REFORMS

UNCERTAINTY ON THE OUTCOME OF THE REFORM PROCESS

The sluggish progress made to date with the implementation of structural reforms in the EU can partially be attributed to the uncertainty regarding the outcome of reforms. In this respect, two considerations are worth mentioning.

First, public awareness of the precise benefits that structural reforms could bring may be crucial in building support for such reforms. For example, in a 2004 survey of German citizens, 75% said that politicians had not sufficiently explained why the agreed reforms were necessary. Public resistance to reforms whose outcome is uncertain is thus hardly surprising.[26] These findings are mirrored in a questionnaire-based survey for Germany and Italy conducted by Boeri et al. (2002), who find that the perception of a pension crisis is lower among those who are poorly informed about how the pension system works, making them less likely to support reform measures.

Second, even if the public is well informed about the general benefits for the economy of a particular reform, i.e. even if the average payoff from the reform will be positive, resistance to reforms may also arise as the more uncertain individuals' personal status is after the reform, the stronger they may support a specific unchanged outcome (the "no reform" scenario). Reformers must therefore counteract this "status quo bias"[27], a task that may require compensating some social groups opposed to the reform.[28]

STRUCTURAL REFORMS CAN CREATE COSTS IN A SECOND-BEST WORLD

Another obstacle that structural reforms face from an economic point of view comes from the theory of second best (Rodrik, 2004): when an economy exhibits several inefficiencies, fixing only a few of them is no guarantee of improved economic performance, and may actually reduce welfare. For example, if some institutions were put in place to mitigate the negative effects of inefficient existing institutions, welfare may decrease if only the former are eliminated or making the use of temporary contracts more flexible without improving the flexibility of permanent contracts may lower productivity. By reducing the probability that temporary employees could become permanent, both their incentive to build up human capital and firms' incentive to provide training are lowered, reducing productivity as a result (see Blanchard and Landier, 2002; OECD, 2006).[29]

MARKET FAILURES

Another potential reason why structural reforms may face opposition emphasises the difficulty of reforming institutions that were originally introduced with the aim of playing an important social role in mitigating market failures. For example, Pages (2004) argues that institutions such as public unemployment insurance may be justified if there are sizeable search costs in the labour market and, at the same time, insurance companies do not offer private unemployment insurance to employees owing to adverse

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26 Survey conducted by infratest dimap ("Deutschland-trend") for ARD television, 2 July 2004.

27 See for example Samuelson and Zechkauser (1988), Fernandez and Rodrik (1991) and Saint-Paul (1996). In this respect, Heinemann (2004) suggests that loss aversion might explain why losers' resistance to reform is potentially more intense than winners' support.

28 See Rodrik (1994). In a dynamic environment, though, the government faces a trade-off when deciding on whether the losers of the reform should be compensated: on the one hand, such compensation would tend to increase support for the reform, yet on the other, it might trigger more opposition to future reforms as interest groups would fight for further compensatory measures. In practice, a case-by-case approach is the most likely outcome. For instance, if a pay-as-you-go pension scheme is partially replaced by a privately funded scheme, some compensation for those retirees that have contributed during their working lives to "buy the right" to receive a pension from the government is expected to receive widespread support.

29 As temporary contracts are likely to be used by young workers, incentives to increase human capital are trimmed down for those who need them most (Alonso-Borrego and Aguirregabiria, 1999). On the other hand, temporary workers may have more incentives to perform well as they enjoy less employment protection. Additionally, if they credibly perceive that their contracts may be renewed in case they perform well, they may still have incentives to invest in human capital in the short run to improve their performance.

selection and moral hazard problems.[30] Similarly, government intervention may be needed to guarantee an effective minimum level of healthcare. As a consequence, reforms affecting the size of these institutions are impeded by the fact that there seems to be great demand for them (in particular for those related to social protection), reflecting social preferences (Bentolila and Saint-Paul, 2001).[31] Obviously, the less obvious the cost associated with these institutions is to the majority of voters, the higher the demand and the greater the resistance to reforms.

THE POLITICAL ECONOMY OF STRUCTURAL REFORMS

A further explanation for the difficulties encountered when conducting structural reforms can be found in the political economy literature: as structural reforms may have significant redistributive effects, the segments of the population that stand to lose from the reform, despite being in the minority compared with those who are expected to gain from the reform, could drive policy decisions in their favour if they are better organised, have greater political voice, and are better at lobbying for their own interests.[32] The more successfully the group of those unwilling to reform is represented by interest groups and the more complex the link between the reform and the benefits for the majority, the more difficult the implementation of reforms becomes.[33] In this context, Carcillo et al. (2004) and IMF (2004) have pointed out that small interest groups tend to have more power in proportional voting systems, rendering the rigorous implementation of structural reforms more difficult than in majoritarian voting systems.

Furthermore, the political orientation of the government may affect the kind and magnitude of reforms implemented, with some governments putting more emphasis on equity than on efficiency when confronted with the equity-efficiency trade-off. This may be tantamount to being more hesitant with labour market reforms than with product market reforms, where the involved interest groups are more evenly spread across the electorate of several parties (Castanheira et al., 2006).

Political economy considerations also play a prominent role in explaining resistance to the implementation of reforms when their costs and benefits are possibly distributed unevenly across time: even well-designed structural reform packages that unambiguously provide long-term social gains which outweigh any possible short-term costs are sometimes not implemented because politicians discount the future at a higher rate than is socially desirable, owing to the political uncertainty surrounding their eventual re-election (Bean, 1998).[34] Incumbent governments may fear losing political support today to achieve benefits that may only materialise over a time horizon beyond the election cycle, and eventually accrue to another government. Generally, these problems are exacerbated in ageing societies, as older people, especially if they have no children and thus no direct link to future

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30 See also Messina and Vallanti (2006), whose empirical findings suggest that employment protection legislation has contributed to stabilising employment fluctuations in Europe, providing workers with an insurance mechanism against the risk of losing their labour income.

31 It can be argued that these social preferences may be biased, as the benefits of these institutions for certain groups are directly visible, whereas the costs created for the whole of society (e.g. in the form of distorted incentives, higher unemployment and lower real wages) could be much more indirect and, as a result, may be underestimated by the general public. While this argument may be true for certain institutions, it is less applicable to some of the examples described in the text, to the extent that in a context of severe market failures, economic distortions are clearly outweighed by the benefits from preserving human life more efficiently.

32 See for example Heinemann (2004). Boeri et al. (2002) show that younger, more educated and richer males tend to support private pension systems, while union members, residents of poorer regions and those with a left-wing orientation strongly support the publicly funded "pay-as-you-go" system.

33 The recent demonstrations in France against the "first employment contract" illustrate this point: the reform was likely to increase employment prospects for uneducated youth, whose unemployment rate is high. However, the reform could also reduce the level of future expected employment protection for educated youth (university students) with respect to the status quo. Since university students are much better organised than uneducated youths, the reform encountered severe popular opposition and was finally abandoned.

