

7. ONGOING ISSUES IN EU ECONOMIC SURVEILLANCE

Summary

Article 99 of the EC Treaty instructs the Council to monitor economic developments in the Member States and in the Community on the basis of reports submitted by the Commission. In the context of this economic surveillance, DG ECFIN prepares a number background studies that are relevant for a broader audience; the aim of this chapter on current issues in economic surveillance is to present the results of this analysis in an easily accessible format.

The introduction to this year's chapter offers a definition of economic governance, a term that has assumed a growing importance in recent debates on economic policy in the EU, but which is difficult to pin down conceptually. The main body of the chapter deals with policy issues that are relevant to economic governance and surveillance. It gives a broad overview of the Draft Treaty Establishing a Constitution for Europe and discusses ways in which it strengthens economic governance in the EU. The discussion then moves onto education and its significant but changing impact on economic growth in the coming decades, as the educational profile of the workforce evolves. The chapter concludes with a discussion of structural indicators and macroeconomic statistics in the EU, both of which are critical for the effectiveness and transparency of economic surveillance.

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ONGOING ISSUES IN EU ECONOMIC SURVEILLANCE

1. Introduction

In the course of its deliberations on Europe's institutional and political framework, the European Convention set up a working group on economic governance to discuss the case for further cooperation in the economic and financial field following the launch of the euro in January 1999. The working group distinguished between three broad strands of economic governance in the EU. The first is monetary policy, which in the euro area is the exclusive competence of the European Central Bank (ECB). The second strand concerns the narrowly defined rules that Article 104 of the Treaty and the Stability and Growth Pact impose on net government lending and public debt in EU Member States. The third strand focuses on the wider economic policy mix including the pursuit of sound public finances and supply-side reform in factor and product markets. Although Member States retain primary responsibility for such measures, Article 99 calls on the Council of Ministers to issue Broad Economic Policy Guidelines (BEPGs) concerning Member States' economic policies with a view to achieving, *inter alia*, sustainable and non-inflationary growth and the smooth functioning of Economic and Monetary Union (EMU).

In March 2000 the European Council introduced an ambitious agenda for economic reform – known as the Lisbon Strategy – that is designed to make the EU ‘the most competitive and dynamic knowledge-based economy in the world, capable of sustainable economic growth with more and better jobs and greater social cohesion’ by 2010. At the same time, the European Council recognised the central role of the BEPGs as an instrument of economic governance. In this regard it called for the BEPGs to ‘focus increasingly on the medium- and long-term implications of structural policies and on reforms aimed at promoting economic growth potential, employment and social cohesion, as well as on the transition towards a knowledge-based economy’.

The use of the term economic governance in the European Convention rather than more established terms like economic policy coordination, economic cooperation and *gouvernement économique* is noteworthy.¹ On the one hand, economic governance has much the same meaning as these other terms. At its base, economic governance concerns the institutions, rules and procedures that govern the conduct of economic policies in the EU in the light of the increased interdependence that comes from the completion of the internal market, the exercise of common policies and the launch of the euro.

On the other hand, the concept of economic governance goes beyond terms like economic policy coordination, economic cooperation and *gouvernement économique* by recognising the need for accountability, transparency and responsibility in relation to the conduct of economic policies in the EU. In this sense, the idea of economic governance reflects the broader debate on EU governance that followed the publication of the European Commission's White Paper on this subject in 2001.²

In this White Paper, the European Commission recognised the need to bring policy making in the EU ‘closer to the European citizens’ and to address the perceived democratic deficit in EU institutions. This principle has been formally recognised under Article 49 of the Treaty Establishing a Constitution for Europe, which calls on the EU's institutions to ‘promote good governance’.

When the idea of good governance is applied to the economic domain, it expresses two key ideas. The first is that there should be transparency over Member States’

¹ For a discussion of economic policy coordination and cooperation see Mooslechner and Schürez (2001). See Dyson (2000) for a discussion of *gouvernement économique*.

² See European Commission (2001a).

rights and responsibilities concerning economic policies. From this perspective, the usage of the term economic governance is designed to allay concerns that EMU will lead to a progressive transfer of competence in the field of economic policy to the EU level. It does so by reinforcing the institutional asymmetry of EMU, according to which euro area monetary policy is formulated by the European Central Bank while primary responsibility for economic policies – including fiscal policy and supply-side reform – rests with the Member States.

The second aspect of good economic governance concerns the need to ensure that economic policy in the EU is conducted in an accountable manner. The concept of accountability here has a two-fold meaning. On the one hand, it states that EU institutions should be held accountable for their involvement in the formulation and implementation of economic policies. On the other hand, it refers to the fact that Member States should be held accountable to one another. This follows from Article 99 which states that Member States should treat economic policy ‘as a matter of common concern’.

This chapter, which is a new addition to the EU ECONOMY REVIEW, discusses some special topics related to the surveillance of economic policies in the EU. In view of the description above, this discussion will touch upon matters relating to economic governance and the wider economic policy mix.

This inaugural discussion focuses on four topics that are of direct relevance to the EU economy and which reflect the broad scope of economic surveillance. The second section provides a broad brush overview of the new constitutional treaty and considers its likely impact on economic governance in the EU. The third section turns to the EU labour market and examines the impact of education on economic growth. The fourth and fifth sections focus on the informational requirements of economic surveillance in the EU. The former concentrates on the development of structural indicators in the context of the Lisbon Strategy and their contribution to reform efforts. The latter looks at the progress achieved in relation to macroeconomic statistics since the launch of EMU and identifies future challenges.

The second section of this chapter looks at the implications of the *Treaty Establishing a Constitution for Europe* for economic governance in the EU. In addition to introducing greater transparency, accountability and democracy in EU policy making in general, the Constitution strengthens economic governance in a number of key respects. First, there will be greater scope for the Council of Ministers for Economic and Financial Affairs (Ecofin) to take decisions relating to the sole votes of the euro area, for instance in relation to the part of the BEPGs concerning the euro area in general. Second, the Constitution includes a Protocol on the informal Eurogroup that formalises the Commission’s involvement in Eurogroup

meetings and allows members to nominate a Eurogroup President for a period of 2.5 years. Third, the impartiality of multilateral surveillance has been strengthened by giving the Commission the right to issue direct warnings against Member States whose economic policies are either inconsistent with the BEPGs, or otherwise risk jeopardising the proper functioning of EMU.

The importance of *education* for economic surveillance in the EU was recognised at the Lisbon European Council in March 2000 when the Heads of State and Government adopted the goal of halving the number of 18 to 24 year olds with only lower-secondary level education who are not in further education and training by 2010. Existing studies suggest that education has been a key driver of economic growth in the past, but that its impact will change as the educational profile of the work force evolves. Section 3 presents projections of educational attainment – by which is meant average effective years of schooling – for EU Member States over the next fifty years. In so doing it builds on the study of ‘Education, training and growth’ in the EU ECONOMY REVIEW 2003. The results of this update are that the average years of schooling will increase by around 0.6 years in the coming decade as compared with a rate of 0.8 over the past eight years. It follows that while educational attainment will continue to be a driver of economic growth in the EU, the magnitude of this impact will gradually fall. Moreover, there is likely to be considerable variation between Member States owing to the variance in the scope for increased educational attainment and also the different estimated rates of return. From an economic surveillance perspective, this changing impact of education on economic growth underlines the importance of ensuring quality education at both the secondary and tertiary levels, for example by targeting reduced drop out rates from universities.

At the Lisbon European Council in Lisbon in March 2000, the Heads of State and Government invited the Commission to draw up an annual synthesis report on the basis of structural indicators. Since this time, the Commission’s database on structural indicators has grown to 117 indicators, covering five main areas: General Economic Background, Employment, Innovation and Research, Economic Reform, Social Cohesion and Environment. In October 2003, the Commission proposed a short-list of 14 indicators, which in keeping with the principle of streamlining will be revised every three years or in the intervening years to take new policy priorities into account only. Section 4 of this chapter argues that the structural indicators are a useful tool for monitoring structural reforms undertaken by the Member States and an important guarantee of consistency between different policy messages. The contribution of the structural indicators to economic surveillance could be strengthened, it is argued, by placing greater emphasis on country rankings and by promoting a more in depth analysis of reform

implementation and its impact on economic performance.

The production of high quality, reliable and timely *macroeconomic statistics* is, it is argued in Section 5, essential for successful economic surveillance in the EU. If this condition does not hold, then it will jeopardise the conduct of monetary policy in the euro area and make it harder both to assess compliance with EMU's budgetary rules and to identify common challenges for Member States' economies. A report by the Monetary Committee in 1998 on information requirements for EMU concluded that there were a number of deficiencies in the EU's macroeconomic statistics in relation to, for example, money growth, banking, the financial markets, the balance of payments and (most importantly) price statistics. This paved the way for the launch of an EMU action plan in 2000, which included targets for the production of national data to permit the timely compilation of reliable key statistics for the euro area and the EU, with at least 80 per cent coverage of Member States' data. After four years, it is commonly agreed that euro area statistics have improved considerably both in scope and timeliness. Key achievements in this regard include the production of improved quarterly national accounts, quarterly government statistics and short term business indicators. This progress notwithstanding, the evolution of economic surveillance will require further improvements in relation to, *inter alia*, hourly working data, statistical indicators for the services economy and the balance of payments.

2. The Draft Treaty Establishing a Constitution for Europe: strengthening economic governance in the EU

Coming only a few weeks after the Union's biggest ever enlargement, the agreement of the Heads of State and Government on the constitutional treaty marked a critical juncture for European integration. The Constitution – which is now subject to ratification by the Member States – is not a revolution, but neither is it a mere consolidation of the Union's current legal architecture. Above all it is designed as a means to define the competences of the Union, simplify its policy instruments, and improve the democratic legitimacy, transparency and efficiency of its working methods.

The elaboration of a Constitution was entrusted to a Convention in which representatives of national parliaments, the European Parliament, the national governments and the Commission discussed the future of the Union. The Intergovernmental Conference (IGC) that gave its final agreement on June 18th 2004 has largely taken on board the Convention's proposals.

This section examines the key developments in the Constitution from the point of view of economic governance. Since the Constitution has considerably amended and improved the Union's overall legal and

institutional framework, Section 2.1 provides a general overview of the main changes in this area compared with the present treaties. The relevance of these new elements for economic governance in the EU is then briefly discussed.

Section 2.2 focuses on economic governance proper and on the various enhancements proposed by the constitutional treaty. It focuses in particular on measures which strengthen and streamline decision making in the euro area, including those which bolster the Commission's role in multilateral surveillance.

Section 2.3 summarises the Commission's position during the negotiations at the Convention and the subsequent IGC and compares the final text of the Constitution with the Commission's overall stance. The final section concludes.

2.1 General implications of the constitutional treaty

2.1.1 The constitution becomes the Union's single foundation

Europe has been built in stages and is based on different Treaties that have been concluded over time. This is one of the reasons why the European construction is sometimes difficult to understand. From now on, the "European Union" will replace the present "European Communities" and the "European Union". The three "pillars" will be merged, even though special procedures in the fields of foreign policy, security and defence are maintained. The EU and EC Treaties, as well as all the treaties amending and supplementing them will be replaced by the "Treaty establishing a Constitution for Europe".

The Constitution integrates the Charter for Fundamental Rights, becoming Chapter II of the Constitution,³ and moreover clearly acknowledges the Union's values and objectives as well as the principles underlying the relationship between the Union and its Member States. It also contains a clearer presentation of the distribution of competences and a simplified set of legal instruments and procedures.

In legal terms, however, the Constitution remains a treaty. Therefore, it will enter into force only after all Member States have ratified it, which implies popular consultations in some of them. It should be noted that any modification of the Constitution at a later stage will require the unanimous agreement of the Member States and, in principle, ratification by all. For some modifications, however – for example with regard to the extension of the scope of qualified majority voting – a unanimous decision by the European Council will

³ This refers to the text of the Constitution as adopted in June 2004 by the IGC and which contains 4 chapters. The final version of the text will not contain any subdivisions and articles will be continuously numbered.

suffice, although the possibility will exist for just one national parliament to block the decision of the European Council and thus to prevent the switch to qualified-majority voting and/or co-decision.

2.1.2 A revised institutional framework

The Convention made a particular effort to reform and clarify the EU's institutional framework, notably as regards the respective roles of the European Parliament, the Council and the Commission and this achievement has been largely confirmed by the IGC.

The Constitution recognises the different competences of the *Commission*, including its near monopoly of legislative initiative, its executive function and its role as external representative of the Union, except in the field of common foreign and security policy. It extends very substantially the scope of the *co-decision procedure*, which, significantly, will henceforth be called the legislative procedure (95 per cent of European laws will be adopted jointly by the Parliament and the Council). This generalised recourse to co-decision, obviously constitutes a significant enhancement of the Parliament's involvement in the EU's legislative process.

The main institutional innovation is the creation of the post of *Union Minister of Foreign Affairs*, who will be responsible for the representation of the Union on the international scene. This function will merge the present tasks of the High Representative for the Common Foreign and Security Policy with those of the Commissioner for External Relations. The Minister of Foreign Affairs will thus be mandated by the Council for common foreign and security policy and he (or she) will chair the External Relations Council. At the same time, the Minister of Foreign Affairs will be a full member of the Commission and as such in charge of the Commission's responsibilities in the field of external relations as well as of the coordination of the other aspects of the Union's external action.

The Constitution establishes the *European Council* as an institution, distinct from the Council. The European Council will be chaired by a President, with limited powers, appointed for a period of two and a half years. On the other hand, and in contrast to what had been proposed by the Convention, the system of twice-yearly rotation among the Member States of the presidency of the different Council formations (with the exception of the External Relations Council) will be maintained, although within a "team presidency" of three countries. This system will be able to evolve in the future since it can be altered by the European Council acting by qualified majority.

In relation to EMU, the Constitution establishes the *European Central Bank* as an institution, while preserving its legal personality and independence *vis-à-vis* the other institutions and the Member States. It moreover recognizes the important role of the

Eurogroup in a separate Protocol, which notably provides for the appointment of a President for a period of two and a half years. Both issues will be further discussed in Section 2.3.

As to the composition of the institutions, the IGC finally decided to raise the maximum number of seats in the *European Parliament* to 750. These seats will be allocated to the Member States according to the principle of "degressive proportionality", with a minimum of six and a maximum of ninety-six seats. The precise number of seats attributed to each Member State will be decided before the European elections in 2009. The IGC decided to maintain the current composition of the *Commission* – one Commissioner per Member State – until 2014. From then on, the Commission will comprise a number of Commissioners corresponding to two thirds of the number of Member States. The members of the Commission will be chosen according to a system based on equal rotation among the Member States, which had been already decided by the Nice Treaty.

The definition of *qualified majority* for decision-making in the Council proved to be one of the more vexing questions that the IGC had to deal with. As proposed by the Convention, the Council will henceforth decide on the basis of the double majority of the Member States and of the people. The IGC nonetheless decided to raise the thresholds: instead of the majority of Member States representing 60 per cent of the population, the IGC decided that a qualified majority will require the support of 55 per cent of the Member States representing 65 per cent of the population. This definition is accompanied by two further elements. First, in order to avoid a situation in which only three (large) Member States could block a Council decision due to an increase in the population threshold, a blocking minority needs to comprise at least four Member States. Moreover, a number of Council members representing at least three-quarters of a blocking minority, whether at the level of Member States or the level of population, can demand that a vote is postponed and that discussions continue for a reasonable time in order to reach a broader basis of consensus within the Council.

