

ARTICLES

ONE MONETARY POLICY AND MANY FISCAL POLICIES: ENSURING A SMOOTH FUNCTIONING OF EMU



The euro area is characterised by a unique combination of centralised monetary policy-making and largely decentralised, albeit closely coordinated, fiscal policy-making (as well as other economic policies which are decentralised but not covered in this article). This feature of “one monetary policy and many fiscal policies” is at the heart of the institutional setting which governs the interactions between monetary and fiscal policies in the euro area and aims to ensure a smooth functioning of EMU. This article summarises insights from the macroeconomic literature on how to appropriately design the interactions between monetary and fiscal policies in currency areas and links them to key features of the institutional setting of the euro area. The main focus of the article is on conceptual issues. The article stresses the advantages of conducting monetary and fiscal policies within a rules-based framework and discusses selected empirical indicators which summarise the conduct of monetary policy and fiscal policies in the euro area over the period 1999-2007. Drawing on this evidence, the article concludes that the significant dividends offered by a rules-based framework are at risk if policy-makers fail to deliver results in line with the stated objectives.

I INTRODUCTION

The institutional framework of EMU is unique. It is characterised by a single monetary policy assigned to the supranational level (i.e. the Community level) and by largely decentralised fiscal policies, which remain a competence of sovereign Member States but are subjected to rules-based coordination procedures. The framework is based on clearly specified objectives and a clear allocation of responsibilities between policy areas. Given the large number of policy-makers involved in the decision-making process, these features are indispensable to ensure a smooth and effective functioning of EMU. As regards the interactions between monetary policy and fiscal policies, the framework is conducive to well-aligned policy outcomes provided that all policy-makers live up to their responsibilities.

Against this background, this article summarises insights from recent contributions to the macroeconomic literature on how to design the interactions between monetary and fiscal policies in monetary unions. The article contributes to a better understanding of the rationale behind the main provisions and guiding principles of the institutional framework of EMU which govern the relationship between monetary and fiscal policy-making.¹ The article also considers selected empirical indicators which summarise the conduct of monetary policy and fiscal policies in the euro area over the period 1999-2007.

Overall, although it is satisfactory from a historical perspective, the performance of monetary and fiscal policies exhibits considerable differences between the two fields in an environment characterised by a sequence of severe challenges stemming from a number of unexpected adverse shocks. With regard to monetary policy, price stability has been broadly achieved, despite the fact that strong global commodity price increases – on which monetary policy has no direct influence – have affected Europe and the rest of the world, leading to an average inflation rate that has been slightly above 2% since the launch of the euro. While there is no room for complacency, this is a remarkable result. In the decades before the launch of the euro, average annual inflation rates in the individual countries were significantly higher than those in the euro area over the period 1999-2007. The overall assessment of fiscal policy is nuanced. On the one hand, the overall fiscal position of the euro area has improved significantly in recent years. On the other hand, some euro area countries have still to achieve and maintain sound fiscal positions, as well as reduce government debt ratios to more sustainable levels. In this respect, the failure in many cases to

¹ For a comprehensive discussion of the institutional arrangement, also covering numerous aspects not addressed in this article, as well as the ECB's monetary policy strategy, see the June 2008 Special Issue of the Monthly Bulletin on the occasion of the tenth anniversary of the euro. See also the article entitled “The relationship between monetary policy and fiscal policies in the euro area” in the February 2003 issue of the Monthly Bulletin.

consolidate public finances more rapidly in good times has been especially disappointing.

Section 2 reviews insights from the literature on how to design monetary and fiscal policy-making, focusing in particular on issues specific to monetary unions. Section 3 summarises key features of the institutional arrangements and guiding principles of monetary policy and fiscal policies in the euro area. Section 4 takes an empirical perspective and summarises the conduct of monetary policy and fiscal policies in the euro area for the period 1999-2007. Section 5 concludes.

2 PRINCIPLES AND INSTITUTIONAL PREREQUISITES FOR SOUND MONETARY AND FISCAL POLICY-MAKING IN A MONETARY UNION

This section identifies widely agreed principles and institutional prerequisites for sound monetary and fiscal policy-making. It first addresses a number of general issues before turning to aspects which are unique to the euro area and related to the combination of centralised monetary policy and decentralised, albeit closely coordinated, fiscal policies in a monetary union.

MONETARY AND FISCAL INTERACTIONS: GENERAL ISSUES

First, the monetary policy provisions of the institutional framework should respect the fundamental insight that the maintenance of price stability is the single most important contribution that monetary policy can make to sustainable economic growth, job creation, prosperity and social stability. This assessment is supported by ample empirical evidence and well grounded in economic theory.² Moreover, it is widely understood that monetary policy can affect price developments only with significant and variable time-lags, making it impossible to fine-tune the inflation rate at short horizons. This insight calls for a medium-term orientation of monetary policy.

Second, the fiscal policy provisions of the institutional framework should respect the fundamental insight that sound and sustainable fiscal policies are indispensable requirements for growth and prosperity. This insight is firmly grounded in the public finance and growth literature. It is also of high relevance from the perspective of monetary policy, since it ensures that fiscal policies, if conducted in this way, will be conducive to a macroeconomic environment in which the task of a stability-oriented central bank will be substantially facilitated.³

Third, the institutional arrangement should not only allow for a clear assignment of objectives among policy-makers, but also support this assignment by granting the central bank a high and encompassing degree of independence, thereby insulating the central bank from political influence on the conduct of monetary policy. This institutional feature is indispensable for the central bank to be able to maintain price stability, in the light of various interdependencies between monetary and fiscal policies. On the one hand, fiscal policy matters for monetary policy. In particular, in addition to the demand-side effects of fiscal policy (which often directly affect the inflation outlook), fiscal policy also shapes the supply side of the economy and how it responds to monetary policy measures. Moreover, certain fiscal measures, such as changes in indirect taxes and administered prices, have a direct impact on price developments. On the other hand, monetary policy matters for fiscal policy. In particular, monetary policy decisions affect the overall budget constraint of the public sector because changes in interest rates and inflation expectations (which, in the medium term, are influenced by monetary policy) affect the interest burden on government debt. From this perspective, a credible monetary policy can contribute directly to a smooth conduct of fiscal policies by ensuring that low inflation expectations and low inflation risk premia are incorporated in

2 For a detailed summary, see the article entitled "Price stability and growth" in the May 2008 issue of the Monthly Bulletin.