34 Begg (2000), Tabellini and Wyplosz (2004) and Chriszt and Kay (2004), among others, argue that most of the benefits from structural reforms usually take rather a long time to materialise.

generations, tend to discount the longer-term economic benefits of structural reforms more strongly than young persons.[35]

The economic literature has identified several reasons why structural reforms in labour markets may lead to a temporary decline in aggregate demand and/or to costs that may materialise before the long-term benefits described in Chapter 2:

– Reductions in unemployment benefits would be likely to create short-term costs for the unemployed in the form of lower income support, while the positive effects on employment may take time to materialise.

– Lower firing costs intensify labour-market turnover and employment rates do not necessarily rise (or unemployment rates drop) in the short run due to the effect of further layoffs (Blanchard and Landier, 2002; Saint-Paul, 2002; Galiani and Hopenhayn, 2004).[36] A higher probability of being fired spurs workers to reduce consumption in the short run in order to increase their precautionary savings.

– The introduction of fixed-term contracts for some employees, without making permanent contracts more flexible, may increase the bargaining power of permanent employees because it creates a cushion of temporary employees that will presumably be first to be laid off if the firm has to confront unfavourable economic circumstances. Their strengthened bargaining position might result in higher wages for permanent employees and lower employment rates relative to the no-reform scenario (Bentolila and Dolado, 1994).

Reforming the product market may also result in significant short-term costs: greater competition may occasionally have perverse outcomes on efficiency by diminishing the resources available to previously more protected firms for financing innovations (Aghion et al., 2002; Etro, 2004). Additionally, Carcillo et al.

(2004) suggest that the combination of dangerous over-employment, wage rigidities and inelastic demand may imply that sectoral employment has to decrease if labour productivity increases in the aftermath of liberalisation. Moreover, sectoral employment losses are not always absorbed straightforwardly by other sectors. If labour is at least partially sector-specific and real wages are not flexible, then some aggregate employment losses might emerge in the short term.

Regarding the short-term costs associated with financial market reforms, it is not obvious that all countries will gain when a number of countries with structurally diverse financial systems open up to financial trade (ECB, 2004a). Financial integration possibly creates winners and losers, and better capital allocation is expected to benefit many but could also hurt others in the short run.[37]

Although it cannot be generalised, it seems that the positive impact of some reforms, such as falling relative prices following deregulation in telecommunication services or the beneficial effects of some tax reforms, tend to become obvious with less delay than others, e.g. the intended employment effects of many labour market reforms. IMF (2004) provides preliminary and tentative evidence of how consideration of the short-term costs implied by structural reforms has resulted in countries finding it easier to pursue financial market and trade reforms than product and labour market reforms, as the former normally yield

35 Ageing societies might even fall into a demographic trap if the median voter becomes old enough to support relatively high taxes on the current active generation in order to finance relatively generous pension and healthcare systems. Such a trap, for the same reasons that give rise to the Laffer curve, implies that the economy would shift to a low-growth, high-tax steady state (Alesina and Angeletos, 2004), which might lead to a higher risk of government default if public expenditures, especially old-age benefits, are not cut.

36 Such a short-term outcome may be more likely if there is a strong probability that the reform will be revised (e.g. following the next election).

37 The perceived potential disadvantages of free capital flows, in terms of a higher likelihood of financial crises, has led to suggestions for a tax on cross-border capital flows, even between developed countries/areas (Eichengreen et al., 1995).

more immediate benefits with much less uncertainty.[38]

3.2 DOES EMU AFFECT THE INCENTIVES FOR PRODUCT AND LABOUR MARKET REFORMS?

In the particular case of EMU, some authors have argued that politicians in euro area countries have already spent their limited amount of political capital during the convergence process on policies aimed at lowering inflation and fiscal consolidation. Against this background, these same politicians or parties may struggle to convince their constituencies that further investment is needed in the form of labour and product market reforms, in order to foster long-term potential growth and a sustainable employment rate.

However, this theoretical argument runs counter to Bertola and Boeri (2002), who find that the adoption of the euro has triggered an acceleration in the pace of labour market reforms in those countries that joined the euro area. Although the euro area countries started out with a higher level of labour market inflexibility, as measured by employment protection legislation and benefits for the unemployed, euro area countries implemented more reforms between 1997 and 2002 than between 1986 and 1996 compared to non-euro area countries. Even though the raw number of reforms is of course an unsatisfactory measure of reform efforts and provides only partial information on the impact and success of such reforms, there is nevertheless wide agreement that such reforms have contributed to the employment gains observed in the euro area over the last few years.[39]

Duval and Elmeskov (2005) discuss more generally factors that increase or reduce the incentives to implement structural reforms within EMU. In their discussion, they highlight other determinants that the game-theoretic approach is unable to consider fully. For instance, they argue that a common fiscal policy regime in EMU would increase Member States' incentives to implement structural reforms, as national governments may not be able to

compensate the effects of a negative local shock purely by using domestic fiscal policy alone. They also highlight how greater price transparency across countries may reduce the monopoly rents created by structural rigidities, thus reducing the incentive to resist those reforms that would eliminate such rigidities. On the other hand, they argue that the literature analysing the incentive structure of countries participating in a monetary union (MU) from a game-theoretic point of view concludes that participation in an MU may also lower countries' incentives to implement structural reforms for two main reasons. First, from a more long-term perspective, structural reforms would benefit countries running independent monetary policies, because the elimination of structural rigidities would reduce the inflation bias[40] of the monetary authority. In an MU, structural reforms in a single country would not eliminate the "area-wide" inflation bias, thus providing ex ante fewer incentives for structural reforms. Second, countries may refuse to embark on reforms that could have short-term costs, either because of governments' short-sightedness or because monetary policy can only partially

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38 International influences may foster the implementation of structural reforms. For example, a high degree of openness to trade and a high level of foreign direct investment may raise incentives for domestic firms to call for labour and product market reforms that would reduce their production costs, thus increasing their competitiveness (see e.g. Blanchard and Giavazzi, 2003). Furthermore, product market reforms may be fostered by supranational constraints imposed by international agreements or treaties, e.g. within the EU and the World Trade Organization. Hoj et al. (2006) find empirical support that the "international co-operative approach to liberalisation" such as the EU Internal Market Programme has been successful in pushing forward with product market reform. However, the reduction of tariff barriers is found by contrast to be associated with "a less liberal stance in labour markets".