2.1.3 A limited number of EU policies have been revised

As opposed to, for example, the Single European Act or the Maastricht Treaty, the Constitution does not extend the Union's competences considerably. Neither does it modernise all the Union's policies since the content of most provisions that govern these policies remains unchanged.

However, the Constitution significantly updates provisions in the field of *Justice and Home Affairs*, in order to facilitate and improve the establishment of the area of freedom, security and justice. In fact, the Community method will from now on apply to all the areas in question. Moreover, they will fall to a large

extent within the scope of qualified majority voting. Nevertheless, the Constitution retains or introduces some special features in these areas, namely in the area of judicial cooperation in criminal matters and in the area of police cooperation.

The provisions regarding *external relations* have been re-written, but in essence, the distinction between common foreign and security policy and the other aspects of EU external action still determines the respective roles of the institutions and the procedures that apply. Nevertheless, the creation of the post of Union Minister of Foreign Affairs, with the task of developing mutual confidence among Member States in order to achieve a truly common and European stance in external affairs, undoubtedly strengthens the Union's role in world affairs, in all areas. Moreover, the possibility of providing additional ways for the Member States to co-operate more closely in the field of defence will underpin the credibility of the Union's foreign policy.

Amendments were also introduced in the area of *economic governance*, as further detailed in the next section. It should be noted that unanimity is retained in the field of taxation and, partially, in the field of social policy and common foreign and security policy. Although "passerelles" allow a unanimous decision that henceforth qualified majority will apply in a given area, it remains to be seen whether the existence of such clauses will be sufficient to maintain the Union's capacity to act. Moreover, the future development of the Union means that account must be taken of the fact that laws on own resources and the financial perspectives must be adopted unanimously, as must revisions of the Constitution itself.

2.1.4 A system marked by increased democracy and transparency

The Constitution introduces, or confirms in a fundamental text, an important number of provisions to deliver more democratic, transparent and controllable EU institutions that are closer to the citizen. For example, the Constitution provides citizens with the right to invite the Commission to submit an appropriate proposal to the legislator, if they manage to collect one million signatures in a significant number of Member States. The proceedings of the Council, when exercising its legislative function, are to be open to the public. National parliaments are to be informed about all new initiatives from the Commission and, if one third of them consider that a proposal does not comply with the principle of subsidiarity, the Commission must review its proposal. New provisions on participatory democracy and good governance have acquired constitutional status.

2.1.5 Impact on economic governance

All EU policy areas will benefit – to varying extents – from the strengthening of the EU's institutional

architecture. In the field of economic governance, the introduction of the Eurogroup (and its President) deserves to be mentioned and forms part of a general tendency towards reinforcing the euro area's governance.

As far as the Council is concerned, the "double ceiling" definition of qualified majority constitutes a major improvement over the existing provisions in the Nice Treaty and will contribute towards facilitating effective decision-making.

While Parliament has managed to increase its involvement in virtually all EU policy areas, its role under the EMU chapter, which is characterised by strong Member State and Council involvement in the economic domain and sole ECB competence in the monetary field, remains broadly unchanged.

2.2 Specific implications of the constitutional treaty for economic governance

2.2.1 General

In view of its mandate extended by the Laeken European Council, the Convention (and the subsequent IGC) focused on the European Union's legal and institutional framework (see Section 2.2), which are described in parts I and IV of the Constitution. The provisions covering the different EU policy areas were mostly taken over unchanged (cf. part III of the Constitution).

Economic governance constitutes one of the few EU policy areas that was discussed in depth. Shortly after the Convention on the future of Europe started its activities, it decided that one of its eleven working groups would be in charge of examining economic governance issues with a view to presenting proposals to the Convention's plenary. The group was composed of 34 Convention members and chaired by Mr Klaus Hänsch, former President of the European Parliament. The Hänsch group recognised the need for strengthening economic policy coordination, while considering that EMU's monetary "pillar" functioned in an appropriate manner and did therefore not require major revision. The report adopted in October 2002 by the group helped to shape the Convention's stance as regards EMU-related issues, and many of its recommendations were eventually taken up by the Convention in the constitutional treaty.

2.2.2 The role of the Ecofin Council

During both the Convention and the IGC, the Ecofin Council proved to be active in trying to reach consensus concerning most issues under discussion and in attempting to get its views across, first in the Convention and later in the IGC. The Constitution was frequently on the agenda for lunchtime discussions between Ecofin members, while the Economic and Financial Committee (EFC) was invited to carry out all

preparatory work and to achieve as broad a consensus as possible on all open items. Already in May 2002, the EFC was asked to prepare a first issues paper and the Committee was subsequently invited to discuss outstanding issues on a regular basis and to elaborate compromise proposals. As Ecofin's formal positions repeatedly met with resistance from the part of Foreign Affairs Ministers who were formally in charge of presenting Member States' positions in the relevant committees, it gradually moved towards exercising its influence through national channels, although it should be acknowledged that some countries appeared to be more systematic than others in conveying commonly agreed Ecofin positions as national positions.

2.2.3 Progress achieved

Alongside the general provisions detailed in Section 2, the Constitution has managed to achieve meaningful progress in the area of economic governance. First of all, (i) the capacity of the euro area to decide and act autonomously has been significantly enhanced in most areas, thereby reflecting the need for close policy coordination among Member States sharing the same currency. In other areas, the Constitution has (ii) recognised the need to strengthen the Commission's involvement in multilateral surveillance. Finally, the Constitution has (iii) updated and simplified a significant number of EMU-related provisions contained in the current treaty.

(i) Reinforced decision-making within the euro area

The present EC Treaty already excludes the voting rights of the Council representatives of the non-participating Member States in a number of areas, notably when decisions are taken which solely concern euro area Member States, such as the issue of euro banknotes and coins, the adoption of ECB acts, the nomination of the members of the ECB's Executive Board, the adoption of decisions relating to the euro's exchange-rate policy, the imposition of sanctions under the excessive-deficit procedure, etc.

The Constitution significantly extends the scope of Ecofin decision-making based on the sole votes of euro area Member States. For example, the part of the BEPGs concerning the euro area in general (as opposed to the different country sections dedicated to the individual euro area Member States) will henceforth be adopted by the votes of euro area Member States only.

More importantly, this approach has also been extended to a significant number of Council decisions which are applicable to all EU Member States. This evolution reflects the evident need for stronger economic policy coordination between participating Member States, since the euro area countries are more directly and significantly affected by policy deviations (such as excessive deficit situations) arising in other euro area countries. The Constitution therefore provides that Council recommendations (or early warnings) in the context of the multilateral surveillance framework,

Council opinions on stability programmes, decisions on the existence of excessive deficits as well as Council recommendations with a view to bringing that situation to an end within a given period, should be adopted by the votes of euro area Member States only when they relate to participating Member States. At the same time, the Constitution establishes a clear asymmetry in the EU's decision-making rules, since euro area Member States will continue to vote on any such decision relating to countries that do not belong to the euro area.

Euro area Member States also receive a more direct say in decisions on future entries into the euro area. While the final decision on the abrogation of the derogation of a non-participating country will be taken by all Member States (as is the case at present), the Council will only be able to adopt such decisions on the basis of a prior recommendation adopted by the euro area Member States. The abrogation procedure itself continues to be initiated on the basis of a Commission proposal.

The Constitution includes a specific Protocol on the informal Eurogroup, which *inter alia* indicates that the Commission will participate in the Eurogroup as well as in the preparatory meetings (the Commission's current status is less clear since the Luxembourg conclusions of December 1997 indicate that it is only "invited" to the meetings). The Protocol moreover specifies that the Eurogroup will nominate a President for a period of 2.5 years. While the content of the Protocol does not introduce major changes compared to current practices, it marks an important and logical step towards confirming the role of the Eurogroup as a key player in the euro area's decision making process by embedding it in the Union's legal and institutional architecture.

(ii) Stronger powers for the Commission to monitor the observance of the rules

The Constitution strengthens the Commission's role as independent "referee" in relation to economic governance in several key respects. In the context of multilateral surveillance, the Commission will have the possibility to issue a "direct" (i.e. without the endorsement of the Council) warning to Member States whose economic policies are either inconsistent with the BEPGs, or otherwise risk jeopardising the proper functioning of EMU (e.g. a significant budgetary deviation justifying an early warning).

The current possibility for the Council to issue similar recommendations (on the basis of a Commission recommendation) remains in place. In essence, it will thus be for the Commission to decide on a case by case basis whether it issues a "direct" warning or whether it prefers to involve the Council. The Constitution moreover provides that such Council recommendations (including early warnings under the SGP) will be adopted without the vote of the Member State concerned. Under the present rules, this Member State is indeed judge and defendant at the same time, and the change of practice introduced by the Constitution will help to strengthen the impartiality of multilateral

surveillance. In doing so, the Constitution moreover removes the existing bias in favour of large Member States, since under current arrangements the latter can constitute a blocking minority more easily than the smaller countries because of their larger voting weight.

Under the excessive-deficit procedure, Council decisions on the existence of a deficit will henceforth be based on a Commission proposal as opposed to a mere recommendation. This amendment facilitates the adoption process since the voting threshold will be lowered and will thus be easier to reach. In addition, the Council will take its decision without the vote of the Member State concerned.

(iii) *Streamlined and simplified decision-making procedures*

The EMU Chapter is probably one of the few parts of the EC Treaty which has not been amended since the signature of the Maastricht Treaty, notably in order to avoid the launching of counterproductive discussions and debates which could have endangered the preparations for the introduction of the euro.

As a consequence, the EMU Chapter contains a large number of provisions that are obsolete. This applies to most of the transitional provisions (the transition from stage II to stage III, the establishment of the ECB and winding up of the EMI, etc.) which are no longer relevant now that the single currency has been introduced. Other provisions are no longer up to date (e.g. during earlier revisions of the Treaty, the coordination procedure has been systematically replaced by the co-decision procedure in all other parts of the Treaty).

In other areas, the Constitution has simplified decision-making rules by transforming the unanimity requirement into qualified majority (nomination of the members of the ECB's Executive Board) or by establishing a specific legal base providing for decision-making by QMV (granting of macro-financial assistance to third countries) instead of Article 308 EC which requires unanimity.

Other EMU-related issues

One of the most controversial issues during the Convention concerned the formulation in Chapter I of the Constitution of the EU's competence in the area of economic policy coordination. While the Convention decided to adopt a neutral wording that merely constitutes a factual description of the present situation,⁴

⁴ Art. I-11(3): "The Union shall have competence to promote and coordinate the economic and employment policies of the Member States." Art. I-14(1): "The Union shall adopt measures to ensure coordination of the economic policies of the Member States, in particular by adopting broad guidelines for these policies. The Member States shall coordinate their economic policies within the Union." Art. I-14(2): "Specific provisions shall apply to those Member States which have adopted the euro."

and which was therefore also supported by the Commission, this draft text became the object of intensive (and eventually successful) lobbying on behalf of a few countries that strongly argued in favour of reverting to wording coming much closer to the sibylline provisions of the Maastricht Treaty.⁵ The practical consequences of this fight over words are minimal however since Article I-11(6) provides that the provisions of Part III of the Constitution shall determine the scope of and arrangements for exercising the Union's competences.

While monetary policy was left largely unaltered by the Convention and the IGC, the Convention decided to amend the ECB's current status as a *sui generis* institution (Art. 8 EC) and to include it in the list of EU institutions listed in the Constitution's institutional title. The term "Eurosystem" moreover appears for the first time in the Treaty. These changes are however not expected to have material consequences for the functioning of the ECB and ESCB. For its part, the ECB judges that the Constitution preserves its 'special features' of independence, legal personality, and regulatory powers.⁶

The possibility of introducing a more broadly defined enabling clause,⁷ which would allow for a comprehensive reform of the governance of the ECB in the light of enlargement was raised during the IGC and strongly supported by the Commission. This amendment formed part of the compromise package tabled by the Italian Presidency in December 2003, but was eventually not taken up in the Constitution agreed in June 2004. The IGC however agreed that the members of the ECB's Executive Board should henceforth be nominated by qualified majority and no longer unanimously, a useful move which, if implemented earlier, would have helped to avoid protracted and acrimonious discussions in May 1998 over the nomination of the first ECB President and the duration of his mandate.

⁵ Art. I-11(3): "The Member States shall coordinate their economic and employment policies within arrangements as determined by Part III, which the Union shall have competence to provide."

Art. I-14(1): "The Member States shall coordinate their economic policies within the Union. To this end, the Council shall adopt measures, in particular broad guidelines for these policies. Specific provisions shall apply to those Member States whose currency is the euro."

⁶ See ECB (2004).

⁷ The present enabling clause (Article 10(6) ESCB/ECB) already allows for limited revisions to the decision-making rules of the ECB's Governing Council. It was used as a legal basis for amending Article 10(2) ESCB/ECB and introducing a 3-group "rotation" model of the voting rights in the Governing Council, once the number of euro area Member States exceeds a certain number.

2.3 The Commission's proposals in the area of economic governance

In assessing the impact of the Constitution on economic governance, it is useful to recall the Commission's proposals in relation to this domain, during the Convention. The Commission issued two communications⁸ to the Convention in which its position on the different institutional and policy issues, including economic governance, was set out in detail.⁹ While the experience gained with the EMU framework established by the Maastricht Treaty is still relatively short, the Commission nevertheless considered that some lessons could be drawn and that scope for improvement exists in several respects.

2.3.1 Strengthening the EU dimension of economic governance

A key message in the Commission's contribution to the Convention was that the Community dimension of the EU's economic governance process needs to be reinforced so as ensure a harmonious interaction of national economic policies. The need for further progress is particularly apparent with respect to the BEPGs which constitute the Community's overarching instrument for economic policy coordination. In the present framework, the negotiation and adoption of the guidelines are largely in the hands of the Council and the Member States, since the possibility for the Commission to influence the final outcome is very limited once it has initiated the adoption process by tabling the draft BEPGs. In view of this fact, the Commission made the case for basing draft BEPGs and associated surveillance measures on Commission proposals (as is the case in most other EU policy areas) rather than on Commission recommendations. This would bring a greater degree of impartiality to multilateral surveillance as well as taking greater account of the Community interest when preparing guidelines concerning economic policy.

2.3.2 Strengthening economic governance within the euro area

Secondly, the Commission proposed to strengthen the euro area's decision-making capacity. The Eurogroup

⁸ COM(2002)247 of 22 May 2002 and COM(2002)728 of 5 December 2002. Moreover, a draft Treaty (known as Penelope) was released in December 2002. This document was not endorsed by the Commission as such, but issued as a "feasibility study" under the authority of the President and Messrs Barnier and Vitorino.

⁹ The Economic and Social Committee (2002) also presented a report on economic governance. As regards the European Parliament, a draft report "on the development of and new prospects for the European economic union" was prepared for discussion in Parliament's EMAC committee, but never made its way to the plenary since the Committee rejected the report.

already allows euro area Finance Ministers, the Commission and the ECB to exchange views on an informal basis on all issues of common interest. It does not however have any decision-making powers since all formal decisions can only be taken at Council level. Moreover, the functioning of the informal Eurogroup, which operates on a more or less inter-governmental basis, does not properly reflect the European Union's governance principles, notably in terms of inter-institutional interactions. The Eurogroup therefore only constitutes a partial and temporary response to the need for closer policy coordination.

The Commission therefore advocated the creation of a genuine Ecofin Council of the euro area, in which only the Ministers of the participating countries would be represented. This step is all the more relevant following the latest enlargement, since the euro area Ministers currently represent less than half (12 out of 25) of the total number of Ecofin representatives.