3 See the article entitled "Fiscal policies and economic growth" in the August 2001 issue of the Monthly Bulletin.

longer-term government bond yields. Because of these (and further) interdependencies, there is a need to embed the mandates of independent and stability-oriented central banks in broader-based institutional arrangements which also address the core responsibilities of fiscal policy-makers. In particular, these responsibilities should include a credible fiscal commitment to respect the objective pursued by monetary policy, as discussed in further detail in Box 1.

Box 1

REQUIREMENTS FOR PRICE STABILITY: MAIN INSIGHTS FROM THE LITERATURE ON MONETARY AND FISCAL INTERACTIONS

The literature on monetary and fiscal interactions typically starts out from the observation that any consistently specified dynamic general equilibrium model needs to allow for an intertemporal public sector budget constraint which entails budgetary contributions from both monetary and fiscal policy. For a simple exposition, this constraint, from a closed economy perspective, can be written as follows:

$$(1) \quad \frac{R_{t-1} B_{t-1} + M_{t-1}}{p_t} = \sum_{s=0}^{\infty} s_{t+s}^f + s_{t+s}^m$$

Equation (1) captures the broad insight that, in any representative period t , the real value of outstanding nominal public sector liabilities issued in the past (i.e. the left-hand side of the equation) needs to be backed in equilibrium by an appropriately sized stream of discounted future surpluses (i.e. the right-hand side of the equation). Specifically, in equation (1) the term s_{t+s}^f denotes the discounted value of the primary fiscal surplus (i.e. the difference between tax revenues and government expenditures) in some future period $t+s$, while s_{t+s}^m refers to the discounted seigniorage income earned by the central bank in the same period. The latter is linked to the interest income that the central bank earns on the assets backing the monetary base in its balance sheet and returns to the fiscal authority as a transfer.¹ Concerning the left-hand side of equation (1), M_{t-1} denotes the stock of outstanding nominal base money which is a predetermined variable from the perspective of period t . Similarly, B_{t-1} denotes the predetermined stock of interest-bearing nominal government debt, carrying the nominal interest factor R_{t-1} , while p_t denotes the price level prevailing in period t .

For the central bank to be able to control inflation over the medium term, it is well understood that monetary policy must not be overburdened with other objectives. Given the budgetary interdependence of monetary and fiscal policies summarised by equation (1), this general insight implies that monetary policy needs to be conducted within an institutional arrangement that rules out any type of “fiscal dominance”. In this context, two distinct channels have been identified in the recent literature.

First, seigniorage transfers from the central bank to the fiscal authority can be a substitute for taxation. In other words, a “lax” fiscal authority – i.e. one which seeks to avoid the short-term political costs associated with enforcing fiscal discipline – may face an incentive to extract from the central bank pre-specified seigniorage contributions to the overall budget. To rule out such a

¹ Strictly speaking, only currency in circulation earns zero interest. However, as long as the interest paid on reserves is below the market interest rate, the net interest income earned by the central bank on reserves will also be positive.

constellation, there is the need for an institutional arrangement which guarantees that the central bank enjoys full independence at all times to conduct monetary policy operations consistent with its inflation objective, irrespective of the budgetary implications for equation (1). In the extreme situation that the fiscal authority is forced to default on outstanding debt, this requirement includes that monetary policy be protected through a no-bailout clause.

Second, for given expectations of the entire stream of seigniorage revenues of the independent central bank, the private sector may nevertheless perceive fiscal policies to be unsustainable without this immediately leading to an open default. Instead, to the extent that outstanding government liabilities are issued in nominal terms, such expectations may cause revaluations of these liabilities in real terms through once-and-for-all adjustments in the price level, triggered through wealth effects of fiscal expansions on private expenditures. To prevent such a scenario, a fiscal commitment is needed, complementing the first requirement, which ensures that public debt always remains on a sustainable path which does not exert any pressure on the prevailing price level. The logic of this revaluation channel, when applied to a monetary union, implies that an increase in government debt of one member country, when not backed by future tax increases, may exert a certain upward pressure on the union-wide price level. Hence, this channel naturally supports recommendations to limit the debt issuance of member countries via fiscal rules.²

2 For detailed (closed-economy) expositions of these two channels, see, in particular, T. Sargent and N. Wallace (1981), "Some unpleasant monetarist arithmetic", Federal Reserve Bank of Minneapolis Quarterly Review, Fall, pp. 1-17, and M. Woodford (2001), "Fiscal requirements for price stability", *Journal of Money, Credit, and Banking*, 33/3, pp. 669-728. For a discussion in the context of monetary unions, see, for example, P. Bergin (2000), "Fiscal solvency and price level determination in a monetary union", *Journal of Monetary Economics*, 45/1, pp. 37-53.

Fourth, the arrangement of monetary and fiscal policies should take into account that over the past few decades macroeconomic theory has witnessed a profound reassessment of the benefits of rules-based policies, as opposed to purely "discretionary" policies.⁴ It is now widely understood that the latter type of policy, which assumes that policy-makers reoptimise their current and future conduct period by period in response to changing circumstances, under the mistaken assumption that private sector expectations will not internalise such ad hoc behaviour over time, tends to be self-defeating and costly.