39 See also ECB (2007).

40 In the game-theoretic literature of monetary policy, an inflation bias arises if the central bank weighs positively in its loss function the deviations of actual output from the level of output that could be attained if there were no real frictions in the economy. More precisely, the central bank may be aware that structural rigidities would constrain the "equilibrium" output level to be lower than the level which is compatible with full employment. Hence, this monetary authority tries to produce the amount of inflation that is necessary to close the gap between potential and "full employment" output. Obviously, in this case in the long run, the level of output and employment will still be at the suboptimal, rigid potential level, but the economy would suffer from a higher than necessary inflation rate.

compensate for the short-term decline in regional domestic demand.[41]

The rest of this chapter analyses in more depth the conclusions reached by the game-theoretic literature, which takes into account the strategic interactions between private economic agents and policymakers for the determination of economic outcomes.[42, 43]

This literature extends the framework designed in Barro and Gordon (1983) to the case of an MU among different sovereign countries where monetary policy is centralised, but fiscal and structural policies remain in the domain of the national authorities. In general, monetary policy in this type of model only affects real output in the short term, as a consequence of "surprise" inflation produced by the central bank. Higher than expected inflation reduces real wages, and firms are willing to hire more workers and produce more products than they would in equilibrium. In the long run, real wages reverse their fall as nominal wages catch up with higher actual inflation and output reverts to equilibrium. Inflation will be permanently higher. This set-up allows an investigation into the conditions under which EMU would strengthen or weaken the incentives for national governments to implement labour market reforms that would increase long-term potential output growth and lower the persistence of output and inflation deviations from their equilibrium values in countries participating in EMU.[44]

One important contribution to this literature is that of Calmfors (2001), whose model is explained and discussed in detail in Annex 1. The most relevant results obtained in the paper are the following:

– Result 1: When only the effects of structural reforms on equilibrium unemployment and inflation are considered, the existence of an "inflation bias", both at the national and the MU aggregate level, delivers more incentives to reform outside an MU than inside it. Hence, in this model, an MU with decentralised economic policies will only

deliver a suboptimal level of structural reforms. However, *if there is no national inflation bias*, the incentives to reform inside and outside the MU are the same, and the actual level of reforms implemented depends on the structural parameters of the model.[45] Quite differently, in case of participation in an MU, if the single MU central bank has an inflation bias, it will try to reduce countries' average deviations of actual output from "MU-wide frictionless" output in order to reduce average unemployment in the MU (i.e. it suffers from an area-wide inflation bias). Hence, from the country point of view, the amount of inflation created by the single central bank is lower than the amount of inflation a domestic central bank would have created to reduce unemployment. Hence, the

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41 Bentolila and Saint-Paul (2001) and Saint-Paul (2002) argue that countries participating in EMU have lower incentives to implement structural reforms that would lead to the above-mentioned short-term macroeconomic costs than countries that retain their national competence regarding monetary policy. Furthermore, they highlight another limitation to structural reforms under EMU: their potentially deflationary impact. They argue that if (i) a national government tries to avoid national deflation because, among other reasons, deflation reduces the tax receipts of the government under a non-indexed national tax system, and (ii) if the reform does not sufficiently broaden the tax base in the short run to compensate for the above-mentioned decrease in nominal tax receipts, then the maximum size of any reform will be smaller (i) the lower the common trend of inflation in the MU, and (ii) the stronger the downward impact of the reform on national inflation.

42 See Ozkan et al. (1997), Siebert (1999), Siebert and Sutherland (2000) and Calmfors (2001).

43 One further argument supporting the favourable impact of EMU on the incentives for national governments to implement structural reforms which has not yet been tackled in the economic literature is the increased policy competition induced by the more transparent economic environment. Within an MU, voters may increasingly compare economic outcomes and best practices across euro area governments, thereby putting pressure on poorly performing governments.

44 This is because in the model the higher the equilibrium unemployment and expected inflation, the higher the level of structural reforms. In case of non-participation in the MU, the national central bank's inflation bias will increase the government expected inflation without reducing the government expected unemployment. In addition, this literature also provides normative prescriptions for the general macroeconomic policy stance given structural reforms as well as for the need for national policymakers to coordinate in order to achieve the optimal level of structural reform.

45 This is because the government knows that the monetary impulse will be short-lived and its impact on unemployment will evaporate in the long run.

incentives to implement structural reforms are lower.[46]

– Result 2: When the effects of structural reforms on both equilibrium unemployment and inflation as well as on nominal wage flexibility are considered, in the presence of a national inflation bias it is not clear whether incentives to reform are higher inside or outside the MU. However, *in the absence of a national inflation bias*, the analysis unambiguously reveals that national governments have greater incentives to implement structural reforms inside the MU than outside. This differs from the scenario when structural reforms only affect equilibrium variables: in this case, in an MU the government has an incentive to implement more structural reforms in order to increase the flexibility of its economy, thus enabling it to better absorb those shocks that in autarky were more efficiently taken into account by the domestic central bank. Intuitively, the incentives to produce structural reforms are higher in an MU, precisely because the government wants to increase the flexibility of the domestic economy in order to compensate for the lack of a central bank response to idiosyncratic national shocks.[47]

These results are robust to a number of extensions. Calmfors (2001) confirms that the MU will unambiguously deliver more structural reforms than non-participation in an MU, when the national governments and monetary authorities have loss functions such that there is a positive relationship between the utility costs of variations in unemployment and inflation on one side, and the average equilibrium unemployment and inflation around which these variations occur on the other side.[48] This positive relationship provides governments with a "precautionary" rational motive for labour market reforms, much in the same way that income uncertainty may give rise to precautionary savings.

Finally, in the same vein as Calmfors (2001), Siebert and Sutherland (2000)[49] show that small countries joining an MU have more incentives than larger countries to implement structural reforms that increase nominal wage flexibility, as the shocks hitting their economies are less correlated with the average shocks for the area, and their weight in the MU is low. In this situation, the smaller the country, the less it can expect a centralised monetary policy to be able to stabilise the idiosyncratic shocks hitting its own economy. Thus, according to this argument, the smaller the country (or, equivalently, the more numerous the countries joining the MU), the higher the incentives for national governments to implement structural reforms that help their respective domestic economies to absorb non-area-wide shocks.

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46 Equations (6) and (9) in Annex 1 show that, minus the inflation bias, the optimal level of structural reforms does not depend on monetary policy (the second terms in both equations disappear) and thus would not be affected by the country joining an MU or deciding not to join.

47 For the euro area, it can be safely assumed that neither national authorities nor the ECB suffer from an inflation bias. National governments should have more incentives to implement structural reforms than they would if monetary policy were in the hands of a domestic authority.

48 In this scenario, the marginal disutility of both unemployment and inflation is convex, and no longer linear as in the case of a standard, quadratic loss function.

49 In their multi-country model, Siebert and Sutherland (2000) analyse the implications of possible spillover effects of decentralised national monetary policy stabilisation on other countries. These spillovers reflect inflation differentials among countries – weighted by the size of each country relative to the size of the aggregate area – whereby higher inflation in one country is assumed to be related to higher production costs (higher wages) and, consequently, to lead to shifts in production to other lower inflation countries. Once again, if governments have an inflation bias, as in Calmfors' (2001) model, the incentives to implement structural reforms are lower in an MU because the loss arising from the inflation bias is lower than it would be in the case of no participation in the MU. This is for two reasons: first, in an MU the inflation bias is lower because national policymakers internalise the losses arising from having higher inflation than their trading partners. In comparison with the Calmfors (2001) model, in the Siebert and Sutherland (2000) model the central bank recognises that the gains from inflation are reduced by the loss of competitiveness, as in an MU the nominal exchange rate cannot compensate for the inflation differential. Second, as in Calmfors (2001) – see Result 1 above – in an MU, monetary policy is centralised and based on area-average variables. This implies that national policymakers with an inflation bias have lower incentives to implement structural reforms that would have a limited impact on the average deviation of equilibrium output from its non-distortionary level.