2.3.3 Making sure that the euro area is properly represented outside the EU

Finally, the Commission argued in the Convention that the euro area's influence on the international scene should be commensurate with its economic and commercial weight. This is unfortunately not the case under existing arrangements, notably because the euro area is not properly represented in the relevant international institutions and fora, such as the IMF, the G7, etc. While the parties most directly concerned recognise that the current situation is unsatisfactory, no meaningful progress has been achieved since the introduction of the euro in 1999. In addition, the conclusions adopted on this issue by the Vienna European Council in December 1998 are not being applied. The Commission therefore invited the Convention to contribute towards unlocking the present stalemate. The Commission moreover considered that it is institutionally well placed to be put in charge of the euro area's external representation, as it already takes on this role in many other prominent EU policy areas.

2.3.4 Assessment

Being represented in both the Convention and in the IGC, respectively as a member and an observer, the Commission was in a position to actively defend its views throughout the revision process of the current treaties and to influence the final text of the Constitution, albeit with varying degrees of success. In respect of the necessary strengthening of the EU dimension of the economic governance framework, the Constitution extends the use of Commission proposals as opposed to recommendations only in relation to the existence of excessive deficits. In spite of this fact, several improvements in the surveillance area deserve to be mentioned such as the possibility for the Commission to issue a "direct" surveillance warning, or the exclusion of the Member State concerned from the decision-making process on surveillance decisions.

The euro area's capacity to decide and to act autonomously was also significantly enhanced, since virtually all decisions relating to the euro area or to the participating Member States, particularly in the policy surveillance area, will henceforth be in the hands of the sole participating countries, as already detailed in Section 3 above. The Constitution stops short of establishing a genuine Ecofin Council for the euro area, but it further emphasises the role and importance of the Eurogroup in a separate Protocol, and establishes the function of a Eurogroup President to be appointed for a period of 2.5 years.

Finally, in respect of the euro area's external representation, neither the Constitution nor the IGC achieved any material progress, despite the fact that both recognised the importance of this matter.

2.4 Conclusion

Now that a political agreement has been reached on the content of the Constitution, the text is being finalised for official signature in Rome on the 31st of October 2004. This will also be the starting date for the ratification process in all 25 Member States.

The Commission has indicated that it wholeheartedly welcomes the new Constitution, which constitutes a significant improvement of the present treaties. This conclusion also applies in the field of economic governance, since the various changes discussed above, while recognising that many of them are relatively minor when considered individually, constitute a major improvement when assessed on a collective basis and pave the way for the future strengthening of economic governance in the EU.

3. Education and growth

Education is attracting growing interest from economic policy-makers, including at the EU level for two key reasons. First, the best available economic evidence suggests that rising educational attainment is an important influence on economic growth.¹⁰ Secondly, education accounts for a sizeable share – around 11 per cent in the EU as a whole – of public expenditure.

This note builds on the analysis of the EU ECONOMY 2003 REVIEW that was presented in a chapter on 'Education, training and growth'. The chapter reviewed the impact of education on growth, and examined the likely evolution of educational attainment. Attainment is defined as the successful completion of a given level of education and is usually measured in effective *years of schooling* – the sum of the standard lengths of studies successfully completed. The chapter concluded that average years of schooling in the EU were set to rise by a baseline rate of around 0.65 over the next ten years.

¹⁰ See de la Fuente and Ciccone (2002); de la Fuente (2003).

The present note extends the analysis to the individual Member State level, thus allowing for an investigation of cross-country differences.¹¹ It presents a simple methodology for estimating years of schooling on the basis of Labour Force Survey data and presents attainment projections for 10 and 50 years ahead.

The paper restricts itself to education – including pre-primary, lower-secondary, upper-secondary and tertiary education, but not including continuing vocational training or workplace training. Training merits a separate treatment in its own right, but the main reasons for excluding it here are: first, it is difficult to compare with formal education in terms of years of schooling; secondly, since employers and individuals pay a large share of the costs, the implications for public finances are relatively limited; and, thirdly, the available data allow at best a very partial coverage.¹²

The paper is structured as follows. Section 3.1 introduces the methodology employed and presents projections for educational attainment in 2012 and 2052 under the assumption that enrolment in secondary and tertiary education will remain constant. Section 3.2 relaxes this assumption and considers how enrolment rates might evolve in the coming years. Section 3.3 incorporates the assumption of increasing enrolment into the projections of educational attainment. Section 3.4 section concludes by considering the likely effects of these educational attainment projections on economic growth.

3.1 Constant enrolment

The first step in this study is to establish a baseline concerning what would happen to average years of schooling in the 25-64 population if enrolment remained fixed at 2002 levels, given the expected demographic developments. Under constant enrolment rates, the current age profile of attainment largely determines any future increase in attainment. In other words, in countries where younger workers are much better-educated than older workers, average attainment will automatically increase as older workers retire. In countries where older workers are almost as well-educated as their younger counterparts, this effect will be much smaller.

¹¹ The Member States that joined the European Union in May 2004 are not covered in this paper mainly because the available data do not extend far back enough for these countries. However, it should be straightforward, given the necessary information, to extend the exercise to 25 Member States.

¹² A recent study by Coulombe et al. (2004) suggests that the causal links between investment in education and growth may have been weakened by the use of diplomas and degrees as proxies for skills that increase productivity. These results underline the importance to the knowledge economy of promoting "competences" (functional literacy) and of lifelong and lifewide learning.

Table 1: Years of schooling by age group, 2002

	15-24	25-34	35-44	45-54	55-64	25-64
Belgium	10.2	12.2	11.5	10.8	10.0	11.2
Denmark	9.3	13.0	12.6	12.6	12.1	12.6
Germany	9.4	12.7	12.9	12.7	12.2	12.7
Greece	10.1	11.8	11.1	10.1	9.2	10.6
Spain	9.7	11.0	9.9	8.8	7.8	9.6
France	10.0	12.0	11.1	10.5	9.8	10.9
Ireland	10.4	12.1	11.2	10.4	9.6	11.0
Italy	9.3	10.8	10.1	9.4	8.3	9.7
Netherlands	10.0	12.4	12.1	11.6	11.0	11.8
Austria	9.9	12.5	12.4	11.8	11.1	12.0
Portugal	8.5	9.2	8.3	7.9	7.5	8.3
Finland	9.8	12.8	12.6	11.8	10.7	12.0
Sweden	10.2	12.5	12.2	11.8	11.2	12.0
UK	11.7	12.5	12.3	11.8	11.2	12.1
EU-14	9.9	11.9	11.5	10.9	10.2	11.2

Note: EU-14 excludes Luxembourg.

Source: Commission services.

The approach here is, first, to use Labour Force Survey (LFS) data to estimate average years of schooling in 10-year age groups. These estimates are then used to project the future increase in years of schooling due to replacement of older workers by better-educated younger ones, and, secondly, due to current enrolment. Even assuming that enrolment rates are fixed, years of schooling will still increase when people currently enrolled receive their qualification.

In principle, an easier approach would be to use available data on enrolment by age, and to infer future stocks of attainment from current flows of enrolment. In practice, however, it is difficult to establish a clear link between the data on enrolment (from administrative sources) and the data on attainment (usually from LFS or censuses).¹³

The advantage of using the LFS data is that they are available on a comparable basis for all countries. The disadvantage is that the estimates, particularly since they rely on splitting the sample up into 10-year age groups, are subject to sample error. In addition, the allowance made for increased attainment due to current enrolment is very imprecise. Thus, estimates based on detailed national sources may produce slightly different results and, accordingly, the results presented here should be seen as indicative of cross-country differences rather than precise estimates of the situation in each country.

¹³ Complications include: the time lag between enrolment and attainment (the latter being measured by the highest qualification achieved, not the number of years actually spent in school or college); drop-outs, repeat years and part-time studies, which mean that the average year of enrolment results in less than a year of average attainment; and inconsistencies between the (administrative) enrolment data and estimates of attainment based on surveys or censuses.

Average years of schooling are estimated by multiplying the highest level of education achieved by the standard number of years it takes to reach that level.¹⁴ The broad classification of educational attainment in the LFS – low, medium and high, corresponding to ISCED¹⁵ 1997 levels 0-2, 3-4 and 5-6 respectively – is employed in order to obtain estimates for most EU countries going back 10 years.¹⁶ In a few cases where the data do not extend back to 1992, linear extrapolation is used.

Table 1 shows estimated years of schooling by age group. Average attainment is highest in the 25-34 age group and, as would be expected, declines thereafter with age. Country differences are striking: attainment ranges from just over 8 years in Portugal to almost 13 years in Germany. Here a word of caution is in order, since education systems in different countries are not fully comparable. The tables cannot take into account the fact that attainment is higher in some countries in part because courses last longer, while it is debatable whether the quality of outcomes increases in proportion with the length of studies. The age profile of attainment ranges from a steep incline in the case of Spain – where attainment of 25-34 year-olds is over three years higher than that of 55-64 year-olds – to almost a plateau in Germany.

¹⁴ The latter is obtained from de la Fuente and Doménech (2001).

¹⁵ International Standard Classification of Education, developed by the UN.

¹⁶ LFS data on attainment by the finer ISCED 1997 classification are available for a few recent years only. In any case, as noted in European Commission (2003a), the estimate of average years of schooling for 2002, at least for the EU as a whole, is similar using either the broader or finer classification.

Based on these data, the following rough projections of average years of schooling in 2012 are made.

- For a lower bound, it is assumed that 15-24 year-olds in 2002 will reach the same level of attainment as 25-34 year-olds in 2002, and that the older groups will remain at 2002 levels of attainment. Thus, 45-54 year-olds in 2012, for example, would have the same level of attainment as 35-44 year-olds in 2002. This misses the impact of, for example, a 26 year-old who is currently enrolled for a university degree but is yet to graduate.
- For an upper bound it is assumed that attainment will rise in each age group in the same proportion as it did between 1992 and 2002. Thus, for example, attainment of 35-44 year-olds in 2012 is estimated by: attainment of 35-44 year-olds in 2002 × (attainment of 45-54 year-olds in 2002 / attainment of 35-44 year-olds in 1992).¹⁷ This includes not only the impact of current enrolment but also the increase in enrolment rates between 1992 and 2002.
- The rough projections reported below are the mid-points between the lower- and upper-bound estimates. The difference between the mid-point and the lower bound is thus, in effect, taken to reflect the impact of current enrolment on attainment. The long-run estimates (for 2052 and beyond) take the 2012 result for 25-34 year-olds and add to this the estimated increase in attainment due to current enrolment for older groups. Thus the long-run attainment profile under constant enrolment is slightly increasing with age. Table 2 presents projected years of schooling under constant enrolment. Population figures are taken from Eurostat's baseline population projections for 2010 and 2050. These results differ slightly from those presented in the EU ECONOMY REVIEW 2003, mainly because of a correction to the data for the UK.¹⁸

¹⁷ It turns out that, for a few combinations of countries and age-groups (especially the 15-24 age group), estimated attainment in 2002 is actually slightly lower than estimated attainment in 1992, which means that the 'upper bound' is below the 'lower bound'. This is puzzling given the available evidence on enrolment, which suggests that participation especially in tertiary education rose during the 1990s. Moreover, educational reforms in recent years have, if anything, aimed to reduce course durations and drop-out rates. In these cases, the upper bound estimate was constrained to the lower bound one.

¹⁸ The data for the UK are corrected for a break in the series around 1997, which appears to be due to the UK's decision to count success in the GCSE exams (General Certificate of Secondary Education, which pupils usually sit at age 16 shortly after the end of compulsory schooling) as upper-secondary attainment. The data reported respect that decision, but adjust the earlier part of the series accordingly. This means that the increase in attainment over the decade 1992-2002 in the UK is considerably less than it first appears from the raw data. This has a significant impact,

Table 2: Projected years of schooling in the 25-64 population with constant enrolment

	2002	2012	2052
BE	11.2	11.7	12.3
DK	12.6	12.8	13.0
DE	12.7	12.8	12.7
EL	10.6	11.3	12.1
ES	9.6	10.6	11.9
FR	10.9	11.4	12.1
IE	11.0	11.8	12.8
IT	9.7	10.4	11.1
NL	11.8	12.1	12.4
AT	12.0	12.6	13.1
PT	8.3	8.8	9.4
FI	12.0	12.8	13.7
SE	12.0	12.3	12.8
UK	12.1	12.4	12.9
EU-14	11.2	11.7	12.2

Note: EU-14 excludes Luxembourg.

Source: Commission services.

3.2 Increased enrolment

Of course, the assumption that enrolment patterns will remain constant is moot. Table 2 provides indicators of current enrolment in upper-secondary and tertiary education. As discussed in the EU ECONOMY REVIEW 2003 there are a number of reasons to expect enrolment to increase in the coming years.

First, average years of schooling in the 25-64 population have been growing at a roughly constant rate of 0.8 per decade in the EU as a whole since the 1960s.

Second, policy-makers (at both EU and national levels) have established explicit targets for increased enrolment and/or attainment at upper-secondary and tertiary levels.

Nevertheless, one should not necessarily expect enrolment to continue to grow indefinitely. In some countries, upper-secondary education (up to the age of 18) is already compulsory and therefore near-universal. In tertiary education, the position of the United States suggests some scope for further increases in participation in most EU countries. Beyond this, however, it is unclear whether tertiary participation will become saturated, or whether it can continue to grow.

reducing the apparent 1992-2002 increase in years of schooling in the UK by 1.2 years and in the EU as a whole by 0.17.

Table 3: Indicators of participation in upper-secondary and tertiary education

	Upper-secondary (2002) %18-24 year-olds qualified or in further training	Tertiary (2001) Enrolment as % of 20-29 population
Belgium	87.6	27.4
Denmark	91.6	27.2
Germany	87.4	21.8
Greece	83.9	30.1
Spain	71.0	28.0
France	86.6	26.0
Ireland	85.3	26.0
Italy	75.7	22.5
Netherlands	85.0	24.4
Luxembourg	83.0	4.04
Austria	90.5	26.2
Portugal	54.5	24.2
Finland	90.1	44.0
Sweden	89.6	32.5
UK	82.3	26.7
EU-15	81.5	25.4
USA	n.a.	36.6

Note: Tertiary participation is low in Luxembourg because most students study abroad.

Source: Commission services.

This section focuses on upper-secondary and tertiary education, since this is where most of the scope for increased enrolment lies. We do not include pre-school education or most of adult education and training here. Although empirical evidence suggests that early child care and education has a positive impact on cognitive abilities, this may be regarded as an influence on the quality of learning rather than something to classify as part of formal education. Clearly, adult education and training merits a separate discussion in its own right. However, adult education that leads to a formal educational qualification (in the ISCED classification), is included in the data on years of schooling and, implicitly, in the benchmarks discussed below.

Third, even if these areas were included, the impact on average years of schooling would be relatively small compared to increased upper-secondary and tertiary enrolment.¹⁹ In the case of preschool education, it takes more than 20 years for this to have any impact on average schooling in the 25-64 workforce. The impact of reaching the EU Education Council benchmark for increased adult education and training (12.5 per cent of 25-64 year-olds participating at any given time by 2010) would be larger, though progress towards this target has been slow thus far.

Projecting enrolment in *tertiary education* is inevitably a tentative exercise. One might imagine that it will follow

a similar path to that of enrolment in primary and secondary education, approaching universality in the long run. On the other hand, some commentators have raised concerns about 'over-education', some even predicting that tertiary enrolment may fall towards what they consider more reasonable levels.²⁰ This would suggest saturation of tertiary enrolment well below universality.