There are numerous ways to exemplify this general insight, which affects all areas of policy-making. For example, attempts to increase employment through an expansionary monetary policy at any given level of nominal wages (which embody, inter alia, expectations about future inflation) cannot have lasting employment effects, because inflation expectations will adjust.⁵ However, it is also understood that policy-makers may find it difficult to credibly

refrain from this type of discretionary behaviour, unless they receive adequate support from the institutional set-up.⁶

As regards monetary policy, central bank independence, when combined with the unambiguous mandate to maintain price stability and a consistently communicated medium-term orientation of monetary policy, goes a long way towards reaping the benefits associated with a rules-based policy. In this context, it is important to stress that the announcement of a quantitative definition of price stability acts as a commitment

4 Seminal papers in this context include F. Kydland and E. Prescott (1977), "Rules rather than discretion: the inconsistency of optimal plans", *Journal of Political Economy*, 85/3, pp. 473-91, and R. Barro and D. Gordon (1983), "Rules, discretion and reputation in a model of monetary policy", *Journal of Monetary Economics*, 12/1, pp. 101-121.

5 Similarly, attempts to increase government revenues through higher capital taxes at a given level of the economy's capital stock (which depends, inter alia, on expectations of future tax rates) may be self-defeating if, over time, investment decisions adjust to higher tax rates.

6 For a non-technical overview of these concepts, see, for example, V. V. Chari and P. Kehoe (2006), "Modern macroeconomics in practice: how theory is shaping policy", *Journal of Economic Perspectives*, 20/4, pp. 3-28.

device which can be constantly used to monitor and assess the performance of the central bank over the medium term. Moreover, it also acts as an effective implicit coordination device for all other policy-makers.

Concerning fiscal policies, given the constraints associated with political election cycles and the multidimensional set of objectives, similar mechanisms are lacking, implying that fiscal policy-making is more strongly affected by short-term considerations. This implies that the fiscal policy provisions of the institutional arrangement should be sufficiently flexible to accommodate these considerations. In general, short-run fluctuations in economic activity are best dealt with by letting automatic stabilisers operate freely and symmetrically over the cycle. By conducting fiscal policy in this way, imbalances in government debt over the medium to long term are ruled out and inflationary

pressures, which could arise under pro-cyclical fiscal policies, are avoided. This recommendation, as discussed in further detail in Box 2, reflects that the track record of fiscal activism, i.e. the use of discretionary fiscal policy actions aimed at fine-tuning the business cycle, has been disappointing. At the same time, the fiscal policy provisions should ensure that the required short-term flexibility cannot endanger the long-term sustainability of public finances. To this end, there is a need for mechanisms of effective fiscal surveillance which rule out unsustainable fiscal developments. These mechanisms should be cast in terms of binding rules that respect fundamental principles such as simplicity, transparency and enforceability, thereby ensuring the credibility of the overall framework.⁷

⁷ For a detailed exposition of “good” principles of fiscal rules, see G. Kopits and S. Symansky (1998), “Fiscal policy rules”, IMF Occasional Paper No 162.

Box 2

DISCRETIONARY FISCAL POLICY ACTION

The track record of fiscal activism, i.e. fiscal policies aimed at fine-tuning the business cycle, is disappointing. There is ample evidence that the discretionary fiscal policies pursued in the 1970s in many European and other OECD countries did not stabilise their economies as intended, but rather led to a sustained increase in debt-to-GDP ratios. Often, fiscal policy measures turned out to be pro-cyclical, i.e. they exacerbated the cycle, rather than counter-cyclical as originally intended. The failure of activist fiscal policies can be traced to a number of factors, among which the information, political, implementation and economic lags associated with discretionary fiscal policy measures figure prominently. For activist fiscal policies to be effective, policy-makers need to correctly identify the cyclical state of the economy and fiscal measures need to be implemented in a timely manner, well targeted and temporary. In practice, these conditions are very difficult to meet. Moreover, if fluctuations in short-run economic growth are caused by supply-side rather than demand-side developments, activist fiscal policies aimed at smoothing short-run growth will be destabilising rather than stabilising. Against this background, a consensus view has emerged which states that the best contribution fiscal policy can make to short-term macroeconomic stabilisation is to avoid discretionary fiscal fine-tuning, while ensuring the free operation of automatic stabilisers (the automatic response of taxes and unemployment benefits to the business cycle).¹

¹ See J. B. Taylor (2000), “Reassessing discretionary fiscal policy”, *Journal of Economic Perspectives* 14 (3), pp. 21-36, and A. Auerbach (2002), “Is there a role for discretionary fiscal policy?”, in *Rethinking Stabilization Policy*, proceedings of the symposium of the Federal Reserve Bank of Kansas City, 29-31 August 2002, pp. 109-150.

While fiscal activism aimed at fine-tuning the business cycle should be avoided, there are circumstances under which discretionary fiscal policy action is warranted. First, the line of theoretical reasoning presented in this article emphasises that ensuring the long-term sustainability of public finances should be the overarching goal of fiscal policy. For countries with unsustainable fiscal positions, this implies the need to take structural consolidation measures to correct the fiscal imbalances. It is sometimes argued that during the transition period there will be a trade-off between the goals of sound public finances and macroeconomic stabilisation. However, there is evidence showing that consolidation measures which correct severe fiscal imbalances are likely to result in only small output costs, if any.² Second, discretionary fiscal policy action may be necessary to correct severe internal and/or external macroeconomic imbalances. Third, there may be a need for emergency fiscal policy action in the rare event of a major crisis. Finally, the avoidance of fiscal activism does not relieve the need to adjust policies to the needs of the economy. In particular, in many euro area countries, there is ample scope for improving the quality of public expenditure and taxation in such a way as to promote long-term economic growth and job creation.³

2 See G. Briotti (2005), "Economic reactions to public finance consolidation: a survey of the literature", ECB Occasional Paper No 38.

3 As regards these arguments in the context of the euro area, see the article entitled "Fiscal policies and economic growth" in the August 2001 issue of the Monthly Bulletin and the article entitled "The importance of public expenditure reform for economic growth and stability" in the April 2006 issue of the Monthly Bulletin.