4 AN ACTIVE ROLE
FOR MONETARY
POLICY IN THE
EURO AREA? THE
"TWO-HANDED"
APPROACH

4 AN ACTIVE ROLE FOR MONETARY POLICY IN THE EURO AREA? THE *"TWO-HANDED"* APPROACH

Following on from the above discussion, the current status of efforts aimed at implementing structural reforms in the euro area can be characterised as follows: broad consensus has been reached on the necessity of structural reforms in the euro area, and EMU participation does not per se mitigate the incentives for national policymakers to implement such structural reforms. However, although significant progress has been made with structural reforms in recent years, politically motivated governments tend not to implement sufficient structural reforms because they are afraid of losing voters' support (and future elections) if they were to introduce reforms whose negative, short-term effects would be relatively more visible to voters, and whose positive, long-term effects could be more difficult to ascertain in advance.

Carcillo et al. (2004) suggest that a unique solution capable of unlocking the reform process in the EU might not exist, as each EU Member State has its own specific institutions and reform needs. As discussed in the previous chapter, structural reforms are more likely to be advocated in emergency situations (e.g. in the midst of a crisis), when the short-term political costs of inaction may be even higher than those stemming from the implementation of the reform package (Alesina and Drazen, 1991; Drazen and Grilli, 1993; Rodrik, 1994).[50]

However, as some authors have argued, countries do not have to plunge into costly economic and financial crises in order to decide to implement structural reform packages. While reform packages indeed entail short-term costs, appropriate macroeconomic policies could mitigate this impact, thus relieving governments from worries connected to the political cycle. Blanchard et al. (1986), describing what has since been termed the "two-handed approach"[51] to structural reforms, argue that some macroeconomic stimulus from aggregate demand policies might be necessary to foster the implementation of structural reform packages. Given that, as discussed above, structural reforms are critical for long-term output and employment growth, but will presumably only contribute gradually to these goals, *"something much more immediate is needed to change the course of events"* in the short run.

These authors advocate that structural reforms must be accompanied with a set of timely supply incentives which, together with expansionary demand policies, would start improving employment in the short term and make it much easier to find the social agreement required to proceed with some difficult reform proposals. However, according to Tabellini and Wyplosz (2004), the timing of the *two-handed approach* is crucial. In their view, expansionary aggregate demand policies should not be put in place until the reform package is implemented, as otherwise they may foster the illusion that reforms are not so urgent.

The macroeconomic thrust of the "two-handed approach" is as follows[52]: structural reforms in the labour market may lead to an immediate fall in the natural rate of unemployment, i.e. the rate to which the unemployment rate converges in the absence of shocks. However, the actual unemployment rate does not immediately follow the adjustment in the natural rate. This scenario, in which the unemployment rate lies above the natural rate, is one which does not fully utilise economic resources, and could lead to decreasing prices. Therefore, even if employment increases after the reform, output might for some time remain below potential. This makes it desirable to exert some stimulus through monetary and/or fiscal policies. Furthermore, the possible deflationary impact of a structural reform may be even larger if employment protection is curtailed, since (i) the aforementioned effects are aggravated

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50 See Saint-Paul (2002) for a different view.
51 See also Bean (1998) and Blanchard (2006).
52 See Bentolila and Saint-Paul (2001), Saint-Paul (2002) and Gros et al. (2004).

by the wealth effects of unproductive jobs being destroyed after the reform; and (ii) the creation of new productive jobs will presumably take some time to materialise owing to adjustment costs, which implies that borrowing constraints and uncertainty are likely to prevent those who presumably will be employed in the future from increasing current consumption.

4.1 THE TWO-HANDED APPROACH AND EMU

By centralising monetary policy and establishing clear constraints on national fiscal policies, the creation of EMU has profoundly changed the macroeconomic environment of participating countries. These changes are moreover highly relevant in shaping the possible implementation of "two-handed" policies in the euro area.

In particular, before EMU, national governments had full control of their own fiscal policies and could therefore use transitory fiscal deficits to mitigate the negative short-term effects of some structural reforms. Furthermore, national central banks, at least in principle, could counteract the short-run negative output gap generated by the implementation of some structural reforms, thereby supporting the national government in question.

After EMU, however, national authorities within the euro area no longer control their own monetary policy and are thus unable to support structural reform programmes by ensuring the best feasible transition path to the new natural rate of unemployment. Within EMU, a single country embarking on possibly painful structural reforms would face a single monetary authority, the ECB, which has to assess its policy stance against economic developments in the euro area as a whole. Especially in the case of the smaller euro area countries, the "unemployment gap" created by some structural reforms would then not be compensated by an easier monetary policy stance unless the aggregate euro area economic developments point to a "euro area-wide" unemployment gap (for a discussion of this issue, see Hoj et al., 2006).[53]

Against this background, it may be argued that fiscal policy – which in EMU remains under the domain of the national governments' competences – is the tool that may provide the necessary support for structural reform packages by compensating the deflationary short-term impact of such packages.[54]

However, as some authors[55] have argued, this avenue seems to be severely curtailed by the Stability and Growth Pact (SGP) to which individual countries are committed. In this sense, Beetsma and Debrun (2003) find that the constraint on fiscal deficits imposed by the SGP may impair structural reforms to some extent, as national governments are tempted to sacrifice future growth for present stability. Furthermore, this literature claims that many key reforms advocated by some international organisations may, independently from providing ex post support to domestic demand, require substantial upfront fiscal costs and could thereby clash with the requirements of the SGP for countries

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53 The size of the unemployment gap that may appear in those countries that conduct structural reforms is likely to decrease with the degree of integration of labour, product and financial markets in the currency area: in a flexible economy, lower prices following a structural reform in any country of the currency area would increase the competitiveness of the goods and services produced in that economy, raising incentives to invest and therefore compensating potential contractionary effects. Those reforms that help to enhance the adjustment mechanisms within the currency area are thus particularly important, as they may contribute to dampening the size and persistence of national output and unemployment gaps.

54 The effectiveness of discretionary fiscal policy for fine-tuning macroeconomic fluctuations has, however, long been a subject of debate, with critics pointing to the long implementation lags and problems of time-inconsistency in particular (see Friedman, 1953, and Fischer, 1980). For more recent contributions, see Taylor (2000) and Auerbach (2002). For a more favourable view of discretionary fiscal policies, see Blinder (2004).