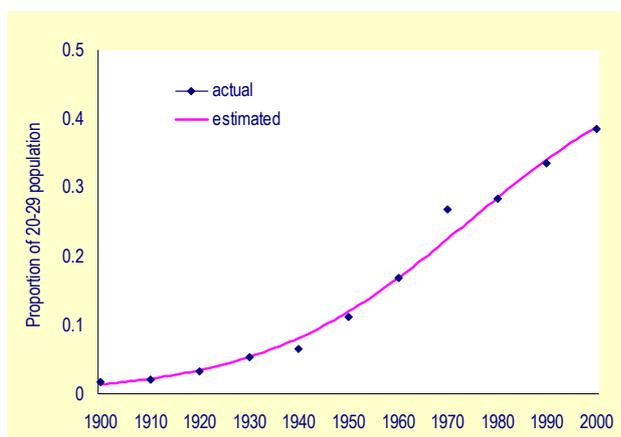
Another issue is how to specify the enrolment rate and in particular its denominator. Here, we express (gross) tertiary enrolment as total enrolment in tertiary studies divided by the population aged 20-29 in all countries. It should then be clear that, if two countries have the same tertiary enrolment rate but degree courses are longer in country A than in country B, then the share of people who graduate from tertiary education is lower in country A than in country B.

Over long periods of time, enrolment rates may be observed to follow an S-shaped adoption curve similar to that which characterises the diffusion of many goods and services. A curve for US data is estimated (since this is the country with the highest tertiary enrolment rate for which a sufficiently long series is available), imposing a

¹⁹ See EU ECONOMY 2003 REVIEW, Chapter 3, Table 7.

²⁰ See, for instance, Krugman (1996).

Graph 1: US enrolment in degree-granting institutions, 1900-2000



1) Normalised.

Notes: A logistic specification was used to capture the S-shape:

$$y = \frac{y_{\max}}{1 + e^{at+b}}$$

where y is the enrolment rate, y_{\max} is the maximum enrolment rate (in this case 0.5, or 50% of the 20-29 year-old population), t is time in years (0 = 1900) and a and b are parameters.

This was estimated by OLS with dependent variable

$$\hat{y} = \ln\left(\frac{y_{\max}}{y} - 1\right)$$

The estimated curve was then used to project future enrolment rates given today's enrolment rate.

Source: Commission services, US Department of education, Census Bureau and Commission services.

maximum enrolment rate of 50 per cent (compared to an actual rate of 38.6 per cent in 2000).²¹ The estimated relationship between enrolment rate and time (shown in Graph 1) is then used to project tertiary enrolment in the EU, given data on enrolment rates in 2001.

This implies that tertiary enrolment for the EU as a whole would rise from 25.4 per cent of the 20-29 population in 2000 to 30.7 per cent in 2010. It could be argued that, given widespread recognition of the importance of tertiary education for the knowledge-based economy, and the presence of national-level targets for more substantial increases in enrolment in a number of Member States, a more ambitious benchmark

²¹ A 50 per cent rate would imply that, if only 20-29 year-olds attended university and degrees lasted for 5 years, then in the long run 100 per cent of the population aged 30 and above would graduate (assuming no drop-outs, repeat years or part-time studies). In practice, since some under-20s and over-29s are enrolled, and many people study for longer than 5 years, the long-run share of graduates will be well below 100 per cent.

for 2010 would be appropriate. If such targets are considered plausible, then the estimates of increased attainment presented here should be regarded as conservative.

In *upper-secondary education*, the natural assumption is 100 per cent attainment in the long term. Upper-secondary education is already compulsory and near-universal in some EU Member States. For simplicity, a similar curve to that used for tertiary education is assumed, with the implication that enrolment rates follow a concave path (increasing at a decreasing rate) towards the long-run maximum.

The age range 18-24 is used for comparison with the Lisbon target to halve the number of 18-24 year-olds with below upper-secondary level education who are not in further education or training by 2010. In 2000, around 19.4 per cent of 18-24 year-olds were in this position.²² A liberal interpretation would be for an additional 9.7 per cent of 18-24 year-olds to reach upper-secondary attainment by 2010 (in practice, it could be less than 9.7 per cent, since the target refers to enrolment and not all of those enrolled will necessarily graduate). In that case, the EU-15 enrolment rate would reach 90.3 per cent in 2010, which is significantly above the 87.8 per cent shown in the table below. Thus, again, the present scenario may be regarded as slightly on the conservative side compared to publicly announced targets.

The table below summarises the benchmarks for increased enrolment in both upper-secondary and tertiary education. These are not to be regarded as forecasts, but rather as 'plausible benchmarks', with a view to judging what might happen to economic growth and public spending on education *if* enrolment continued to increase. What actually happens in individual Member States will depend on precise policy measures. For example, a country might see a sharper increase in upper-secondary enrolment if it decided to make upper-secondary education compulsory; or tertiary enrolment might rise by much less if spending on higher education was capped.

²² By 2003, this had fallen to an estimated 18.0 per cent. See Eurostat Structural Indicators (described in this chapter's Section 4).

Table 4: Benchmarks for increased enrolment, 2010 and 2050

	Tertiary level <i>Enrolment as a % of the population aged 20-29</i>				Upper-secondary level <i>% of 18-24 year-olds with upper-secondary level or in further studies</i>			
	2000	2010	2030	2050	2000	2010	2030	2050
Belgium	27.1	32.8	41.6	46.4	87.5	91.9	96.7	98.7
Denmark	26.6	32.4	41.4	46.3	88.4	92.5	97.0	98.8
Germany	21.5	27.4	38.0	44.6	85.1	90.2	96.0	98.4
Greece	26.6	32.4	41.4	46.3	82.9	88.7	95.3	98.2
Spain	27.7	33.4	42.0	46.6	71.2	80.0	91.2	96.5
France	25.7	31.5	40.8	46.0	86.7	91.3	96.5	98.6
Ireland	24.9	30.8	40.3	45.8	83.6	89.2	95.6	98.3
Italy	22.2	28.2	38.6	44.9	74.7	82.7	92.6	97.0
Lux.	4.2	6.5	14.0	25.2	83.2	88.9	95.4	98.2
Netherlands	23.4	29.4	39.4	45.3	84.5	89.8	95.8	98.4
Austria	25.3	31.1	40.6	45.9	89.8	93.4	97.4	99.0
Portugal	23.2	29.1	39.2	45.2	57.1	68.3	84.9	93.6
Finland	42.7	45.2	48.0	49.2	91.1	94.3	97.7	99.1
Sweden	31.3	36.5	43.8	47.4	92.3	95.1	98.1	99.2
UK	26.2	32.0	41.1	46.2	81.7	87.8	95.0	98.0
EU-15	24.9	30.7	40.2	45.7	80.6	87.8	94.8	97.9

Note: Tertiary enrolment projections based on convergence to a long-run maximum of 50% along a curve estimated on US data; upper-secondary projections based on convergence to 100% along a similar logistic curve.

Source: Commission services.

3.3 The impact of increased enrolment on average attainment

In order to determine the potential impact of increased enrolment on economic growth the benchmarks must be expressed in terms of increased years of schooling. This is straightforward in the case of upper-secondary education, since the chosen benchmark is already in terms of attainment. In the case of tertiary education, allowance must be made for high drop-out rates and study durations beyond (or below) the standard length, which mean that years of enrolment are significantly higher than years of attainment in some cases.

The available data suggest that drop-out rates in tertiary education vary considerably among countries and in some cases are very high. Figures reported in the OECD's *Education at a Glance* publication, for instance, suggest that in a couple of countries more than half of those who begin a tertiary programme fail to graduate.²³

If enrolment were constant over time and all students remained enrolled for the same number of years, the relationship between the number of graduates and the number enrolled in a given year could be expressed as:

$$G_t = \frac{1}{l} E_t (1 - d),$$

where G_t is the number of graduates in year t , l is the length of the course, E_t is the number of students enrolled in year t and d is the "drop-out rate" in years (i.e. the share of years of enrolment that do not result in

a year of attainment, which is the variable of interest for present purposes.)

If enrolment is growing, then a relatively large share of students is in the earlier years of study. In this case, l in the above formula may be replaced by:

$$\sum_{i=1}^{l-1} (1 + g)^i,$$

where g is the (constant) annual rate of growth of enrolment.

Applying this formula to the 2001 Eurostat figures on enrolment and graduates in tertiary education as a whole, and taking de la Fuente and Doménech's figures on duration of full-length tertiary courses for l , the following results for d can be obtained (Figures from the previous three years are used to estimate g).²⁴

²³ OECD (2003), p. 52.

²⁴ It must be stressed that d here is not the same as the OECD indicator, which compares the number of graduates to the number of entrants in the typical year of entry. A high level of d may result not only from drop-outs in this sense, but also from studies lasting longer than the standard number of years. For example, if a student takes 6 years to complete a degree, but the standard length – for the purpose of estimating years of schooling – is 4 years, then this represents a 'drop-out' of 2 years out of 6, or 33 per cent. The negative estimates of d in some countries may be partly explained by average degree courses being shorter than the standard lengths (taken from de la Fuente and Doménech, 2003) used to estimate years of schooling. It should also be noted that, although these figures are from the same statistical source, there may still be inconsistencies between numbers enrolled and numbers graduating, as well as cross-country differences in data collection and so forth.

“Drop-out rates” for tertiary education thus inferred are then multiplied by the increase in enrolment to give increased attainment in tertiary education.

Table 5: Tertiary duration and “drop-outs”

	<i>d</i>	<i>years</i>
Belgium	20%	4
Denmark	17%	4
Germany	n/a	n/a
Greece	14%	4
Spain	10%	5
France	-7%	4
Ireland	-10%	4
Italy	33%	5
Netherlands	-2%	5
Austria	57%	4
Portugal	35%	4
Finland	30%	5
Sweden	50%	4
UK	-21%	4
EU average	14%	4.4

Note: EU average is weighted by enrolment.

Source: Commission services.

The estimated increases in attainment in each age group must then be translated into increases in average attainment in the 25-64 labour force. For the purpose of this calculation, we assume that attainment or enrolment rates rise gradually along the path assumed in the S-shaped projections.

Table 6: Projected effective years of schooling in the 25-64 population

	increase with constant enrolment			increase due to upper-secondary		increase due to tertiary		total attainment (<i>increase since 2000</i>)			
	2000	2010	2050	2010	2050	2010	2050	2010	2050		
Belgium	11.1	0.5	1.1	0.01	0.26	0.06	1.06	11.6	(0.6)	13.5	(2.4)
Denmark	12.5	0.2	0.4	0.02	0.32	0.06	1.12	12.9	(0.3)	14.4	(1.9)
Germany	12.6	0.1	0.1	0.02	0.30	0.04	0.87	12.8	(0.2)	13.9	(1.3)
Greece	10.5	0.8	1.5	0.02	0.35	0.07	1.16	11.3	(0.9)	13.5	(3.0)
Spain	9.4	1.0	2.2	0.04	0.74	0.07	1.16	10.5	(1.1)	13.5	(4.1)
France	10.8	0.5	1.2	0.02	0.27	0.08	1.49	11.4	(0.6)	13.7	(2.9)
Ireland	10.7	0.8	1.8	0.02	0.34	0.11	1.57	11.7	(0.9)	14.4	(3.7)
Italy	9.8	0.6	1.3	0.04	0.82	0.05	0.98	10.5	(0.7)	12.9	(3.1)
Luxembourg						0.02	0.85				
Netherlands	11.7	0.3	0.6	0.01	0.21	0.07	1.49	12.1	(0.4)	14.1	(2.3)
Austria	11.9	0.6	1.1	0.02	0.28	0.03	0.59	12.5	(0.6)	13.9	(2.0)
Portugal	8.3	0.5	1.1	0.05	1.05	0.05	0.97	8.8	(0.6)	11.4	(3.1)
Finland	11.9	0.8	1.7	0.01	0.19	0.02	0.34	12.8	(0.8)	14.2	(2.3)
Sweden	11.9	0.4	0.8	0.01	0.16	0.03	0.57	12.3	(0.4)	13.4	(1.5)
UK	12.0	0.4	0.8	0.02	0.37	0.09	1.64	12.5	(0.5)	14.8	(2.9)
EU-15	11.1	0.5	1.1	0.02	0.43	0.06	1.19	11.7	(0.6)	13.8	(2.7)

Source: Commission services.

We now turn to the main results, presented in the following table.²⁵

These results suggest that average educational attainment among 25-64 year-olds is set to continue increasing in the EU as a whole, though at a declining rate compared to previous decades. The intuition that increased average attainment over the next 10 years is dominated by the replacement of older workers with better-educated younger counterparts is confirmed. The impact of further increases in upper-secondary and tertiary enrolment on average attainment among 25-64 year-olds is limited in the first decade (also partly because most of those in the relevant age groups are below the age of 25). In the longer term, however, the potential for further increases in average educational attainment clearly depends on increasing enrolment, especially in tertiary education.

²⁵ The results for the EU as a whole differ slightly from those presented in the 2003 EU ECONOMY REVIEW on account of the correction to the UK data (described above) and the fact that the benchmarks for increased enrolment here are less ambitious. The estimated increase in attainment with constant enrolment between 2002 and 2012 or 2052 derived in section 3.1 is taken to be equal to the increase between 2000 and 2010 or 2050.

Cross-country differences are striking. Over the next decade, the projected increase in average attainment in Germany is less than one fifth what it is in Spain. It may be worth recalling the main reasons for these differences:

- *Cohort effects*: If a country has experienced a rapid increase in enrolment in recent decades, so that young people's attainment is much higher than that of older working-age people, then the predetermined increase in average attainment is correspondingly high. This is mostly the case in countries where attainment is relatively low (though the same is true for Finland where, despite high average attainment, enrolment of young people has increased rapidly).
- *Scope for further increases in enrolment*: The methodology for the projections assumes that countries converge to long-run (i.e. beyond 2050) maximum enrolment rates, so that those with relatively low rates to begin with have greater scope for further increases.
- *Length of upper-secondary studies*: The benchmarks here refer to the number of people completing upper-secondary education (long-run maximum of 100 per cent), so the impact on effective years of schooling is higher in countries where the standard length of upper-secondary studies is longer.²⁶ The standard length is 3 or 4 years in most countries, except Italy (5 years) and Netherlands (2 years).
- *Enrolment/attainment ratio in tertiary education*: In tertiary education, the benchmark refers to the share of people enrolled. This implies a trade-off between the length of studies and the number of graduates. The effect of increased enrolment on effective years of schooling is lower in countries where the number of years enrolled is significantly higher than the standard length of studies needed to achieve a degree (owing to a high drop-out rate or repeat years, for example). This effect also partly explains the relatively large impact of increased tertiary enrolment in France, Ireland, the Netherlands and the UK, where the available data indicate that the average time taken to successfully complete studies

²⁶ The standard length of upper-secondary studies is taken from de la Fuente and Doménech (2001).

is shorter than the standard length given in de la Fuente and Doménech (2001).

The pure demographic effect of a falling share of young people in the population has a small impact for the EU as a whole during this period. For example, the increase in average attainment due to higher tertiary enrolment by 2050 would be 1.22 years instead of 1.19 years if, all other things being equal, the structure of the population remained as it was in 2000. The demographic effect makes very little difference to cross-country comparisons.

As regards the different areas of the education system, the results suggest that increased upper-secondary enrolment may still have a significant contribution to make to raising average educational attainment. In most cases, however, the potential contribution of tertiary education far outweighs that of upper-secondary, with the notable exception of Portugal.