MONETARY AND FISCAL INTERACTIONS: ISSUES SPECIFIC TO MONETARY UNIONS

In addition to the principles summarised so far, the overall setting should be consistent with the core principles of a monetary union which is characterised by a single monetary policy and many decentralised fiscal policies. For a monetary union of this type, optimal policies should support a clear division of labour between the objectives of centralised and non-centralised policies. Monetary policy should aim to maintain price stability in the monetary union as a whole. By contrast, fiscal policy-makers are well equipped to absorb country-specific shocks. This latter feature calls for a certain degree of flexibility in the conduct of fiscal policies at the national level, mainly through letting automatic stabilisers act as shock absorbers.

At the same time, however, monetary unions of this type create coordination challenges between fiscal policies, which call for constraints on national policies. In this context, notwithstanding the existence of a credible no-bailout clause protecting the central bank, the excessive issuance of national government debt constitutes a widely acknowledged risk. Given the large

number of independent fiscal policy-makers that share the benefits of a single currency and gain access to an enlarged pool of savings, a situation in which free-riding incentives for excessive government borrowing are created needs to be avoided.⁸ Such incentives arise if national debt can be financed at largely union-wide-determined interest rates which do not fully incorporate adequate and country-specific risk adjustments. If not held in check, these incentives are likely to reinforce each other, leading to higher area-wide fiscal deficits and upward pressure on area-wide interest rates, and thereby to less favourable financing conditions in all participating countries. In principle, financial markets themselves should eliminate such incentives by assigning appropriate risk premia to sovereign debt. Yet, in practice, not least due to short-termism and the herding behaviour of investors, the discrimination between risk characteristics of national government debt by financial markets tends to be imperfectly reliable and often incomplete.⁹

8 For more details, see C. Detken, V. Gaspar and B. Winkler (2004), "On prosperity and posterity: the need for fiscal discipline in a monetary union", ECB Working Paper No 420.

9 See the article entitled "Fiscal policies and financial markets" in the February 2007 issue of the Monthly Bulletin.

To compensate for these features, there is a clear complementary need for a collective fiscal framework that limits the issuance of national government debt.

In sum, monetary unions, by nature, give rise to specific challenges that need to be carefully balanced in the overall framework. In particular, the framework should recognise the requirement to grant fiscal policy-makers the flexibility required at the national level to address, whenever necessary, country-specific developments. At the same time, the framework should recognise the requirement to strictly impose rules-based discipline on all fiscal policy-makers, thereby ensuring that fiscal policy-makers in each member country achieve and maintain sound budgetary positions.

3 INSTITUTIONAL ARRANGEMENTS AND GUIDING PRINCIPLES OF MONETARY POLICY AND FISCAL POLICIES IN THE EURO AREA

This section argues that the institutional arrangements and guiding principles of monetary policy and fiscal policies in the euro area are in line with the insights summarised in Section 2. At the same time, given the broad nature of these insights, it is clear that many of the more specific elements of the arrangement in the euro area cannot be understood without knowledge of the historical context and particular characteristics of the participating countries.

THE SINGLE MONETARY POLICY

The Treaty establishing the European Community assigns responsibility for monetary policy to the Eurosystem and unambiguously entrusts it with the primary objective of maintaining price stability in the euro area over the medium term. To ensure that this assignment can be fulfilled effectively, the Eurosystem and the members of its decision-making bodies have been granted a high degree of independence. To facilitate a clear translation of the general principle of central bank independence into practical terms, the Treaty explicitly covers

a number of its dimensions, thereby ensuring independence from the institutional, personal and financial perspectives.

Moreover, the Eurosystem has been granted functional independence to render operational its mandate of primarily safeguarding price stability in the euro area. In line with this stipulation, the Governing Council of the ECB developed and announced in October 1998 a comprehensive monetary policy strategy. As an important component of this strategy, the Governing Council adopted a quantitative definition of price stability: “Price stability shall be defined as a year-on-year increase in the Harmonised Index of Consumer Prices (HICP) for the euro area of below 2%. Price stability is to be maintained over the medium term.” Following a thorough evaluation of the strategy in 2003, the Governing Council clarified that, within the definition, it aims to keep HICP inflation “below, but close to, 2%”. Such an approach is sufficient to hedge against the risks of both very low inflation and deflation. The ECB’s overall approach to assessing the risks to price stability is based on two analytical perspectives, often referred to as the two “pillars”. Within the two-pillar framework, the monetary analysis serves mainly as a means of cross-checking, from a medium to longer-term perspective, the short to medium-term indications from the economic analysis. Generally speaking, by offering complementary perspectives, the two pillars ensure an all-encompassing assessment of the risks to price stability.

NATIONAL FISCAL POLICIES

The institutional arrangements relating to fiscal policies reflect the fundamental principle that fiscal discipline is necessary for the smooth functioning of a monetary union. The Treaty and the secondary legislation provided by the Stability and Growth Pact (SGP) offer an effective area-wide fiscal surveillance framework designed to ensure fiscal discipline and the long-term sustainability of public finances. Beyond explicitly prohibiting the financing of government debt through the

central bank and stipulating that neither the Community nor any Member States should be liable for commitments of another Member State (the “no bailout clause”), the Treaty obliges all Member States to avoid excessive deficits. For euro area countries that do not comply with the government deficit and debt ceilings (3% of GDP and 60% of GDP respectively) defined in the Protocol on the Excessive Deficit Procedure (EDP) annexed to the Treaty, the procedure can ultimately lead to sanctions.