55 See Eichengreen and Wyplosz (1998), Bentolila and Saint-Paul (2001) and Saint-Paul (2002).

which are already close to the deficit limits.[56,57] For instance, investment in public infrastructure is likely to require significant start-up costs, and the political appetite for crucial structural reforms may require some form of compensatory schemes aimed at smoothing the possibly harmful reorganisation of production processes and the loss of income in the short term by individuals who might lose their job or their benefits.[58]

Based on such considerations, some authors have suggested that the SGP should be reformulated to take into account the fact that the introduction of a ceiling on fiscal deficits has both a positive and a negative welfare effect, with lower public expenditure on the one hand to some extent compensated by less structural reforms on the other.[59] Therefore, they propose that the Maastricht criteria ought to be relaxed when national governments pursue structural reforms with a negative short-term impact on the fiscal budget, because the optimal policy response to potential trade-offs between structural reforms and fiscal stabilisation does not necessarily imply that the stabilisation of the fiscal budget should come first in all circumstances. In particular, some authors have argued that constraints on fiscal behaviour are more likely to be welfare-enhancing when sanctions are made contingent on the level of reforms, as this would facilitate achieving a more favourable balance between the goals of stability and growth as proclaimed by the SGP.

In this context, the recent reform of the SGP partially addresses these concerns in three main ways.[60] First, the revised Pact allows for country-specific medium-term budgetary objectives that take into account public investment needs. Second, the implementation of structural reforms that have direct long-term cost-saving effects can be taken into account, allowing Member States to deviate either from their medium-term budgetary objectives or from the adjustment path towards them. And third, the implementation of the Lisbon Agenda is one of the relevant factors that may be taken

into account when deciding whether a fiscal deficit that temporarily exceeds – but remains close to – 3% of GDP is excessive.

Nevertheless, it should be made clear that there are reasons to be sceptical about the implementation of a deficit cap contingent on the structural reforms initiated by national governments. Measures of the effects of structural reforms are typically not available in real time, and national governments may therefore have incentives to overestimate the costs of the reforms they are pursuing as a

56 See Daveri and Tabellini (2000) for a quantification of the effects of some structural reforms on the average budget gap in the EU. Generally, the sooner the benefits on output and employment materialise, the less detrimental the net effect on the budget should be.

57 Not all structural reforms necessarily lead to an increase in fiscal deficits. In a case study for four countries (the Netherlands, Ireland, the UK and Denmark), Annett (2007) observes that cutting government expenditure and labour taxes fostered employment, giving rise to a virtuous circle where increased revenue from higher employment paves the way for further tax cuts and continued wage moderation. Along similar lines in a case study for eight countries, Hauptmeier et al. (2006) find that ambitious reform countries reduce spending on transfers, subsidies and public consumption (while largely sparing education), where successful expenditure retrenchment is typically part of a comprehensive reform package that includes improvements in fiscal institutions as well as structural and other macroeconomic reforms, particularly in the labour market. These results stand in contrast to views put forward by IMF (2004) and Hoj et al. (2006), for example, which both consider a larger country set, and argue that budgetary consolidation hinders labour market reform. This suggests that there may well be caveats to both approaches, i.e. the cross-country analysis incorporating a large country set might be too generalising, while drawing conclusions purely from case studies that remain unclear about causalities risks producing rather specific results.

58 This would incidentally help tackle one of the major sources of Europe's structural sclerosis, which is the existence of relatively resilient political groups composed of the main beneficiaries of the same rents that the reforms would abolish. Such compensation schemes might put serious pressure on the budget balance in the short term. For example, Börsch-Supan, Ludwig and Winter (2004) simulate an international overlapping-generations model and find that individuals born between 1928 and 1982 are likely to end up worse off if the pay-as-you-go pension system were to be reformed and replaced by a partially funded scheme. These individuals would need to be compensated if their political support is needed to proceed with the reform. Roeger (2005) estimates that, in order to compensate those generations, the debt-to-GDP ratio in the EU15 may have to "increase by 80% of GDP over the next 40 years and would only decline afterwards".

59 Gros et al. (2004) and Beetsma and Debrun (2003).

60 For a detailed description of the revised SGP, see ECB (2005) and Morris et al. (2006).

means of defending increased government consumption that is largely unconnected to reform policies.[61] Beside this, there are a number of reform measures which could improve the fiscal position of governments in the short term (e.g. privatising inefficient government-financed enterprises, reducing the regulatory barriers for new firms entering a market, or introducing new taxes), and thus would not be hindered by the SGP. Whether these budget-friendly reforms alone are able to increase potential output significantly in the euro area remains an open question, however.

4.2 SOLVING THE STRUCTURAL REFORM DEADLOCK IN EMU: ECONOMIC POLICY COORDINATION?

To overcome the potentially unfavourable effects of EMU on structural reform, Bentolila and Saint-Paul (2001) advocate the case for coordination of reforms across euro area countries.[62] Such coordination would enable the ECB to induce monetary expansion in the euro area at the same time as all Member States are engaged in structural reforms, which would otherwise put downward pressure on prices. This would in effect entail applying the *two-handed approach* at the euro area-wide level. This is also proposed by Saint-Paul and Wasmer (1999), who advocate that a European Employment Agency, which in their view would be the natural counterpart of the ECB, could first solve the coordination problem between national governments, and would then be engaged in a long-term relationship with the ECB, reinforcing the likelihood of a cooperative solution to the problem of structural reforms. The ECB has however argued against ex ante coordination with national authorities, contending for example that discretionary coordination "always gives rise to implementation problems and incentive distortions for the actors involved", and that the ECB should be "shielded from possible short-term political interests of governments" (ECB, 2003).

Tabellini and Wyplosz (2004) point out that while euro area-wide coordination of structural reforms may be appropriate for product and financial markets, it does not seem the right approach for labour markets.[63] For example, coordinated reform efforts may be successful in completing the integration of the single market in services, public utilities and energy, which requires dismantling the barriers that lead to market segmentation along national borders, liberalising markets for services to foreign suppliers, promoting cross-border mergers, putting an end to state aid and regulations that preclude foreign access to some markets and, under some circumstances, forcing divestitures and privatisations. Tabellini and Wyplosz (2004) therefore suggest that this policy area should be separated from the influence of national governments by enhancing the enforcement powers of European policymakers.

The challenge they identify is not to achieve market integration in labour markets, but rather to "remove specific distortions from each national labour market". These reforms entail policy decisions characterised by delicate trade-offs between efficiency and redistribution that can best be made through national political processes. Therefore, euro area-wide coordination of structural reforms in labour markets might not be appropriate, thus limiting the role of the ECB and expansionary monetary policy in the context of the *two-handed approach*.

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61 Buti (2006) argues that the reform of the SGP has, on the one hand, increased the Pact's economic rationale because it overcomes excessive uniformity in the rules while, on the other hand, more complex rules could work against their enforcement by reducing transparency.

62 Bertola and Boeri (2002) also point out that "coordination of reforms […] can have an important role in overcoming opposition by national lobbies".

63 This argument is based on the idea that policy coordination makes sense when spillovers and external effects are involved (e.g., liberalisation in the EU internal market), but is inappropriate in fields where these do not exist to a significant extent, such as on labour markets.