3.4 Conclusions: the possible impact of increased attainment on growth

If the findings of recent research on the link between education and growth were taken at face value, then the results presented here would have significant implications for growth potential in the EU-15 as a whole and for cross-country differences. *If* one extra year of schooling in the labour force aged 25-64 leads to an increase in GDP of around 6 per cent and *if* the assumptions behind the attainment projections hold, then the main results could be summarised as follows.

In the EU as a whole the contribution of education to growth looks set to decline. The projections suggest that average years of schooling will increase by around 0.6 years in the coming decade, compared to 0.8 per decade over the past 40 years. This implies that the contribution of education to rising GDP in the EU as a whole would fall from almost 0.5 percentage points of GDP per year in recent decades to 0.35 percentage points up to 2010, and falling slightly further thereafter. This varies a great deal between countries, owing mainly to variance in the scope for increased attainment, but also to different estimated rates of return. The following table sums up the implications for growth, using the de la Fuente (2003) estimates of raw macroeconomic returns to schooling in individual EU countries.

Table 7: Possible impact of increased attainment on GDP

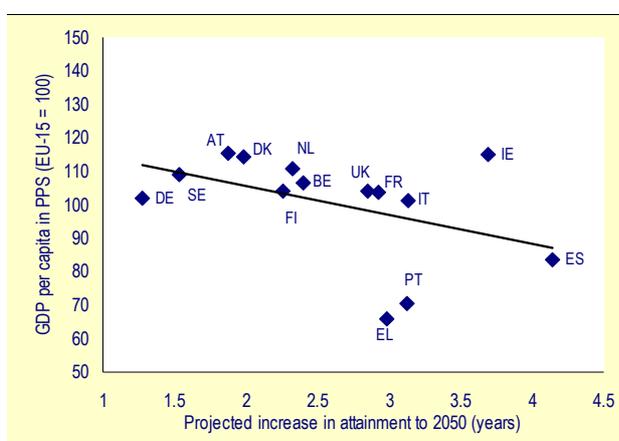
	Projected increase in attainment (years)		Macro return (1990 data)	Implied annual % increase in GDP	
	2010	2050		2010	2050
Belgium	0.57	2.40	5.82	0.33	0.26
Denmark	0.32	1.88	5.00	0.16	0.18
Germany	0.19	1.27	4.53	0.08	0.11
Greece	0.86	2.98	7.42	0.62	0.40
Spain	1.07	4.14	8.27	0.85	0.59
France	0.60	2.93	5.62	0.33	0.31
Ireland	0.92	3.69	6.24	0.56	0.42
Italy	0.71	3.13	7.30	0.51	0.41
Netherlands	0.38	2.32	5.36	0.20	0.24
Austria	0.64	1.98	5.19	0.33	0.20
Portugal	0.57	3.12	9.16	0.51	0.50
Finland	0.83	2.26	5.35	0.44	0.23
Sweden	0.41	1.53	5.53	0.22	0.16
UK	0.49	2.85	5.58	0.27	0.30
EU	0.58	2.68	6.17	0.35	0.31

Note: Implied annual increase in GDP is calculated as the compound annual growth rate required to yield the implied increase in the level of GDP by 2010 or 2050.

Source: Commission services and de la Fuente (2003) for macro returns.

There is a negative correlation between the projected increase in attainment and GDP per capita, which is consistent with the presumed role of education in economic catch-up. This is not surprising since current attainment is clearly linked to GDP (with causality almost certainly running in both directions), while long-term upper bounds on average attainment are imposed in the projections. Apparent outliers include Ireland (a greater projected increase in average attainment than expected given current GDP), Greece and Portugal (both with a lower projected increase in average attainment than would be expected on the basis of cross-country differences).

Graph 2: Projected increase in attainment versus current GDP per capita



Source: Commission services.

Since the ‘ifs’ mentioned at the beginning of this section are big ones, it is instructive to recap the essential caveats which suggest that these results should be interpreted with caution, and in any event as projections based on strong assumptions rather than forecasts:

- The future impact of education on growth depends on quality and efficiency, as well as quantity. Evidence suggests that an improvement in the quality of school education of one standard deviation could in fact have a larger effect than an extra year of schooling.²⁷ At tertiary level, effective years of schooling could be increased without even raising enrolment by reducing the number of drop-outs and excess years of study.²⁸
- The absolute level of average attainment (as opposed to changes in average attainment) may be relevant to growth, perhaps especially when it comes to extending the frontier of technical progress. In that case, countries like Germany may still enjoy advantages.
- On the other hand, there are some reasons to fear that a macroeconomic return of around 6 per cent – i.e. an extra year of schooling raises aggregate productivity by 6 per cent – may be optimistic for the future. These include the possibility of slower technical progress, and the possibility of diminishing returns to further increases in tertiary enrolment.

²⁷ See Hanushek and Kimko (2000).

²⁸ For a discussion of the importance of quality and an introduction to the non-monetary outcomes of investing in education, including the issue of equity, see OECD (2002).

- The difference between estimated rates of return in different countries depends on the assumed form of the aggregate production function – in the case of de la Fuente’s estimates, returns are in fact constrained to diminish as years of schooling increase, so that countries with high current attainment have relatively low returns by assumption.
- The attainment projections for individual Member States should be seen as tentative, given the underlying data and methodology, and because of the inevitable degree of arbitrariness in establishing benchmarks for increased enrolment.
- The projection methodology effectively sets an upper bound on tertiary enrolment that may not strictly apply in practice. Some countries (Finland in particular) have increased enrolment by more than might be expected according to this methodology. Adult education and training could also contribute to raising effective attainment.
- In the shorter term, the projections might be seen as slightly conservative compared to publicly announced targets for increased upper-secondary and, in some countries, tertiary participation.

Despite all these caveats, the basic results have a ring of truth about them. There is quite strong evidence that the change in educational attainment over time is important for growth, and the scope for further increases in average years of schooling clearly varies a good deal among countries. Nevertheless, some of the caveats may be important in the context of education and training policies: for example, greater attention to quality and efficiency may be required in some countries, or the design of policies and reforms may need to take into account a country’s position relative to the forefront of technical progress.²⁹

²⁹ See Aghion and Cohen (2004).

4. Development of the structural indicators

4.1 Background

As requested by the Lisbon European Council, the assessment of progress towards the Lisbon objectives in the annual Spring Report is based on a list of structural indicators to be agreed between the Commission and Council.³⁰ Since the first proposal by the Commission in 2000, the indicators database has evolved considerably. In order to make it easier to present the policy messages and the Member States’ positions relative to the key Lisbon targets, the Commission³¹ proposed a shortlist of 14 headline indicators in October 2003.³² The comprehensive database (117 indicators), which covers five main areas: General Economic Background, Employment, Innovation and Research, Economic Reform, Social Cohesion and Environment, continues to be released on the publicly accessible Eurostat structural indicators website.³³

This section aims at presenting the structural indicators (SI) as an instrument of economic surveillance contributing to the assessment of progress of EU countries towards the Lisbon objectives. The remainder of this section is organized as follows. The principles and evolution of the SI database is first reviewed. The most recent development is the creation of the shortlist of structural indicators in 2003. A robustness analysis of the progress assessments based on both the shortlist and the comprehensive database is also included.³⁴ The third part is dedicated to the role of the SI in the Lisbon strategy. Finally, the current use of the SI is critically assessed from different angles: the method used to select the indicators; the relevance of the list; the effectiveness of the indicators as part of the governance system; and the use of indicators for country ranking. As far as the latter is concerned, possible methods for constructing rankings are briefly discussed as well.

³⁰ The Presidency conclusions of the Lisbon European Council (23-24 March 2000) indeed states (paragraph 36): “The European Council invites the Commission to draw up an annual synthesis report progress on the basis of structural indicators to be agreed relating to employment, innovation, economic reform and social cohesion.” The sustainable development objectives have been added at the Gothenburg Council in June 2001.

³¹ European Commission (2003).

³² This shortlist was slightly amended following discussions with the Council (2003a).

³³ <http://europa.eu.int/comm/eurostat/structuralindicators>.

³⁴ The robustness analysis is conducted in collaboration with the JRC of Ispra.

Box 1: The shortlist of structural indicators

The list of indicators is balanced to reflect the importance that European Councils at Lisbon and Gothenburg placed on the domains of employment, innovation and research, economic reform, social cohesion and the environment.

1. GDP per capita in PPS (General Economic Background)
2. Labour productivity (General Economic Background)
3. Employment rate* (Employment)
4. Employment rate of older workers* (Employment)
5. Educational attainment (20-24)* (Innovation and Research)
6. Research and Development expenditure (Innovation and Research)
7. Comparative price levels (Economic Reform)
8. Business investment (Economic Reform)
9. At risk-of-poverty rate* (Social Cohesion)
10. Long-term unemployment rate* (Social Cohesion)
11. Dispersion of regional employment rates* (Social Cohesion)
12. Greenhouse gas emissions (Environment)
13. Energy intensity of the economy (Environment)
14. Volume of freight transport (Environment)

* Indicators disaggregated by gender.

4.2 Principles and evolution of the structural indicators database

The choice of indicators reflects the overall objective of the Lisbon strategy, which is for the EU to become: “the most competitive and dynamic knowledge-based economy in the world capable of sustainable economic growth with more and better jobs and greater social cohesion”. This overall objective can be represented by a welfare function reflecting the idea that aggregate welfare in the EU depends on economic, environmental and social factors. The different structural indicators selected reflect policy action or performance in these three domains.

In addition, the structural indicators in the list have to fulfil a number of more specific selection criteria. The indicators have to be: (1) easy to read and understand; (2) policy relevant; (3) mutually consistent; (4) available in a timely fashion; (5) available for most, if not all Member States; (6) comparable between these countries, as far as possible with other countries; (7) selected from reliable sources; and (8) do not impose too large a burden on statistical institutes and respondents

In practice, the development of the Structural Indicators database (and shortlist) is the result of interactions between the Commission and the Council. The Commission proposes a set of indicators which is agreed, in turn, by the Council. In the past, the selection method relied on compromises that expanded the database often at the expense of the underlying economic rationale.³⁵

Over the years, the number of indicators has tended to increase thus making it more difficult to draw a clear picture of progress towards the Lisbon objectives. In order to re-focus the policy debate, the Commission proposed in 2003 (COM(2003b) 585 final) a shortlist of only 14 SI, in combination with a publicly-accessible database and website containing the longer list. The final shortlist approved by the European Council in December 2003 settles the current framework for the SI analysis. In accordance with the principle of streamlining documents and policies, it was agreed that this shortlist would be revised every three years only, although it could be modified in intermediate years in order to take new policy priorities into account.

The shortlist of indicators has several advantages. First, it makes it easier to present a clear picture of the Member States’ relative positions with respect to the most important Lisbon targets. Second, the shortlist includes well-known and easy-to-understand indicators.

Third, the shortlist of indicators has a better logic, thus reinforcing the economic foundations of the policy messages drawn from the progress assessment. Fourth, agreeing the list of indicators every three years fits with the streamlined procedure for the Broad Economic Policy Guidelines, the Employment Guidelines and the Internal Market Strategy. Hence, the stability of the shortlist is of crucial importance to make comparisons over time possible. As structural issues develop only slowly over time and as several of the indicators are key Lisbon targets, it is wise not to revise the list too frequently.

³⁵ The first Commission (2000) Communication following the Lisbon Council, put forward a list 27 key indicators, which became 35 after agreement with the Council. The Stockholm Council in March 2001 and the Gothenburg Council in June 2001 called for new indicators in the fields of social inclusion and sustainable development, respectively. In

response to this request, the Commission proposed a new list of 36 indicators (European Commission, 2001b), which became 42 after approval by the Council (expanding to 107 indicators when all sub-indicators are taken into account).

Box 2: Consistency analysis between the shortlist and structural indicators database

This analysis demonstrates that inferences based on the shortlist of 14 headline indicators corroborate assessment that is based on the comprehensive database. This analysis of robustness is done in terms of average country rankings across the indicators.¹ The study is carried out both for levels and growth rates. Levels are analysed for the years 1999, 2000, 2001, 2002 and 2003. Growth rates are considered over the period 1999-2003. Two statistical tests are carried out to establish whether the average country rankings obtained with the shortlist are statistically equivalent to the average country rankings obtained with the full set. For more detail see Tarantola, Liska and Saltelli (2004).

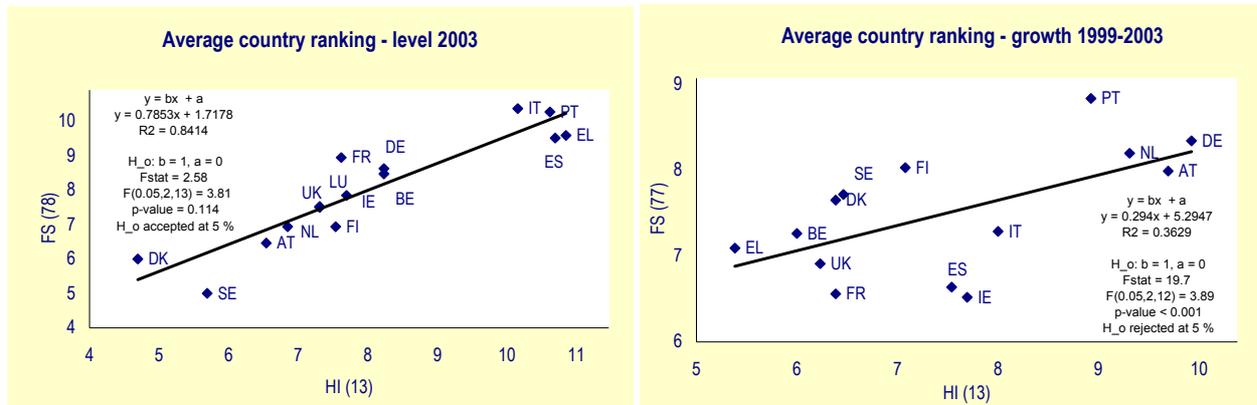
Based on the average rankings for country i , obtained from the short list (denoted by X_i) and full list (denoted by Y_i), the following F-test is performed: a linear relationship $Y_i = a + b X_i + e_i$ between X_i and Y_i is assumed and the hypothesis $H_0: a=0, b=1$ is tested by F-statistics, which under the null hypothesis follows an $F_{2,n-2}$ distribution. The F-statistics are presented in the table below together with their p-values and information whether the hypothesis H_0 can be rejected or accepted at 5 per cent level. The graphs illustrate the result for both the level in 2003 and the average growth 1999-2003.²

Table: Consistency analysis between the headline indicators and full set of indicators

	Indicators for full set	y = a + b x		H 0 that a = 0 and b = 1		
		Coefficients (a, b)	R ²	Fstat	p-value	H 0 at 5%
level 1999	68	1.83 + 0.77 x	0.83	3.11	0.082	accepted
level 2000	70	2.15 + 0.73 x	0.88	6.35	0.012	rejected
level 2001	74	1.54 + 0.81 x	0.89	2.98	0.086	accepted
level 2002	78	1.63 + 0.80 x	0.85	2.49	0.121	accepted
level 2003	78	1.72 + 0.79 x	0.84	2.58	0.114	accepted
average growth 1999-2003	77	5.29 + 0.29 x	0.36	19.7	<0.001	rejected

Note: Critical value for the level estimates is $F(0.05, 2.13) = 3.81$, for the growth estimate $F(0.05, 2.12) = 3.89$.