The SGP, adopted in 1997, complements and strengthens the EU fiscal framework.¹⁰ The “preventive arm” of the SGP, aimed at avoiding excessive deficits, provides for a concrete procedure of multilateral surveillance whereby a “stability programme” has to be submitted each year by countries having joined the single currency. However, non-euro area countries are committed to submitting a “convergence programme”. These programmes present a general outlook for economic and fiscal developments in Member States, along with the medium-term objective (MTO) for the structural budget balance, and an adjustment path towards the MTO. The SGP also comprises a set of procedures referred to as the “corrective arm”, which aim to ensure a rapid correction of excessive deficits. In particular, the EDP sets out a stepwise procedure to ensure that countries implement timely and efficient measures to reduce high deficits. The reform of the SGP in 2005 introduced more flexibility into the procedures. In particular, the use of discretion in the determination of an excessive deficit was widened and procedural deadlines were extended. Many observers, including the ECB, expressed concerns that these changes would make the EU fiscal framework more complex and less transparent and thereby undermine confidence in the framework and the sustainability of public finances in the euro area countries.¹¹

The European Commission and the ECOFIN Council, i.e. the Council of the European Union in its composition of economics and finance ministers from all EU Member States,

play a central role in enforcing the EU fiscal framework. The Lisbon Treaty, signed on 13 December 2007, which, after ratification by the EU Member States, is expected to enter into force on 1 January 2009, assigns a more prominent role to the Eurogroup – currently an informal body bringing together, on a monthly basis, economics and finance ministers from the euro area countries. In addition, the Commissioner responsible for Monetary Affairs and the President of the ECB regularly participate in Eurogroup meetings. While not fundamentally modifying the provisions of the current treaties on economic and monetary policy, the Lisbon Treaty stipulates that, on some matters, only euro area countries will be entitled to take decisions. For example, decisions on the non-compliance of euro area countries with the EDP will be taken only by euro area countries, and without the Member State concerned.

4 MONETARY POLICY AND FISCAL POLICIES IN THE EURO AREA: SELECTED INDICATORS

This section describes the main outcomes of monetary policy and fiscal policies in Stage Three of EMU for the period 1999-2007 by considering a range of selected indicators, covering both aggregate outcomes and country-specific developments.

SELECTED INDICATORS OF MONETARY POLICY

Table 1 reports averages of annual HICP inflation rates (as well as those of its main sub-components) for the euro area for the period 1999-2007. Over this period, overall HICP inflation was low on average and remarkably stable by historical standards and when compared with the countries with the best record in terms of price stability in the pre-EMU period. Annual HICP inflation reached its single highest

¹⁰ The SGP consists of a European Council Resolution and Regulations 1466/97 and 1467/97 adopted in 1997, eventually amended in 2005 by Regulations 1055/05 and 1056/05.

¹¹ See the statement issued by the Governing Council of the ECB on 21 March 2005 and the article entitled “The reform of the Stability and Growth Pact” in the August 2005 issue of the Monthly Bulletin.

value of 3.1% in May 2001 and its lowest value of 0.8% in February 1999.¹² Nevertheless, average annual HICP inflation over this period was slightly above 2%, and from 2000 average annual inflation rates remained at levels persistently exceeding the upper limit of the ECB's definition of price stability. This outcome was largely due to a sequence of unexpected adverse shocks which occurred over that period, as can be inferred from the lower average values of HICP inflation excluding unprocessed food and energy prices.

Over the entire period, overall inflation was driven, in particular, by substantial contributions from the energy component on account of the surge in oil prices (see Table 1). Food prices also made a substantial contribution to overall HICP inflation, reflecting a number of weather-related shocks, the impact of animal diseases as well as tobacco tax increases. Price developments in the latter components were partly compensated for by overall favourable price developments in non-energy industrial goods, reflecting strong international competition, technical progress and fast productivity growth. Services prices contributed significantly to upward pressures on overall inflation, with annual inflation rates in services standing above annual overall HICP inflation rates in seven out of the nine years, mainly on account of below-average labour productivity in the sector.¹³ Since the introduction of the euro, the inflation rates of food and energy components have not only been high on average, but also highly volatile. Chart 1 shows the 24-month rolling window standard deviations of annual growth rates for overall HICP inflation and its food and energy components. The volatility of unprocessed

food and energy components was on average high and had a marked time-varying pattern, fluctuating in ranges of between 1% and 3% and 1% and 7% respectively. Despite these very volatile patterns, monetary policy has managed to ensure that the resulting volatility of overall HICP inflation has been remarkably low (i.e. below 1%) and stable over time.

In the light of the importance of unexpected adverse shocks to inflation, a more encompassing way to evaluate the ECB's past performance in terms of its primary objective is to also look at the inflation rates expected by market participants. Chart 2 reports for the period 1999-2007 the evolution of inflation expectations two and five years ahead, as measured by the ECB Survey of Professional Forecasters (SPF), together with the realised annual inflation rates. While actual inflation has been fluctuating over time as a result of shocks hitting the euro area economy, inflation expectations have been firmly anchored at levels consistent with the ECB's definition of price stability. Both two-year and five-year-ahead inflation expectations were always below 2%, with the only exception of the third quarter of 2007 when both observations were exactly 2%. In addition, the standard deviation of SPF respondents' point forecasts for five-year-ahead inflation expectations halved between 1999 and 2002 and continued to gradually decline from 0.2% in 2002 to around 0.1% in 2006, where it remained

¹² More recently, annual HICP inflation reached 3.7% in May 2008.

¹³ For an analysis of recent developments in services prices, see the box entitled "Recent developments in euro area services price inflation" in the April 2008 issue of the Monthly Bulletin.