5 SUMMARY AND CONCLUSIONS

After reviewing the potential benefits of structural reforms, this paper examined the existing literature in order to suggest some tentative explanations for the relatively limited progress achieved to date with the implementation of structural reforms. In particular, the political economy considerations reviewed start from the theory that although well-designed structural reforms increase welfare in the long run, some of these reforms could also generate non-negligible short-term costs. As a consequence, for example, structural reforms may not be implemented because politicians tend to discount the future at a higher rate than society. Incumbent governments may fear losing political support today by implementing reforms whose benefits may only materialise over a time horizon beyond the election cycle. In addition, widespread public support may be weak, as voters face relatively high uncertainty about the long-term effects of the reform.

The paper then summarised the main arguments in the literature on whether participation in an MU increases the incentives to implement structural reforms in individual countries. In particular, this literature concludes that joining an MU, which implies delegating monetary policy to a common supranational authority, should in the absence of an inflation bias, in principle provide more, not less, incentives for national governments to implement structural reforms.[64] This is because in an MU, structural reforms increase both the equilibrium level of employment and the resilience of the domestic economy to idiosyncratic shocks, which would not be fully compensated by the eventual area-wide monetary policy reaction.

In the particular case of EMU, this argument is further reinforced by the possibility that a negative idiosyncratic shock may hit a particular country in a situation where the fiscal leeway to absorb this shock is rather small. Finally, greater price transparency across countries may reduce the monopoly rents created by structural

rigidities, thus reducing the incentive for those benefiting from monopoly rents to resist reforms that would eliminate such rigidities. However, it is important to note one major caveat to the general conclusions reached by the respective literature, which focuses on the steady-state equilibrium of the country (or countries) joining an MU. While in the medium to long term, EMU should in principle increase incentives to implement structural reforms it is easy to imagine that upon joining an MU, and depending on the respective country's starting position in the business cycle, participation in the MU may, at least temporarily, lower the incentives for national governments to implement structural reforms. For instance, by joining an MU with a lower inflation country or group of countries, the new MU member country could experience a decline in its nominal interest rate. This could boost activity and mask for some time the possible structural deficiencies hindering its long-term potential growth, thus eventually temporarily shielding its economy from structural adjustment. In fact, it could be argued that this is one of the reasons why some national governments in EMU have failed to acknowledge the need to implement structural reforms.

In Chapter 4, the paper briefly reviewed the case of macroeconomic policy coordination, the so-called *two-handed approach*, which argues that macroeconomic stimulus is needed to facilitate the implementation of structural reforms. In the context of EMU, the main conclusions that emerge are that the monetary policy for the euro area is not the appropriate tool for mitigating the potential short-term costs of reforms or for providing incentives for structural reforms at the national level, for two reasons. First, not all structural reforms necessarily lead to a short-term decline in domestic demand, such that an easier monetary policy stance is warranted. For instance, reforms that increase competition are normally thought to determine an increase in both consumption

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64 For the euro area, it can safely be assumed that neither national authorities nor the ECB suffer from an inflation bias.

and investment. This is because the decline in the price mark-up induced by the liberalisation of the production process leads to an increase in the real wage and to a decline in the relative price of capital.[65] Second, different reforms implemented in different countries may eventually require different degrees of expansionary stimulus. The single monetary policy, with just one policy rate for the whole euro area, is by its very nature unable to play the role of mitigating the potentially different short-term regional costs of structural reforms.

Apart from these reasons, the ECB argues against ex ante coordination with national authorities, on the grounds that discretionary coordination "always gives rise to implementation problems and incentive distortions for the actors involved". In particular, within a policy framework of active monetary and fiscal policy coordination, "by blurring their respective responsibilities, policy-makers' incentives and/or ability to deliver on their specific objectives are weakened and the possibility for the public to hold them accountable is diminished". Hence, "such a policy framework would not be credible" and could make it difficult for the ECB to be "shielded from possible short-term political interests of governments".

A credible monetary policy can contribute to an environment which is conducive to welfare-enhancing structural changes. Wage and price-setting mechanisms may over time become more forward-looking, indexation to past or current inflation may be reduced, and the definition of price stability may increasingly guide the nominal component of wage contracts. All this would tend to improve the functioning of the supply side of the economy. Maintaining price stability makes it easier to distinguish changes in relative prices from changes in the general price level, thus enabling people to identify on the basis of relative price signals the areas in which structural reforms may be needed. In addition, maintaining price stability helps allocate resources to their most efficient use, allowing the welfare-enhancing benefits of

structural reforms to be exploited and making these benefits more visible. All in all, this should tend to raise public acceptance and facilitate the political reform process.

The ECB's contribution to the implementation of structural reforms therefore takes the form of analysis, assessment and communication. Publicly divulging in a precise and balanced manner, and through different channels and fora, the expected effects for the public of precise reform measures might contribute to reducing the typically large degree of uncertainty surrounding the outcome of reforms.

Fiscal policies, which in EMU broadly remain under the domain of the national governments' competences, may theoretically be a way to provide the necessary support to some structural reform packages by appropriately compensating their eventual negative effects in the short term. This avenue, however, is severely curtailed by the excessive public deficits that many euro area countries have suffered from in recent years, and which have pushed these countries' public finances up against the limits imposed by the SGP. Moreover, this situation may endanger not only the support that macroeconomic policies can provide to reform efforts, but also the reform process itself, as some reforms may require substantial upfront fiscal costs.

Some authors have suggested that the SGP could be reformulated to take into account the short-term negative impact on the fiscal budget of structural reforms that are expected to have a positive (and large) net effect on public finances in the long run. In this respect, the recent reform of the SGP partially addresses these concerns. The implementation of the Lisbon Agenda is one of the relevant factors that may be taken into account when deciding

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65 Quite differently, reforms that liberalise the labour market, such as a reduction in unemployment subsidies, are more likely to reduce consumption in the short term and eventually lead to a temporary slowdown in inflation dynamics.

whether a fiscal deficit that temporarily exceeds – but remains close to 3% of GDP – is excessive. Furthermore, the implementation of structural reforms that have direct long-term cost-saving effects, such as reform of pension and healthcare systems, can be taken into account, allowing Member States to deviate in the short term from either their medium-term budgetary objectives or the adjustment path towards them. Nevertheless, it should be made clear that there are reasons to be sceptical about the implementation of a deficit cap contingent on the structural reforms initiated by national governments. Measures of the effects of structural reforms are typically unavailable in real time, and national governments may therefore have an incentive to overestimate the costs of the reforms they are pursuing as a means of defending increased government consumption that is largely unconnected to reform policies. In general, fiscal discipline, especially during "good times", can be very useful as it provides fiscal authorities with adequate room for manoeuvre regarding their support for the implementation of structural reforms.

ANNEX I
THE INCENTIVES TO IMPLEMENT STRUCTURAL REFORMS IN A MONETARY UNION. THE CALMFORS (2001) MODEL

In this annex we present the basic equations and discuss the analytical solutions of the model proposed by Calmfors (2001), which is the blueprint for the arguments developed in sub-section 3.2.