Graph : Consistency between full set of indicators and headline indicators



Note: HI and FS represent the average ranking for, respectively headline indicators and full set of indicators. The number in brackets represents the number of indicators used for the analysis. HI (13) includes all headline indicators except the dispersion of regional employment rates, due to missing data. The lower the value on the axes, the higher the ranking.

Source: Commission services.

The test described above is used for all countries jointly. The hypothesis about equality of the average rankings is accepted at 5 per cent except for the growth analysis and for the year 2000. On the whole, it is possible to identify clusters of countries that are robust. The assessment based on the full set of indicators and the shortlist, in terms of average ranking, is therefore quite consistent and robust for the countries of the EU-15.

A further test is to identify countries for which the average ranking is statistically different across the two sets of indicators.³ The shaded cells in the table below indicate that the average rankings obtained on the basis of the shortlist and on the basis of the full set of indicators are significantly different from each other. This test confirms the previous graphical analysis. The robustness of the shortlist is however lower for countries such as Denmark, Spain, France and Greece.

Table: T-test: Level in 5 Years and Growth over 1999-2003 EU-15⁴

	T_i statistics for two sided test (at 5% critical value)					
	Levels					Growth
	1999	2000	2001	2002	2003	1999-2003
AT	-0.92	-0.60	-0.23	-0.10	0.07	1.52
BE	-0.55	-0.47	-0.56	-0.34	-0.35	-1.10
DE	-1.14	-0.76	-0.14	0.04	-0.20	1.39
DK	-0.60	-0.81	-0.80	-1.08	-1.13	-0.94
ES	0.77	0.89	0.60	0.85	0.94	0.71
FI	0.87	0.51	0.48	0.63	0.48	-0.83
FR	-0.78	-0.41	-0.72	-1.54	-1.49	-0.19
EL	0.98	1.14	0.71	0.64	0.87	-1.28
IE	0.04	0.02	-0.32	0.11	-0.11	0.82
IT	0.06	0.32	0.28	-0.05	-0.21	0.58
LU		-0.63	-0.70	-0.32	-0.15	
NL	0.44	0.24	0.39	-0.06	-0.08	1.04
PT	0.15	0.18	0.36	0.31	0.26	0.07
SE	0.15	0.18	0.54	0.62	0.55	-1.08
UK	0.13	-0.08	-0.14	-0.26	-0.15	-0.68
5% critical value	0.83	0.83	0.83	0.83	0.83	0.83

1) The average rankings are computed by, for each country, averaging the rankings obtained for each indicator.

2) This F-statistic is defined as $F = \frac{(N-2)(R_1 - R)}{2R}$, where, $R = \sum_{i=1}^N (Y_i - \hat{a} - \hat{b}X_i)^2$ and $R_1 = \sum_{i=1}^N (Y_i - X_i)^2$, \hat{a}, \hat{b} are OLS estimates based on sample $(X_i, Y_i), i = 1, \dots, N$.

3) Such identification is possible via the two-sample t-test, which is more severe than the previous one. The test is conducted for each country independently. Let X_i represents the average ranking of country i over the short list and Y_i represents the average ranking of country i over the full set of indicators. Denote further by $S_{x,i}, S_{y,i}$ their corresponding standard deviations and by x and y the number of indicators in short set and the full list. Under the null hypothesis $X_i = Y_i$, the test is defined as follows:

$$T_i = \frac{X_i - Y_i}{\sqrt{(x-1)S_{x,i}^2 + (y-1)S_{y,i}^2}} \sqrt{\frac{xy(x+y-2)}{x+y}}, \text{ which follows } t \text{ distribution with } (x+y-2) \text{ degrees of freedom.}$$

4) Luxembourg is not included.

Moreover and probably more importantly, the assessment based on the shortlist has been shown to be relatively robust. Robustness analysis conducted by the Joint Research Centre (Ispra) for the EU-15 confirms the overall consistency between the ranking obtained with the shortlist and the database; thereby reducing the risk of a partial or biased analysis when displaying the performances (levels) and progress assessment for the 14 headline indicators.³⁶ In particular, leaders and laggards can be identified in a robust way.

4.3 Role of the structural indicators in the Lisbon Strategy

The economic policy coordination serving the Lisbon Strategy is organised in three stages. First, the main decisions are taken and economic policy orientations are agreed at the annual Spring Council. A report prepared by the Commission, the so-called Spring Report, is used to guide the decisions of the Heads of States. Second, those decisions are translated into policy recommendations in the Broad Economic Policy Guidelines (BEPGs), the Employment Guidelines (EG) and the Internal Market Strategy (IMS). Finally, the Implementation Package (three Implementation Reports (IR), one for each of the BEPGs, EG and IMS) and the Spring Report assesses whether these policy recommendations have been implemented. Two instruments of governance contribute to the implementation of the Lisbon strategy: the BEPGs and the Open Method of Coordination (OMC).

³⁶ The same conclusion holds to some extent for the new Member States. For some of these countries discrepancies exist due to different reasons (problems of data availability and quality, as well as strongly changing economies). This makes the use of the shortlist for these countries a bit less effective as a summary of the long list, at present.

The structural indicators are mainly used in the Spring Report to provide an assessment of the Member States performance towards the main Lisbon targets. They are also used in other Commission and Council reports such as the BEPGs. The structural indicators are a useful tool of the policy coordination, as they provide valuable information about the steps already taken by national governments to achieve the Lisbon targets.

The success of this policy coordination instrument in assessing Member States' policies and in measuring their performance depends on two main factors:

- The structural indicators should increase the capacity to correctly *monitor* national performances in the most relevant areas and establish a benchmark for the Member States that is as accurate as possible.
- The assessment exercise should help to identify the areas where Member States lag behind and where further reform effort is necessary; eventually it should aim at *encouraging* Member States to significantly step up the pace of structural reforms.

In addition, it is important to take into account the different starting positions across Member States to provide encouragement to those who have undertaken difficult reforms, when using, presenting and interpreting the structural indicators. Therefore, there has been an increasing focus on measuring both the level as well as the progress (growth rates) in Member States' performance. The Statistical Annex of the Spring Report illustrates the use made of the structural indicators. In particular, Table 15 and Table 16 of the Spring Report 2004 present an assessment of the EU and Member States performance in terms of levels and progress made since Lisbon.

4.4 Critical assessment

The structural indicators have been successful in several ways. They have been used in the Commission's Spring Reports, in the BEPGs, as well as in other Commission documents to provide statistical support for policy messages and to measure progress towards the Lisbon objectives. Being used in different processes, the structural indicators database is a guarantee for consistency between policy messages. The structural indicators have also attracted a lot of outside attention being one of Eurostat's most popular websites.

However, the indicators have also been subject to a lot of criticism focusing, on, amongst other issues, the basic rationale underlying the choice and the selection method of indicators, the relevance of the list and its focus on policy versus performance indicators, the lack of effectiveness of the indicators as a tool to bring about policy change, and the use of the indicators for country rankings (including a brief presentation of country rankings methods in Box 3). These different points of criticism are considered in somewhat more detail below.

4.4.1 Method used to select the indicators

The basic rationale underlying the choice of indicators has become less clear as the requirement to reach agreement between the Commission and Council on the structural indicators necessitated the finding of a compromise solution. The choice of indicators has been based on discussions on the relative merit of individual indicators rather than on the consistency of the indicator set as a whole. The yearly revision of the database also leads to continuous addition of new indicators that dilute the potential influence of each indicator on monitoring and policy analysis.

There is an agreement that the shortlist established in 2003 would be revised every three years only. The 14 headline indicators provide a good and manageable set of indicators that should help to attract and increase public awareness of structural reforms. In the face of the considerable size of the comprehensive database and according to the principle of streamlining, it is important to resist the temptation for more frequent changes or extension. Following completion of the mid-term review of the Lisbon strategy, a revision of the shortlist could be envisaged, in order to better reflect the priorities for action during the second half of the decade. However, if it is decided to leave the overall objectives of the Lisbon strategy in place, then, according to principle of streamlining, the shortlist should remain constant.

4.4.2 Relevance of the list: policy or performance indicators?

One can take a rather critical stance with respect to the indicators' reflection of reality. Are the indicators successful in measuring the progress in terms of reforms implemented? There has been a gradual shift in emphasis from an 'input indicators' approach (i.e. policy measures taken, progress with respect to the reform agenda) to an 'output indicators' approach (i.e. picture of the actual performances). While the latter is more in line with the conclusions of the Lisbon European Council, the former may be more effective in bringing about policy reform. As such, the 'input indicator' could help to improve the peer pressure and the efficiency of the structural indicators as an economic policy coordination instrument. A drawback of the 'input indicator' is that the link between policies and performances is not always straightforward. Many external factors, including the business cycle, intervene. This criticism also applies to the 'output indicator' where the performances measured are not necessarily due to efficient economic reforms but could be due to favourable economic conditions.

The choice of the benchmarks and the reference to the US model can also be questioned. Some of the structural

differences observed between the USA and Europe may result from strongly different social preferences.³⁷

4.4.3 Effectiveness of the indicators as part of the governance system

One major criticism is related to the effectiveness of structural indicators in assessing the implementation of policy measures and as a tool to bring about policy change. There are two (complementary) approaches to this issue.

First, the structural indicators, particularly the shortlist, are used to give a synthetic view of the performance of the Member States. But the rather descriptive analysis based on the 14 headline indicators needs to be supplemented by a more in-depth analysis in order to provide a reasonable and more comprehensive picture of reform implementation and their effectiveness in improving performances. More sophisticated analytical tools may be needed to better understand the effects of reform as well as the interactions and tradeoffs between different reforms undertaken. Provided the structural reform assessment is underpinned by a sound and thorough analysis, possibly including a specific analytical framework that would have unanimous support, the credibility (and hence the desirability) of the whole Lisbon Strategy would increase. Eventually, the support for (sometimes painful) structural reform would rise.

Second, producing and clearly conveying convincing evidence to the public is a major challenge. Against the background of falling public support for structural reforms, some reflection is necessary on a new dissemination instrument that would increase public awareness of the potential benefits of such reforms. Improving the communication of the Lisbon Strategy and increasing public awareness is a first step in bringing about policy change. The shortlist is a good candidate as a 'marketing instrument' to draw the attention of the public. As a corollary, the shortlist could even be shorter than the current one and, accordingly, only reflect main priorities. Next to an in-depth analysis, the shortlist of indicators could therefore be designed as a powerful communication device, which would contribute to the transparency of the Lisbon Strategy.

4.4.4 The use of the indicators for country rankings

The success of Lisbon depends on the effectiveness of peer pressure and the benchmarking of best practices amongst countries. So far, it has not proven to be very successful. Along the lines of the previous section, a possible candidate for communication instrument that could further simplify and highlight the policy messages is the country ranking.

The communication potential of the ranking method is illustrated by the numerous country ranking produced by other national or international institutions, think-tank and the like (Financial Times, World Economic Forum, Unice, OECD, The Economist). There is an obvious demand for this kind of popularization instrument. However, although the indicators have not been used in a mechanical way, there has been fierce opposition against the inclusion of country rankings in the Commission and Council reports, particularly from the countries that perform relatively poorly.

There are pros and cons to the use of country rankings. As mentioned above, the major advantage of the rankings is its communication potential. Moreover, since the rankings are computed anyway by others actors, there is a strong case for the Commission and the Member States to do it themselves. However, arguably, rankings only display a factual view limited to the 14 headline indicators without guarantee that the rankings would convince Member States to undertake the necessary reforms. Nevertheless, there exist several methodologies to construct country rankings and, in general, they have proven to be quite robust; especially for leaders and laggards, whose rankings tend to be more robust than that of the countries in the middle. It is also interesting to note that the results obtained by calculating the average ranking of countries are corroborated by those of these more sophisticated methods. Some of these methodologies are illustrated below in Box 3. In particular, the results of the Benefit-of-the-doubt method are worth highlighting. In those cases where some countries could argue that the weights used penalize their revealed performance, the method shows that using the most favourable weights for a given country does not change significantly the results. This is particularly relevant for the poor performers who are more likely to complain about country rankings. The results prove that the poorest performers remain poor performers even if the most favourable weights for them are used.

³⁷ For recent contributions to this debate, see Blanchard (2004) and Gordon (2004).

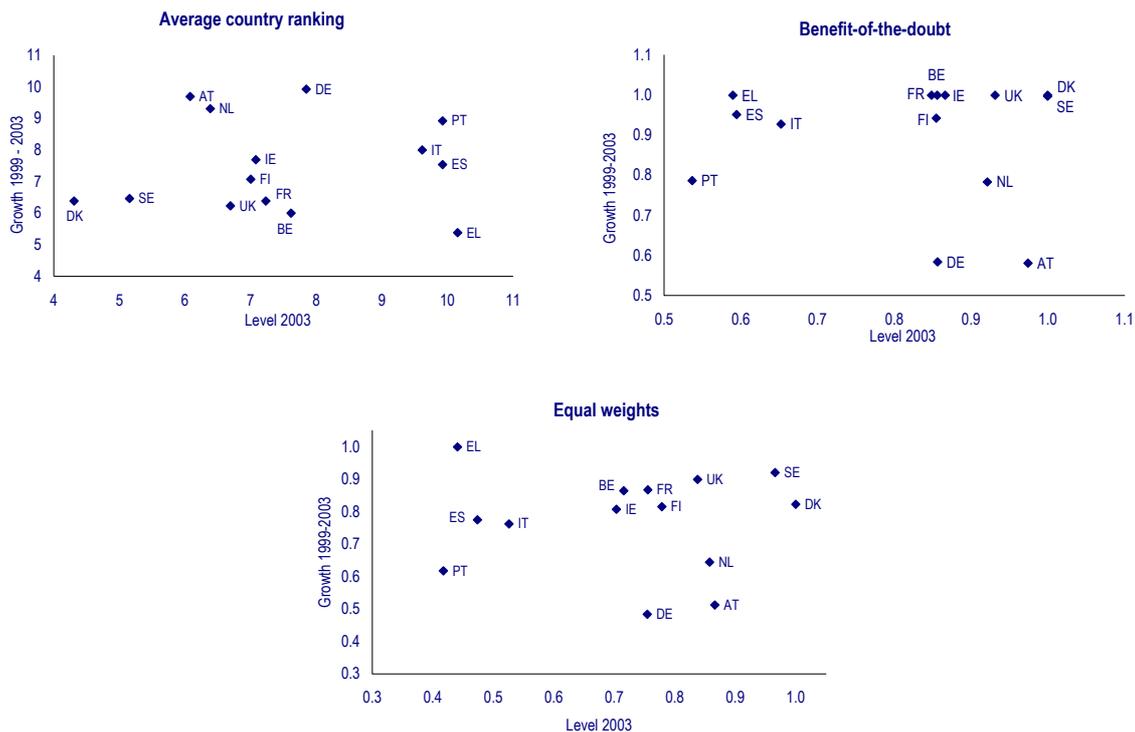
Box 3: Illustration of alternative methods for country rankings

The Joint Research Centre (Ispra)¹ has computed country rankings based on the shortlist of structural indicators by using different tried and tested statistical techniques, among which two of composite indices. Overall, the country rankings appear quite consistent regardless of the techniques used. As far as the charts below are concerned, the rankings corroborate the synthesis analysis made in the 2004 Spring Report (Section 2.5). This analysis enabled a distinction to be made between Member States with relatively overall achievement to date (among others the Nordic countries) and those that are performing relatively poorly (Southern Europe). Similarly, this approach allowed an identification of the countries that have made rather good progress towards the Lisbon objectives (Greece) from the ones that have been rather disappointing (Germany, Austria, The Netherlands and Portugal).