Table 1 Overall HICP and its sub-components in the euro area

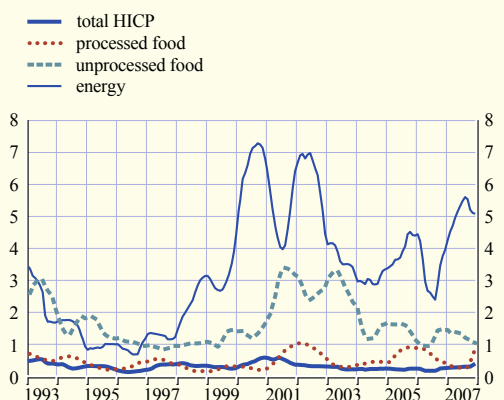
(average annual percentage changes)

	Total	Total excl. unprocessed food and energy	Energy	Unprocessed food	Processed food	Non-energy industrial goods	Services
1999-2007	2.06	1.73	5.05	2.37	2.41	0.77	2.28
1999-2003	1.98	1.70	4.08	2.81	2.26	0.84	2.23
2004-2007	2.16	1.76	6.28	1.81	2.58	0.69	2.35

Source: Eurostat.

Chart 1 Rolling standard deviations of HICP inflation and of selected sub-components

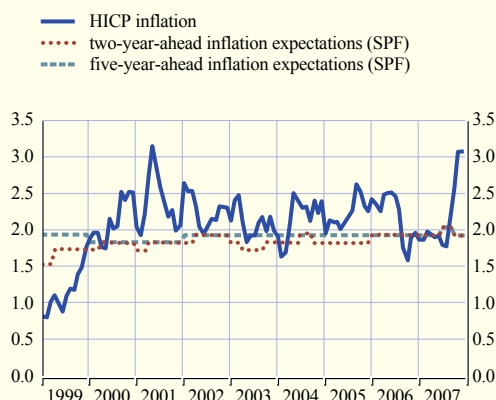
(one-sided backward-looking 24-month rolling standard deviations)



Sources: Eurostat and ECB calculations.

Chart 2 HICP inflation and inflation expectations (SPF) in the euro area

(annual percentage changes)



Sources: Eurostat and ECB.

thereafter. This pattern suggests a broader consensus that inflation was perceived as being consistent with the definition of price stability over the medium term. Moreover, if one considers inflation expectations extracted from financial market data and the degree to which they reacted to macroeconomic news in the short term (a measure of the extent to which they were anchored around the objective of the central bank), long-run inflation expectations tended to be insensitive to news in the euro area over the sample period 2003-06.¹⁴

With regard to links between fiscal policies and inflation, administered prices and indirect taxes are two particularly prominent channels through which governments directly influence price developments in the short term. As shown in Charts 3 and 4, between mid-2003 and the first half of 2007, increases in administered prices virtually always exceeded overall HICP increases. In the second half of 2007, annual rates of changes in administered prices were broadly stable at levels below HICP inflation, with a contribution to overall inflation similar to the value in 2003. This favourable development in administered prices, however, was offset by unusually strong upward pressures on prices coming from changes in indirect taxes. According to ECB staff estimates, the

contribution of indirect tax changes to euro area HICP inflation reached about 0.4 percentage point in 2007. This was above the average contribution of about 0.2 percentage point in previous years, mainly owing to the increase in the German VAT rate in January 2007.¹⁵

SELECTED INDICATORS OF FISCAL POLICIES

Looking at fiscal developments in the euro area, the period since the introduction of the single currency provides a mixed picture. In the run-up to Stage Three of EMU, fiscal deficits were significantly reduced, mainly due to falling interest payments. The convergence of long-term interest rates to lower levels in many countries appears to have been at least in part linked to the set-up of the EU fiscal framework and to countries' efforts to meet the fiscal convergence criteria.¹⁶ In the

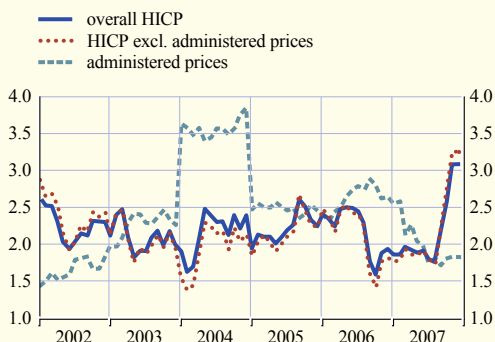
14 For more details, see M. Beechey, B. Johannsen and A. Levin (2007), "Are long-run inflation expectations anchored more firmly in the euro area than in the United States?", CEPR Discussion Paper No 817, and M. Ehrmann, M. Fratzscher, R. S. Gurkaynak and E. T. Swanson (2007), "Convergence and anchoring of yield curves in the euro area", ECB Working Paper No 817.

15 See also the box entitled "Measuring and assessing the impact of administered prices on HICP inflation" in the May 2007 issue of the Monthly Bulletin.

16 See the article entitled "EMU and the conduct of fiscal policies" in the January 2004 issue of the Monthly Bulletin for a comparison of fiscal policies before and after Stage Three of EMU.

Chart 3 Overall HICP inflation and administered prices

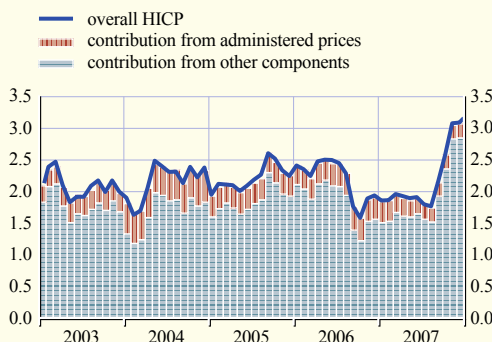
(annual percentage changes)



Sources: Eurostat and ECB estimates based on Eurostat data.

Chart 4 Contribution from administered prices to overall HICP inflation

(annual percentage changes; contributions in percentage points)



Sources: Eurostat and ECB estimates based on Eurostat data.

period since 1999, fiscal deficits have on average been much lower than in the early 1990s.