Calmfors (2001) assumes that in a single region of a currency area, the inflation process is determined by the following equations:

$$u = u^* - \beta\left(\pi - \pi^e\right) + \varepsilon \qquad (1)$$

$$\varepsilon = v + \mu \qquad (2)$$

$$u^* = \tilde{u} - \delta s \qquad (3)$$

where u is the actual unemployment rate expressed as the deviation from the equilibrium unemployment (u^*) due to unexpected inflation. Furthermore, ε is an independent and identically distributed (i.i.d.) white noise shock, which affects the region and is assumed to consist of a region-specific and an area component (v) and (μ), respectively, where $E(v) = E(\mu) = 0$ and $Var(v) + Var(\mu) = \sigma_v^2 + \sigma_\mu^2 = Var(\varepsilon)$. The variable s in equation (3) is a proxy for structural reforms that are expected to lower the equilibrium unemployment rate $(0 \leq s \leq 1)$.[66] Finally, π in equation (1) is a measure of actual inflation.

In the model, the central bank of the currency area and the government of a representative country minimise a similar loss function:

$$L = \frac{1}{2}\pi^2 + \frac{\lambda}{2}u^2 + \gamma s \qquad (4)$$

In the loss function, apart from inflation and unemployment, which are the classic arguments for the central bank function, the amount of structural reforms, s, also appears because it is negatively related to the aggregate real wage. Hence, structural reforms have a direct cost in the model – because they reduce the aggregate real wage – but an indirect benefit, consisting

in their ability to lower equilibrium unemployment (see equation 3). The model per se cannot account for the possible dynamics of structural reforms, such as the long-term effect of the increase in productivity that could eventually follow an initial period of lower real wages owing to the implementation of labour market reforms.

Furthermore, the central bank is assumed to move first and to determine the "optimal" inflation rate that minimises its loss function. Once this has been determined, the government then decides on the "optimal" level of structural reforms, s, by minimising a loss function that is similar to that of the central bank.

Calmfors (2001) analyses the equilibrium outcomes of the one-shot game played by national governments and the central bank – which share the same loss function[67] – in the two alternative scenarios in which the country either does not participate in a monetary union (MU) (Case I), or it does (Case II), and where the government faces a national or a single monetary authority respectively. Furthermore, Calmfors (2001) also analyses the incentives for national governments to implement structural reforms that purely affect equilibrium inflation and unemployment (Case I), as compared to structural reforms that also impact on nominal wage flexibility (Case II).

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66 "Structural reforms" in the model are intended as a composite variable that reduce the equilibrium aggregate real wage rate and therefore move the economy along an aggregate labour demand curve to lower unemployment. An example of such a reform could be a reduction in employment protection that reduces the bargaining power of the unions, thereby leading to both a lower real wage and an increase in the number of people employed. Alternatively, s could be interpreted as the share of unregulated sectors in the economy, where wage-setters aim for a lower real wage (and a lower unemployment rate, $\tilde{u} - \delta$). If wage-setters in the regulated sectors aim for a higher real wage (and higher unemployment = $\tilde{u}$), equation (3) then follows.

67 The quality of the results is also not affected if one assumes a more conservative central bank à la Rogoff (1985), or that s does not enter the central bank's loss function. The sequential equilibrium, as is customary in this class of models, is found by backward induction, where the sequence of decisions is as follows: 1) s is determined; 2) expectations are formed and money wages are set; 3) shocks occur; and 4) monetary policy is decided.

CASE I – STRUCTURAL REFORMS THAT ONLY AFFECT EQUILIBRIUM EMPLOYMENT AND INFLATION

Solution when the country does not participate in an MU

Starting from the monetary policy decision, the central bank takes as given the structure of the labour market, market inflation (rational) expectations and the realisation of the shocks, and minimises equation (4) subject to constraint (3). The outcome is:

$$\pi_n = \beta\lambda u^* + \frac{\beta\lambda}{1+\beta^2\lambda}\varepsilon \tag{5}$$

In a rational expectations equilibrium, the central bank chooses inflation to balance exactly the marginal benefit of lower unemployment (second term of (5)) with the marginal cost of higher inflation (first term of (5)). The first term in (5) represents one version of what has been defined in this class of models as an "inflation bias". As expected, this "inflation bias", which is the positive average inflation rate of the economy in the absence of shocks, is positively related to a) the equilibrium unemployment (higher benefit of surprise inflation); b) the responsiveness of unemployment to surprise inflation, β; and c) the unemployment-aversion parameter, λ.

Once equilibrium inflation has been determined according to (5), the government decides how many structural reforms it deems desirable. In doing this, it minimises a loss function like (4), subject to constraints (1), (3) and (5). This process results in:

$$\frac{\partial E(L_n)}{\partial s} = -\delta\lambda u^* - \delta\beta^2\lambda^2 u^* + \gamma = 0 \tag{6}$$

where the subscript n denotes "non-participation". The optimal level of s is found to be the level that exactly balances the gains of structural reforms arising from lower unemployment (first term) and from lower average inflation, the "inflation bias" (second term), with the direct costs of the reforms (third term).

Solving for equilibrium unemployment, u^*, (6) can be rewritten as:

$$u_n^* = \tilde{u} - \delta s_n = \frac{\gamma}{\delta\lambda(1+\beta^2\lambda)} \tag{7}$$

Solution when country participates in an MU

In this case, the MU is made up of n symmetric countries, where a common inflation rate is determined by a centralised central bank (CCB), but structural reforms are implemented by national governments. The CCB has a loss function as in (4), but defined over the average variables for all the participating countries. Under these assumptions, (5) becomes:

$$\pi_u = \beta\lambda u_u^* + \frac{\beta\lambda}{1+\beta^2\lambda}\frac{1}{n}\sum_{i=1}^{n}\varepsilon_i \tag{8}$$

where $u_u^* = \sum_{i=1}^{n} u_i^*/n$.

Following on from the above, the national government of a participating country now decides on the optimal level of s by minimising (4) subject to constraints (1), (3) and (8). Constraint (8) replaces (5) in the case of non-participation. In this case, (6) becomes:

$$\frac{\partial E(L_u)}{\partial s} = -\delta\lambda u^* - \frac{\delta}{n}\beta^2\lambda^2 u^* + \gamma = 0 \tag{9}$$

and equilibrium unemployment is given by:

$$u_u^* = \tilde{u} - \delta s_u = \frac{\gamma}{\delta\lambda(1+\beta^2\lambda/n)} \tag{10}$$

When n is very large, which is equivalent to the case of a small country participating in the MU, (9) and (10) are reduced to:

$$\frac{\partial E(L_u)}{\partial s} = -\delta\lambda u^* + \gamma = 0 \tag{9a}$$

$$u_u^* = \tilde{u} - \delta s_u = \frac{\gamma}{\delta\lambda} \tag{10a}$$

CASE I – DISCUSSION

Equations (9) to (10a) show that in the case of the MU, the marginal gain from reforms is lower than in the case of non-participation, due to the smaller inflation bias of the CCB (second term of (9)), in comparison with the inflation bias of the national central bank (second term in (6)). This implies that the incentives for reforms in an MU are lower than they are in the case of non-participation, because national governments anticipate that reforms in their own country will only reduce inflation to the extent that it reduces aggregate unemployment, which is the variable the CCB reacts to.