For all charts included below, the performances in terms of levels (year 2003) are displayed on the horizontal axis while the progress (measured in growth rates) are plotted vertically. The clusters of the leaders and laggards can be observed in the top right hand and bottom left hand corner respectively. The chart on top displays the average rankings of 2003 level versus 1999-2003 growth. The composite indices as given by the Equal Weighting method (EW) and the Benefit-Of-the-Doubt method (BoD) are presented in the two bottom graphs.

The EW method computes a synthetic index by using equal weights for each of the indicators included in the index. The BoD procedure calculates a synthetic index for a given country by using the best set of weights, which maximizes the index for that country with respect to the best performing country using the same set of weights. The same procedure is followed for that country. Weights are therefore country-dependent. To put it simply, this weighting scheme provides the best possible ranking for each country individually. Nevertheless, in general, even though this method provides the best weights combination possible, some countries clusters (leaders and laggards) still appear.

Graph : Country ranking based on different computing methods



Source: Commission services.

1) See Tarantola, Liska and Saltelli, (2004).

4.5 Conclusion

This section reviews the structural indicators and their role in the progress assessment of EU countries towards the Lisbon objectives.

The structural indicators are a useful tool of policy coordination, which are used in various Commission and Council reports. They contribute to the monitoring of structural reforms undertaken by the Member States. The structural indicators database is therefore a guarantee for consistency between policy messages. In addition, the regular use of a shortlist of headline indicators, as a complement to the entire database, has proven to be a reliable tool. Robustness analysis ascertains that the assessment of countries' performances with respect to the Lisbon objectives made on the basis of the shortlist and of the entire database is relatively consistent and robust.

However, against the background of the EU-15 (an EU-25) falling short of the Lisbon agenda, some reflection remains necessary on the structural indicators as a peer pressure device. This section has considered some of these shortcomings and provided some suggestions for improvements. One possibility is the technique of the country rankings. Although they constitute an attractive communication device, the rankings cannot guarantee that Member States will carry out the necessary reforms. Nevertheless, it is clear that the rankings alone are not sufficient and that they should be accompanied by in-depth analysis.

5. Improvements in European economic statistics under EMU

It is widely acknowledged that modern democracies can only function efficiently if policy makers and the public at large are well informed about economic and social developments. High quality, reliable and timely statistics are clearly required for the development and evaluation of appropriate economic policies. In recent years, the creation of monetary union, with a single and independent monetary policy and decentralised but co-ordinated fiscal policies, has increased the need to make greater progress in the availability of statistics, improving and harmonising the methodologies used to draw up euro area statistics and indicators. This is alongside the ongoing, more general need to continue to improve EU statistics.

This section reviews the progress that has been made in improving the quality of euro area macroeconomic statistics in response to a number of Commission and Council initiatives (a full timetable is shown in Table 1). The proceeding section provides a separate review of the structural indicators which are used to measure progress against the Lisbon economic reform goals for all EU Member States.

This section firstly reviews progress made in response to a report by the Economic and Financial Committee (EFC) on information requirements in EMU endorsed by the Ecofin Council in January 1999,³⁸ and the joint Action Plan on EMU Statistics³⁹ which responded to this report and was endorsed by the Ecofin Council in September 2000.

The note then considers the response to concerns put forward at the Barcelona European Council in March 2002 regarding the need to improve European Economic Statistics. This includes the development of a set of Principal European Economic Indicators and agreement on a Code of Best Practice on the compilation and reporting of budgetary data. It concludes by taking a forward look at initiatives in place to deliver further quality improvements.⁴⁰

Table 8: Summary of initiatives

11/1998	Monetary Committee produces first report on information requirements in EMU.
01/1999	Transition to third stage of EMU, Ecofin Council endorses report of the Monetary Committee (now EFC).
06/2000	Ecofin Council endorses a second progress report and invites the ECB and the Commission (Eurostat) to establish an EMU Action Plan where urgent progress should be made.
09/2000	Ecofin Council endorses EMU Action Plan.
11/2001	Ecofin Council endorses third and fourth progress reports.
03/2002	Barcelona Council invites Commission and Council to present a comprehensive report on euro area statistics for Spring European Council 2003.
11/2002	Commission publishes communications on 'the need and means to upgrade the quality of budget statistics' and 'Towards improved methodologies for euro zone statistics and indicators'.
02/2003	Ecofin Council endorses fifth progress report. Approves a code of best practice on the reporting of budgetary statistics. Approves the comprehensive report on euro area statistics, and transmits it to the Spring European Council 2003.
06/2004	Ecofin Council endorses final EFC progress report and makes recommendations for further improvements.

Source: Commission services.

³⁸ See Monetary Committee (1998).

³⁹ See European Commission (1999).

⁴⁰ For an alternative account of developments in economic statistics for the euro area between 1991 and 1993, see ECB (2003).

5.1 The need for improved statistics under EMU

The availability of high quality statistics in the euro area is essential to the conduct of monetary policy and the coordination of economic and, in particular, fiscal policies. The EFC's original report in December 1998 recognised that statistics for the euro area were somewhat underdeveloped and that the operation of the *single monetary policy* would require extensive and improved information on areas including money growth, banking, financial market statistics, financial accounts and balance of payments statistics, including the international investment position. Most importantly, price statistics, including the Harmonised Index on Consumer Prices would be required for the successful operation of the policy. The report acknowledged that the ECB's main interests would lie with developments in the euro area as a whole, but also noted that detailed complementary information on developments at Member-State level would be valuable if developments in the euro area and the effects of the single monetary policy were to be adequately assessed.

Member States retain responsibility for *economic policy* including budgetary policy in EMU. However, for the proper functioning of EMU, it is important that their policies be mutually consistent and appropriate in the light of the single monetary policy. The Stability and Growth Pact (SGP) and the Excessive Deficit Procedure (EDP) ensure that budgetary discipline in the EU is examined on the basis of two quantitative criteria for the government deficit and debt level. Therefore the availability of quality statistical data is crucial to ensure adequate implementation of the agreed budgetary surveillance framework and effective coordination of budgetary policies. Non reliable statistics may lead to the wrong policy decision at national and European level, to an inefficient coordination of economic policies, and put the credibility of procedures and institutions at risk.

5.2 Attributes of high quality statistics

It is important that the compilation of the statistics be both free, and perceived to be free, from political interference. The general public needs to be able to trust that official statistics do not serve any other interest than providing the best possible information on the state of affairs.

The EFC report also noted the need for co-operation between different agencies involved in gathering statistics. At the national level, there are two main groups of data producers. National central banks are mainly in charge of statistics on monetary aggregates, financial transaction and balance sheets, and balance of payments statistics, whilst national statistical offices generally deal with most other statistics. In several countries, Ministries of Finance also have major responsibilities in the compilation of budgetary data. At the European level, their respective counterparts are the

ECB and Eurostat (the Statistical Office of the European Communities).

Thus for the purposes of economic and monetary policy making, the EFC report argued that it is important to have a methodologically sound and consistent information system that produces relevant information in a timely fashion. The system needs to facilitate the interpretation of data as well as the assessment of the significance of any new information that comes available. Sound and comprehensive statistical information reduces uncertainties and thereby the risk of confusion and instability in the markets.

Nevertheless, it was recognised that requirements put on statistical data, notably as to detail, frequency, and timeliness, vary between users, depending on the specific purpose. This points to an obvious trade off in data production between the speed and level of detail and accuracy.

5.3 Priority areas for improvement, as identified in 1998

The EFC report recognised that major improvements in statistics had already taken place during the 1990s. In particular, the Council decision in June 1996 to replace the European system of integrated economic accounts (ESA79) with the new and more comprehensive European System of National and Regional Accounts (ESA 95),⁴¹ had introduced major improvements and extended coverage. It obliged Member States to report national accounts data from April 1999 onwards within a well-defined time schedule on both an annual, and for some main aggregates, a quarterly basis. In addition, Council and Commission regulations on the HICP had led to the production of high quality indices since 1997 and since autumn 2001, the provision of an advanced estimate for total HICP growth for the euro area at the end of the current month. Agreements had also been made that were expected to lead to improvements in the quality of short-term economic statistics and of constant price GDP estimates.

However, the report noted that for the purposes of economic policy, *quarterly national accounts* are the core statistical information system and should therefore be developed further. Given the long lead in times in improving the production of statistics it was also clear that EU members that are not participating in the third stage of EMU should fully engage in steps to improve euro-area statistics, in anticipation of their eventual joining.

⁴¹ Council Regulation (EC) No 2223/96 of 25 June 1996 on the European system of national and regional accounts in the Community.

The report urged for rapid progress in a number of areas:

Public Finances

As discussed, it has always been clear that the achievement and maintenance of public finances is of central importance in all Member States and to the success of EMU. Comprehensive information on public finances decisions are therefore crucial to implementing the provisions of the SGP and EDP.

The report stressed the importance of a shift to producing quarterly national accounts for the general government sector. Comparable and timely information on budgetary indicators, including tax revenue, social security contributions and the borrowing requirement would also provide useful indications for the monitoring of budgetary developments.

Labour market

The EFC report observed that cross-country comparisons of the labour market and of labour costs will demand more attention in EMU. This is because in EMU the link between labour cost developments and employment is strengthened, since there is no longer any possibility of regaining competitiveness between Member States through the adjustment of nominal exchange rates.

Given the importance of wage inflation within overall inflation, information on labour market developments and labour costs should, ideally, be consistent with, or even integrated in, the national accounts. The report argued that further progress was required on producing quarterly statistics on the compensation of employees and costs per unit of labour or per unit of production. In addition it was considered important to implement the labour force survey providing quarterly results on employment and unemployment by 2000 at the latest.

Short term business indicators

The EFC report stressed that short-term business indicators are essential for assessing developments in the economy, notably its position in the cycle. Short-term business indicators can supplement national accounts by providing early data on output, demand and prices. Such data will clearly be important for the surveillance tasks of the Commission and for the ECB in assessing economic developments and in deciding on the monetary policy stance to be taken in response.

The Council's adoption of a regulation in May 1998 regarding short-term indicators was viewed as a major step in improving the quality and speeding up the production of short-term quantitative indicators; although a number of Member States had negotiated derogations that threatened to reduce the regulation's impact in the short to medium term. It was also hoped that that qualitative short-term indicators, regarding business and consumer confidence would be produced to complement the quantitative indicators.

Balance of payments and trade

The EFC report considered that the creation of EMU would add considerably to the difficulty in measuring trade and financial flows within the euro area. The creation of the single market had already led to a lowering of quality, regarding intra-trade statistics, for example, huge statistical discrepancies had emerged between dispatches and arrivals.

However, the Committee considered that intra-EU trade data contained more detail than was necessary for the coordination of economic policy. For policy coordination purposes it was considered sufficient to collect only quarterly information and for a smaller number of product categories. The Committee recommended that the present intrastate system be simplified and other methods explored to arrive at a suitable output, while reducing costs.

5.4 Improvements made in response to the EMU action plan

Having endorsed the EFC report on information requirements in EMU, the Ecofin Council invited the Commission, in close co-operation with the ECB, to establish an Action Plan on EMU statistical requirements in order to address the deficiencies outlined in the report. The first action plan was endorsed by the Ecofin Council in September 2000. It set a target for the production of national data, to permit the timely compilation of reliable key statistics for the euro area and the EU, with at least 80 per cent coverage of Member States' data.

The EFC made an assessment of progress made since their 1999 report in May 2004,⁴² a summary of which is provided in Table 9. It concluded that overall, substantial improvements have been made to economic statistics, both for euro-area aggregates as well as for the national components. Particularly strong progress has been made regarding the availability, coverage and timeliness of quarterly national accounts, quarterly government finance statistics and short-term business indicators. However, they also concluded that more progress is still needed, particularly regarding labour statistics, where the process has not yet yielded the expected results and more efforts are needed. The EFC made more detailed comments on the specific areas of the Action Plan:

Quarterly national accounts (main aggregates)

The EFC considered the provision of national data to have improved, with most countries now complying with the 70 days deadline set by the EMU Action Plan. Nevertheless, there are still gaps for several countries and variables that affect euro-area aggregates.

Since May 2003 Eurostat has published GDP flash estimates for the EU and euro area after 45 days. At

⁴² Economic and Financial Committee (2004).

around the same time flash estimates are available for Germany, France, Italy, the Netherlands, Greece, Finland and, before that date, for Belgium and the United Kingdom. Spain and Sweden are planning to move to the 45 days target.

Quarterly euro-area aggregates are published in two main releases with a coverage of well above 80 per cent of the euro area. The output and expenditure side is released after about 65 days. The release of the remaining variables, in particular all income variables, however, is still only possible after around 105 days, over a month after the Action Plan target.

Quarterly public finance statistics

The EFC concluded that the EMU Action Plan has stimulated the process of compiling quarterly public finance statistics covering comprehensive data on government revenue and expenditure, financial transactions and balance sheets as well as EDP debt.

A regulation⁴³ covering quarterly data on taxes, social contributions and social benefits, has been successfully implemented; with a set of back data starting in 1991 provided in July 2002.

Similarly, a regulation⁴⁴ covering the remaining categories of revenue, expenditure and net lending/net borrowing, was enacted in June 2002 and data became available in September 2002. However, in line with an agreement laid down in the Council minutes to ensure quality, the national data are subject to a trial period, ending in 2005 at the latest. Until then, they are confidential unless made public by the Member States. Most of the countries are submitting the entire set of variables within 90-100 days.

Quarterly financial transactions and balance sheets for central government and social security funds have been provided by all Member States, although the coverage needs to be further improved. Several Member States have also voluntarily transmitted quarterly data for other sub-sectors of general government. The next step towards a full set of quarterly financial accounts for the government sector is the implementation of the recently adopted regulation on quarterly financial accounts for general government.⁴⁵ In particular, Germany, Greece and France have to make an effort in order to comply with the Action Plan targets set in this area.

⁴³ Short-term Public Finance Statistics Regulation. Regulation (EC) 264/2000 of 3 February 2000, OJ No. L 29 of 4 February 2000, pp.4.

⁴⁴ Regulation on quarterly non-financial accounts of government. Regulation (EC) 1221/2002 of 10 June 2002, OJ No. L 179 of 9 July 2002, pp. 1.

⁴⁵ European Parliament and Council Regulation (EC) 501/2004 of 10 March 2004, OJ No. L81 of 19 March 2004, pp.1.

Labour Market Statistics

The EMU Action Plan required improvements to data on employment, hours worked, the labour force and labour cost statistics. This remains the area where least progress has been made in terms of European aggregates. Yet the legal instruments requested by the Action Plan have been adopted and are expected to yield significant results by 2006.

From 2004, quarterly ESA 95 data for hours worked have to be transmitted by all countries except Austria and Portugal (who have a derogation). The EFC urged all countries, in particular Spain and Italy, to meet the legal obligations for the crucially important hours worked data.

Progress has been made with regard to euro-area short-term labour cost data. This follows the adoption of a regulation⁴⁶ in February 2003 governing the harmonisation of the labour cost index. First estimates, with coverage of more than 90 per cent can now be published within 80 days after the quarter, close to the target of the EMU Action Plan of 75 days. Several countries have improved the industry coverage and the measures for labour costs and hours worked. The new legislation also requires the coverage of the services sector and improving the timeliness of the first release to 70 days. However, due to extensive derogations the objectives of the regulation will not be fully achieved before 2005.

Short-term Business Statistics

The objective of the Action Plan to produce indicators by the end of 2001 (new orders by end 2002) was achieved for a number of indicators, including industrial production, output prices and retail trade turnover. Progress has been made more recently regarding the release of industrial new order statistics, and early estimates for euro-area retail trade turnover. Qualitative surveys on service industries are already published on a monthly basis and the Commission plans to further extend its coverage within the service industries.