In 1999 and 2000, nominal fiscal balances continued to improve. In these years, no euro area country recorded a deficit above the reference value of 3% of GDP. However, this was the result of a favourable macroeconomic environment, while structural balances deteriorated in many countries due to insufficient consolidation efforts. In the context of the economic downturn that began in 2001, fiscal balances declined and an increasing number of Member States ran the risk of or incurred excessive deficits. In 2003 the average fiscal deficit in the euro area increased to 3% of GDP and, at the same time, five out of the then 12 euro area countries recorded deficits above the reference value. This period provided the first real test of the EU fiscal framework in Stage Three of EMU. The reluctance at that time to follow the rules and procedures of the Treaty and the SGP eroded confidence in the framework and ultimately resulted in a reform of the SGP.

In the period from 2004, the picture improved considerably, although fiscal imbalances persisted in a number of countries. The average euro area fiscal deficit declined to 0.6% of GDP in 2007, the lowest level since the introduction of the euro.¹⁷ In addition, no euro area country recorded a deficit above 3% of GDP in 2007. Importantly, over the period 2004-07, the

structural deficit fell on average by more than 0.5% of GDP per year. While this improvement partly reflected revenue windfalls unrelated to structural consolidation measures, it also appears to have reflected a strengthened commitment to sound public finances in a number of countries.

Table 2 provides a summary of fiscal developments over the period from 1999. While the average euro area deficit-to-GDP ratio has declined by 1.6 percentage points since the start of Stage Three of EMU, this cannot be attributed to genuine fiscal consolidation efforts. Rather the decline in the fiscal deficit has been facilitated by the fall in government interest payments (the “EMU premium”) associated with the convergence of nominal interest rates in many countries to much lower levels than in the pre-EMU period.¹⁸ The low level of long-term interest rates in Stage Three of EMU is, among other factors, an outcome of a credible monetary policy, which has ensured low and stable inflation expectations and low inflation risk premia. Seven euro area countries have seen their interest burden in relation to GDP fall by at least two percentage points. The majority of

17 This assessment excludes the proceeds from the allocation of mobile phone licences (UMTS), which in 2000 had a one-off deficit-reducing impact of 1% of GDP in the euro area on average.

18 See the article entitled “Fiscal policies and financial markets” in the February 2006 issue of the Monthly Bulletin.

Table 2 Selected fiscal indicators

	Fiscal balance to GDP ratio		Government debt to GDP ratio		Interest payments to GDP ratio		Primary expenditure to GDP ratio	
	2007	change 1998-2007	2007	change 1998-2007	2007	change 1998-2007	2007	change 1998-2007
Belgium	-0.2	0.7	84.9	-32.2	3.8	-3.5	45.0	2.0
Germany	0.0	2.2	65.0	4.7	2.8	-0.6	41.1	-3.6
Ireland	0.3	-2.1	25.4	-27.6	0.9	-2.4	35.4	4.4
Greece	-2.8	1.1	94.5	-8.1	4.1	-4.4	39.0	2.3
Spain	2.2	5.4	36.2	-27.0	1.6	-2.6	37.2	0.3
France	-2.7	-0.1	64.2	5.4	2.7	-0.6	49.9	0.5
Italy	-1.9	0.9	104.0	-10.9	5.0	-2.9	43.5	2.5
Cyprus	3.3	7.4	59.8	1.4	3.2	0.2	40.6	7.0
Luxembourg	2.9	-0.4	6.8	-0.6	0.2	-0.2	37.3	-3.3
Malta	-1.8	8.1	62.6	10.1	3.4	0.2	39.1	-0.7
Netherlands	0.4	1.3	45.4	-20.4	2.3	-2.4	43.6	1.6
Austria	-0.5	1.8	59.1	-5.1	2.7	-0.9	45.3	-4.5
Portugal	-2.6	0.8	63.6	11.5	2.8	-0.4	42.9	3.3
Slovenia	-0.1	2.3	24.1	2.2	1.3	-0.9	42.0	-2.1
Finland	5.3	3.6	35.4	-12.8	1.5	-2.0	45.9	-3.1
Euro area	-0.6	1.6	66.4	-6.5	3.0	-1.6	43.3	-0.6

Source: European Commission, Spring 2008 forecast.

Notes: 2007 levels are expressed as a percentage of GDP. The change between 1998 and 2007 levels is expressed in percentage points. For changes in the fiscal balance, a positive (negative) figure reflects an improvement (deterioration) in the fiscal balance.

these countries have offset the fall in the interest burden by expanding primary expenditure and/or cutting taxes, thereby hindering a faster transition towards sound public finances. Government debt-to-GDP ratios decreased over the period 1999-2007 in a large number of countries, but in about half of the countries, as well as in the euro area as a whole, the debt ratio was still above the 60% reference value in 2007.

There is also evidence that the conduct of fiscal policies over the economic cycle improved in the second half of the period under review. Chart 5 plots the change in the output gap, measured as the percentage deviation of actual from potential real GDP, against the fiscal stance, measured by the change in the cyclically adjusted primary balance-to-potential GDP ratio, for the euro area over the period 1999-2007. The chart provides information on whether discretionary fiscal policies in the euro area were stabilising (counter-cyclical) or destabilising (pro-cyclical) in the individual years over this period. Fiscal policies in any given year are assessed to have been pro-cyclical (counter-cyclical) if the change in the output gap has a different (the same) sign than (as) the fiscal stance in that year.¹⁹ During

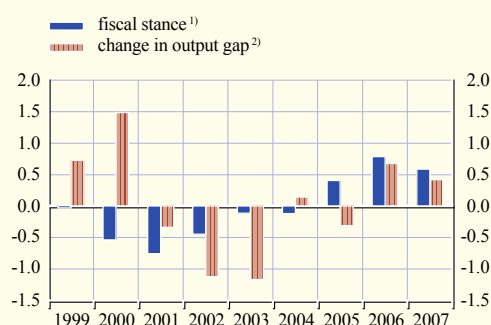
this period, the euro area economy experienced a cyclical upswing in 1999 and 2000, a downturn over the period 2001-05, interrupted by a year of close to potential growth in 2004, and another upswing in 2006 and 2007. Over the years 1999 and 2000, governments missed an opportunity to make progress with fiscal consolidation in economic “good times”. On the contrary, the fiscal stance loosened considerably in 2000, when fiscal policies were pro-cyclical, thereby potentially destabilising the economy and fuelling inflationary pressures. The loosening of the fiscal stance also meant that many countries, which later would be subject to the EDP, had weak starting positions when the economic downturn started.