Hence the decentralised equilibrium in this model is suboptimal. National governments fail to internalise the positive spillovers on aggregate unemployment that result from reforming the domestic labour market. Thus, the final outcome is that on aggregate, the level of reforms achieved is suboptimal.

It should be noted that these results crucially hinge on the assumption that unemployment enters the central bank's loss function in absolute (squared) levels, because this assumption, in turn, produces the so-called inflation bias. However, if the deviation of actual unemployment from its equilibrium level[68] enters the central bank's loss function, it can be shown that this inflation bias disappears, and that equilibrium unemployment is equal in both scenarios, as per equation (10a).[69]

CASE 2 – STRUCTURAL REFORMS AFFECT EQUILIBRIUM EMPLOYMENT AND INFLATION AS WELL AS NOMINAL WAGE FLEXIBILITY

The rationale for studying the effect of labour market reforms on nominal wage flexibility depends on the need to consider the benefits arising from higher nominal flexibility in an MU where, by definition, a centralised monetary policy cannot stabilise the economy when the participating countries are experiencing idiosyncratic shocks. To study this case, Calmfors (2001) exploits the interpretation of s provided in footnote 66. In particular, he

assumes that in the fraction s of unregulated sectors, wages are (almost) fully flexible and wage-setters define the real wage continuously on the basis of realised prices and shocks. The fraction 1-s of regulated sectors, instead, sets wages on the basis of long-term agreements, based on the expectation of prices and shocks (as in Case I). Under this assumption, he shows that the equations governing unemployment dynamics, (1) and (3), are replaced by:

$$u = (\tilde{u} - \delta s) - \beta(1-s)\left(\pi - \pi^e\right) + (1-s)\varepsilon \quad (1a)$$

Equation (1a) shows that labour market reforms affect, as in Case I, the equilibrium level of unemployment (first term on the right-hand side), but also reduce the sensitivity of unemployment to inflation surprises and exogenous shocks (second and third terms on the right-hand side, respectively). The higher the number of "flexible" nominal wage-setters, the more inflation and exogenous shocks will be absorbed through wage renegotiations rather than through unemployment variations.

Solution when a country does not participate in an MU

When a country does not participate in an MU, the sequential equilibrium solution changes because the central bank incorporates (1a) rather than (1) and (3) when setting the optimal inflation rate, which is then given by:

$$\pi_n = \beta(1-s)\lambda u^* + \frac{\beta(1-s)^2\lambda}{1+\beta^2(1-s)^2\lambda}\varepsilon \quad (5b)$$

Comparing (5b) with (5) clearly shows that in the case of perfect wage flexibility, $s = 1$,

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68 This implies that the central bank does not try to maximise the actual level of employment, but rather only smoothes its cyclical fluctuations.

69 Incidentally, this result helps explain why national governments suffering from a positive "inflation bias" may choose to join an MU where the central bank is perceived as not caring about aggregate unemployment. These governments would enjoy the benefits of lower inflation without the costs of the reforms that would be needed in order to reduce the domestic inflation bias, but at the price of higher unemployment.

monetary policy is of no use in stabilising the economy, as the economy fully adjusts to exogenous shocks. The national government, in turn, decides upon the optimal level of *s* by minimising (4) subject to constraints (1a) and (5b):

$$\frac{\partial E(L_n)}{\partial s} = -\delta\lambda u^* - \delta\beta^2(1-s)^2\lambda^2 u^* + \gamma$$
$$- \frac{\lambda(1-s)}{[1+\beta^2(1-s)^2\lambda]^2}(\sigma_v^2 + \sigma_\mu^2) \quad (6a)$$
$$- \beta^2(1-s)\lambda^2 u^{*2}$$
$$= 0$$

Rearranging (6a) to obtain equilibrium unemployment produces:

$$u_n^* = \frac{\gamma}{[\delta\lambda(1+\beta^2(1-s^2)\lambda^2(\delta+1)]}$$
$$- \frac{\lambda(1-s)}{[\delta\lambda(1+\beta^2(1-s^2)\lambda^2(\delta+1)][1+\beta^2(1-s^2)\lambda]^2} \quad (7a)$$
$$(\sigma_v^2 + \sigma_\mu^2)$$

Solution when a country participates in an MU

If a country joins an MU, the inflation rate is set by the CCB, which still maximises a loss function such as (4), but under the constraint given by (1a), redefined over the area aggregate variables:

$$u_u = \frac{1}{n}\sum_{i=1}^{n} u_i^* = u_u^* - \beta(1-s_u)(\pi - \pi^e) + (1-s_u)\mu \quad (11)$$

where for simplicity it is assumed that *n* is very large, so that idiosyncratic shocks have a negligible effect on the aggregate average and the CCB only reacts to common area shocks, μ. $s_u = \sum_{i=1}^{n} s_i/n$ is the aggregate level of reforms.

Minimising (4) subject to (11) delivers the optimal rate of inflation set by the CCB:

$$\pi_u = \beta(1-s_u)\lambda u_u^* + \frac{\beta(1-s_u)^2\lambda}{1+\beta^2(1-s_u)^2\lambda}\mu \quad (8a)$$

which comprises an inflation bias (first term) and a stabilisation (second term) component.

The optimal amount of reforms, *s*, is set by national governments that minimise (4) subject to (1a), (2) and (8a):

$$\frac{\partial E(L_n)}{\partial s} = -\delta\lambda u^* - \lambda(1-s)\sigma_v^2 + \lambda$$
$$- \frac{\lambda(1-s)}{[1+\beta^2(1-s)^2\lambda]^2}\sigma_\mu^2 \quad (9b)$$
$$= 0$$

The first and third terms in (9b) are common to (9a), but the second and fourth terms show the gains in terms of lower equilibrium unemployment arising from higher *s* when the CCB stabilises the economy following common and idiosyncratic shocks, respectively. Equation (9b) shows that the gains are higher in case of symmetric shocks (fourth term), because the CCB does not stabilise idiosyncratic shocks.

CASE II – DISCUSSION

Comparing (6a) and (9b) suggests that in case an inflation bias exists, structural reforms, *s*, in the MU could be either higher or lower than they would be in autarky. The ambiguity of this conclusion lies in the fact that in an MU, structural reforms increase welfare because, via greater wage flexibility, they help the national economy absorb idiosyncratic shocks that the common monetary policy does not stabilise. However, outside the MU, when structural reforms foster wage flexibility and long-term employment, welfare increases for two different reasons, both contributing to lowering the inflation bias. First, as in Case I, expected employment increases and approaches the monetary authority's target. Second, because of greater wage flexibility, the monetary authority will have less incentive to produce surprise inflation, as the employment rate reacts less to monetary surprises.

If there is no inflation bias, comparison of (6a) and (9b) unambiguously confirms that an MU

tends to generate more structural reforms. This can be easily seen because, in the absence of inflation bias, structural reforms do not affect inflation in the non-participation scenario. Hence, the second and fifth terms in (6a) disappear, resulting in (9b) being smaller than (6a).

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