Chart 5 also reveals that the fiscal stance in euro area countries on average loosened further during the economic downturn that started in 2001, leading to a deterioration

¹⁹ It should be noted that the assessment of the cyclicity of fiscal policies is, to some extent, sensitive to the output gap estimation method used and, for a given estimation method, also complicated by large revisions over time of output gap estimates for a given year. On output gap estimation issues, see the box entitled “The (un)reliability of output gap estimates in real time” in the February 2005 issue of the Monthly Bulletin.

Chart 5 Fiscal stance and change in output gap in the euro area

(changes in percentage points)



Source: European Commission, Spring 2008 forecast.

Note: Fiscal policies in any given year are assessed to have been pro-cyclical (counter-cyclical) if the change in output gap has a different (the same) sign than (as) the fiscal stance in that year.

1) Fiscal stance is defined as the change in the cyclically adjusted primary balance (as a percentage of potential GDP), excluding UMTS receipts.

2) Output gap is defined as the percentage deviation of actual from potential GDP.

in the fiscal deficit beyond the operation of automatic stabilisers. This is also true for most individual euro area countries, including – with the exception of Portugal – all those countries that would later be subject to the EDP. Fiscal policies in 2006 and 2007 were in many countries fully compatible with the revised SGP, although the measured improvement

in structural budget balances partly reflected revenue windfalls unrelated to structural consolidation measures. At the same time, fiscal policies also contributed to macroeconomic stability in the euro area by undertaking a counter-cyclical tightening of the fiscal stance during the economic upswing.

While the conduct of fiscal policies over most recent years has been satisfactory on average, there is a risk that complacency may set in and that past mistakes might be repeated in the coming years. Almost ten years after the start of Stage Three of EMU, most euro area countries have still not reached their medium-term budgetary objectives, which are defined in terms of the cyclically adjusted balance net of temporary fiscal policy measures, and which for most countries are set at a balanced budget (see Table 3). A number of countries do not even satisfy the minimum benchmarks calculated by the European Commission as the level of the structural deficit which, except for unusually severe economic downturns, would prevent the deficit from breaching the 3% of GDP reference value. In the absence of additional consolidation efforts, even a moderate deterioration in the macroeconomic environment could entail renewed excessive deficits in these countries.

Table 3 Structural balance, medium-term objective and minimum benchmark

(as a percentage of GDP)

	Structural balance 2007	Medium-term objective (MTO)	Minimum benchmark
Belgium	-0.3	0.5	-1.3
Germany	-0.3	0.0	-1.6
Ireland	0.2	0.0	-1.5
Greece	-3.3	0.0	-1.4
Spain	2.4	0.0	-1.2
France	-2.7	0.0	-1.6
Italy	-1.5	0.0	-1.4
Cyprus	3.5	0.0	-1.8
Luxembourg	2.8	-0.8	-1.0
Malta	-2.4	0.0	-1.7
Netherlands	0.3	-0.5 to -1.0	-1.1
Austria	-1.0	0.0	-1.6
Portugal	-2.2	-0.5	-1.5
Slovenia	-0.7	-1.0	-1.6
Finland	4.9	2.0	-1.2
Euro area	-0.7		

Sources: European Commission, Spring 2008 forecast (for 2007 structural balances), Member States' end-2007 stability programme updates (for medium-term objectives) and European Commission Public Finances in EMU – 2007, p. 95 (for minimum benchmarks).

5 CONCLUSION

The institutional framework which governs monetary policy and fiscal policies in the euro area builds on solid conceptual foundations and meets, if adhered to by all policy-makers, all the requirements for the smooth functioning of EMU. It is based on clearly specified objectives and offers a clear allocation of responsibilities which need to be mutually respected. Moreover, all individual policy-makers are equipped with adequate instruments to achieve the objectives which have been assigned to them. Therefore, there is no need for an explicit ex ante coordination of monetary policy and fiscal policies.

This latter assessment is also supported by the overall performance of monetary policy and fiscal policies, which has been satisfactory from an historical perspective. In particular, in comparison with the pre-EMU period, the euro area has been characterised by higher macro-stability, much lower risk premia and inflation expectations, and on average lower fiscal deficits. Despite this broadly positive assessment, the performance of monetary policy and fiscal policies during the period 1999-2007 exhibits considerable differences between the two fields, in an environment characterised by a sequence of major challenges from a number of unexpected adverse shocks. Monetary policy delivered low and stable inflation, albeit on average slightly above 2%. With regard to fiscal policies, the assessment is more nuanced. On the one hand, the overall fiscal position of the euro area improved significantly towards the end of the period under review. On the other hand, a number of countries showed a disappointing lack of ambition to adjust their budgetary positions. This lack of ambition ultimately created a worrying situation, in which not fiscal policies themselves, but rather the rules were adjusted, as evidenced by the reform of the SGP in 2005. The associated challenge of maintaining the credibility of the institutional framework could have been avoided if all fiscal policy-makers had been clearly committed to the agreed rules.

Looking forward, this episode gives rise to an important insight for all policy-makers in the euro area. In particular, it needs to be understood that the significant advantages offered by a rules-based framework are at risk if policy-makers fail to deliver results in line with the stated objectives or, even worse, if the framework itself is made responsible for disappointing policy outcomes which are rooted in a lack of ambition. Fiscal policy-makers should be aware that the real test of the credibility of the reformed SGP is yet to come. Furthermore, to reap the full benefits of the rules-based framework in EMU, the ECB will remain firmly committed to delivering inflation outcomes over the medium term in line with the definition of price stability.