For other variables, though, the objectives of the Action Plan have not been achieved. For euro-area aggregates, the situation is still not satisfactory for indicators in the construction sector and for services.

A number of countries have still to comply with Council Regulation 1165/98 aimed at ensuring good quality short-term statistics. More emphasis also needs to be placed on improving the comparability of statistical methods and adjusting for seasonal and calendar effects.

External Trade Statistics

The EMU Action Plan set Member States the target of transmitting first euro-area aggregates after 40 days. First aggregates are presently transmitted within 42 days by most Member States on the basis of a gentlemen's

⁴⁶ Regulation No. 450/2003.

agreement. However, regulations to be implemented in 2005 will ensure that the 40 day deadline is met.

Revisions in balance of payments statistics have been progressively reduced, although the bias in its errors and omissions continues to raise concerns. In order to preserve the quality of the data, Member States have started to elaborate national action plans on future compilation systems. Future collection systems will rely more on multiple sources, in particular direct reporting by enterprises. In many countries work in this direction has already been completed or is underway.

5.5 Beyond the action plan: the response to the Barcelona European Council

The Barcelona European Council of March 2002 also recognised the importance of the availability of high quality statistics in a monetary union. It added fresh impetus to the process by inviting the Commission and the Council to present a comprehensive report on euro-area statistics in time for the Spring European Council 2003.

The final report was approved by the Ecofin Council in February 2003 before being transmitted to the 2003 Spring European Council.⁴⁷ The report recognised the considerable progress that had been made in the improvements of EU and euro-area macroeconomic statistics as a result of the implementation of the Action Plan. But it also noted that for the European Statistical System to produce macro-economic statistics reaching quality standards comparable in terms of availability and timeliness to those of the United States, another quantum leap was needed.

5.6 Principal European economic indicators

In recognition of weaknesses identified in Barcelona, the Ecofin Council gave its support to a list of key European indicators (Principal European Economic Indicators (PEEIs, see Table 10)) that had been proposed by the Commission, in agreement with the main European policy users. For this set of key indicators it was agreed that focus would be directed to the provision of a more complete range of variables, higher timeliness and higher frequency of the time series than foreseen by the EMU Action Plan on Statistical Requirements. It was additionally agreed that the Principal European Economic Indicators will be produced for the euro area on the basis of a sufficient – but not necessarily complete – coverage provided by the Member States, with later releases having a broader coverage. Such a release schedule is in line with the ‘First for Europe’ principle. This principle means that the release calendars (of both first releases and subsequent revisions) for the PEEIs and for respective national contributions are aligned and take into account European policy needs. Aligning release calendars reduces the problem of

monthly and quarterly euro-area and EU indicators implicitly changing almost every day as new or revised data is published by national statistical institutes. The full set of indicators with existing and target compliance is included in the annex to this section.

5.7 Code of best practice on budgetary statistics

The February 2003 Ecofin Council also gave its support to a code of best practice on the compilation and reporting of data in the context of the Excessive Deficit Procedure, building on an earlier communication from the Commission.⁴⁸ In putting forward the code, the Commission recognised that although considerable progress had been made in the compilation and reporting of budgetary statistics, experience had revealed some weaknesses in terms of reliability, transparency and timeliness of budgetary statistics. The code of practise thus signalled a strong commitment by all parties to improving performance in these areas.

The Commission communication argued that government accounts were not as reliable as they should be and subject to large revisions. This had been highlighted by the late identification in 2002 of an excessive deficit in Portugal for 2001 and large upward revisions in the government deficit and debt levels of other Member States.

The communication also noted that the government accounts of several countries are not transparent enough. For example, for several countries, the government deficit and the change in debt level are not easily reconcilable with other indicators, for example the cash based balance of the government sub sectors. There had also been problems in the transmission of government data by some Member States in terms of both timeliness and the completion of reporting tables.

Finally, the communication noted that in some Member States, the reporting tables are prepared by the Ministry of Finance and the national statistical institute (NSI) has a relatively minor role in the process. This raises concerns about independence given that the statistics are the basis for assessing the budgetary performance of each country. In contrast, although the Commission fulfils the role of statistical authority regarding the EDP and the SGP, in the internal organisation of the Commission, the tasks of scrutinising the reported accounts and interpreting the accounting rules are carried out by Eurostat. By delegating this task to Eurostat, the commission seeks to ensure that the accounting and statistical issues are treated independently by an impartial and technically competent body according to objective criteria.

The code of best practice has addressed a number of these issues, in particular, reinforcing and reaffirming the independence of statistical authorities based on

⁴⁷ See Council (2003b).

⁴⁸ See European Commission (2002).

scientific methods. The code outlines best practise regarding:

- the compilation and reporting of budgetary data by Member States;
- the securing of quality of budget data, including through NSIs providing to Eurostat a detailed inventory of methods, procedures and sources used for the compilation of government deficit and debt data; and
- publication of the budgetary data by the Commission within a few weeks of the reporting deadline.

The code also provides for increased powers to ensure the quality of reported data. In addition to acting as the final authority on the interpretation of accounting rules, Eurostat has the authority to examine in depth government accounts for each Member State and where it deems necessary to make appropriate amendments to data reported by Member States prior to final publication.

5.8 Progress on implementation of the action plan for the new Member States

The high level meeting with the (then) Candidate Countries in May 2003 in Athens endorsed the Action Plan on economic, monetary and financial statistics for the Candidate Countries. The meeting identified six priority areas where the countries would have to concentrate their efforts in the run-up to the accession. The final progress report on information requirements in EMU concluded that good progress has been achieved in relation to the action plan, in particular as regards annual national accounts as well as the primary convergence indicators (government deficit and debt, HICP and long term interest rates). But it also noted that the length of the time-series is not yet satisfactory for many countries. On specific priority areas, the EFC noted that the following progress had been made (the EFC report annex contains detailed progress on the Action Plan in each new Member State and Candidate Country):

- Regarding *annual national accounts*, all new Member States have reached an appropriate level of compliance with ESA 95. Data availability is considered satisfactory and the key variables are well covered. In some countries, efforts are needed to fill existing gaps, with particular care required regarding the revision of back data. The new Member States must now make efforts to meet the 70 day deadline for the transmission of the main aggregates and provide data on hours worked.
- The new Member States provide *Harmonised Indexes of Consumer Prices* which are up to the standards of the HICPs compiled by the old Member States in terms of timeliness, comparability and compliance.

- A statistical framework on *long-term interest rates* has now been established. The long-term interest rate statistics used for convergence assessment purposes for the new Member States was released for the first time at the end of April 2004.
- The new Member States regularly transmit national *balance of payments data* on a monthly, quarterly and annual basis and statistics on their international investment position on an annual basis, following methodological standards agreed at the European level. However, additional efforts are needed by several new Member States to achieve compliance with the requirements of the Action Plan.
- As regards the timely transmission of detailed statistics on *extra-trade* considerable progress has been made. All but two new Member States are able to meet the transmission deadline of 42 days. Cyprus and Malta need to further adapt their national collection systems in order to comply with the timeliness requirements.
- The new Member State also need to continue to make progress regarding the relevant infra-annual data.
- Concerning *quarterly national accounts*, priority should be given to the provision of seasonally adjusted data and to compliance with the new transmission deadline of 70 days laid down in Regulation 1267/2003.
- Only half of the new Member States have started transmitting *quarterly public finance statistics*. It is important to speed up work in this area. In addition, quarterly financial accounts should be taken up with high priority.
- As regards *labour market statistics*, the situation is generally satisfactory concerning unemployment and labour cost data. Only one country has failed to implement infra-annual Labour Force Surveys. A primary goal must be the timely transmission of a complete set of quarterly employment data under ESA 95.
- In the area of *short-term business statistics* every effort must be made to ensure compliance with existing legislation.

5.9 Conclusions

A process of reform, which began in 1999 and was accelerated by the EMU Action Plan in 2000, has succeeded in stimulating substantial improvements in economic statistics in the EU. As the 2004 OECD Economic Survey of the Euro Area noted, euro-area statistics have improved considerably since 1999, both in scope and timeliness. Availability, coverage and timeliness of quarterly national accounts, quarterly government statistics and short term business indicators are now significantly better than they were in 1999. This

in turn will reinforce the credibility and implementation of the budgetary surveillance and the effective coordination of budgetary policies.

However, greater commitment is required from national authorities if the target to compile and disseminate a set of Principal European Economic Indicators is to be achieved by 2005. More improvements are also required if the EU is to bridge the gaps with the most developed statistical systems, particularly that of the United States. While the EU has had to concentrate on harmonisation issues, the USA has been able to develop and refine new indicators such as hedonic price indices.

More effort is needed to improve the quality of labour market statistics and in particular to ensure that hours worked data are available for all Member States. In addition, for short-term business statistics, only six countries had fully or almost implemented the relevant regulations by May 2004. Moreover, more work is required to develop the statistical basis for the services economy and to minimise balance of payments asymmetries.

Agreement on the code of best practise marks a significant step forward in the quest to ensure budgetary surveillance is based on high quality data. The code has already led to an improvement in the reporting of budgetary statistics, with the EDP notification from March 2004 showing improved compliance regarding reporting deadlines. There was also considerable improvement in the availability of detailed data on the government sub-sectors, even though they remain incomplete. However, compliance was not satisfactory as regards the institutional arrangements in Member States and the submission of their respective inventories. In this and other respects the requirements of the Code of Best Practise need to be fulfilled in a number of Member States in the coming years.

The Ecofin Council on 2nd June 2004 agreed a number of measures to further improve euro-area statistics.

Regarding budgetary statistics, the Council made particular note of the fact that on several occasions, these had been revised by Member States after a new government took office. With this in mind, the Council invited the Commission to make, by June 2005, a proposal for minimum standards for the institutional set up of statistical authorities that reinforces the independence, integrity and accountability of Member States' national statistical institutes. In addition, having observed that the requirements of the code of best practise remain to be fulfilled in many Member States, the Council invited the Commission to strengthen the monitoring of the quality of reported fiscal data and report back by the end of 2004.

Given the increasing requirements for high quality statistics at both national and European level, the Council also agreed that it is important to review statistical priorities and to reduce (legal) requirements for areas that are now considered to be of less importance. The Council therefore invited the EFC, with the assistance of Eurostat and the ECB, to produce a report on 'negative' priorities in statistics, which may help to free resources for the implementation and continuous production of high-priority statistics and to reduce regulatory burden. A preliminary discussion of priorities should take place by the end of 2004.

Finally the Ecofin Council invited the EFC to continue to monitor at regular intervals the quality and availability of statistics needs for EMU and the EU, covering both euro-area/EU aggregates and the key indicators, in particular the PEEIs, and government finance statistics covered by the Code of Best Practise. A follow-up report will be submitted in 2005.

Table 9: Summary of improvements in European Economic Statistics since the start of EMU

Action Plan target	Assessment of progress
Quarterly national accounts	
<ul style="list-style-type: none"> • First reliable estimates within 70 days • Second estimates within 90 days • Back data compiled from 1980 • Limited set of quarterly sector accounts 	<ul style="list-style-type: none"> • Almost complete availability of euro-area and EU aggregates based on a coverage well above 80 per cent of Member States' data. • Most of the EU-15 (B, DK, D, F, I, GR, E, NL, P, FIN, S and UK) supply GDP and a full or partial set of main aggregates within the 70 days deadline. • Euro-area and EU flash estimates have been regularly released at 45 days since May 2003. • Flash estimates available at 45 days for D, F, I, NL, GR, FI and UK. B, E and S are planning to meet the 45 days target. • Adoption by the Commission of the proposal for a European Parliament and Council Regulation on quarterly accounts for institutional sectors.
Quarterly public finance statistics	
<ul style="list-style-type: none"> • Complete implementation of the short term public finance statistics regulation • Quarterly non-financial statistics (taxes and social contributions) and financial statistics (expenditure and revenue) for general government available after 90 days. 	<ul style="list-style-type: none"> • Quarterly non-financial statistics are regularly transmitted within the deadline of 3 months (taxes, social contributions and social benefits). • All countries except IRL regularly transmit data for quarterly government expenditure and revenue variables. • Quarterly financial statistics for central government and social security funds (where the sector exist) are supplied by all Member States on a voluntary basis. Several Member States have also voluntarily transmitted quarterly data for the other sub-sectors of general government.
Labour market statistics	
<ul style="list-style-type: none"> • Full and quick transmission (within 70 days) of data under ESA 95, including employment and hours worked • Quick implementation of the Continuous Labour Force Survey (availability within 91 days) • Improve the quality of the labour cost index (availability within 75 days) 	<ul style="list-style-type: none"> • Currently 8 countries (D, F, I, E, NL, FIN, DK and S) supply employment data (under ESA 95) within the deadline. Work is still necessary for IRL and UK to comply with the deadline. GR and P should start supplying data. • Hours worked are transmitted by D, NL, FIN and S. Efforts have to be made by the remaining Member States in 2004 (except derogations) to ensure regular transmission. • Several countries supplied quarterly results or proxies within the 3 months deadline for the continuous labour force survey. • Most Member States comply with the labour cost index target. European estimates are available at 80 days with more than 90 per cent Member States' coverage. • Monthly unemployment data continues to be steadily calculated. Improvements are to be expected according to the progress in LFS and continuous surveys.
Short-term business statistics	
<ul style="list-style-type: none"> • Quick implementation of the short-term regulation for manufacturing, construction and retail trade • Development of qualitative business survey 	<ul style="list-style-type: none"> • Action Plan objectives achieved for industrial production, output prices and retail trade turnover. • Progress has been achieved concerning the release of new order statistics and timeliness of retail trade turnover. • The short-term statistics regulation has been fully or almost fully implemented only by DK, D, F, FIN, P and S. Euro-area aggregates of specific indicators (industrial output prices and some construction variables) suffer mainly because of the delays in meeting compliance of I and E. Major efforts to comply with the requirements are required by B, A, IRL and GR. • The Action Plan objective of a regular and timely monthly publication of qualitative business surveys (DG ECFIN) has been achieved. Coverage will be extended in the near future.
External trade statistics	
<ul style="list-style-type: none"> • First estimates of extra-EU and extra-euro area trade within 40 days (80 per cent coverage) • Detailed extra-EU trade (within 42 days) • Detailed intra-EU trade (within 70 days) 	<ul style="list-style-type: none"> • Regular release of first estimates for the EMU around 50 days. • The proportion of fully harmonised data in the first estimate is above 80 per cent.

Table 10: Principal European Economic Indicators, Target compliance (delay and coverage) and not fully committed countries⁴⁹

Principal European Economic Indicators	Current release delay (coverage in brackets)		Target release delay	Expected PEEI compliance for 2005	
	European aggregates	US indicators		euro area coverage	euro area countries not fully committed
Consumer Price Indicators					
Harmonised Consumer Price Index: MUICP flash estimate	0 (~55%)	na	0	~65%	FR, IE, LU, NL, AT, PT, FI
Harmonised Consumer Price Index: actual indices	17 (100%)	14	17	100%	none
QUARTERLY NATIONAL ACCOUNTS					
First GDP estimate	45 (~90%)	30	45	~90%	IE, LU, AT, PT
GDP release with more breakdowns	65 (~70%)	30	60	~90%	IE, LU, AT, PT, FI
Household and Company Accounts	n/a (n/a)	60	90	~80%	EL, ES, IE, LU, AT, PT, FI
Government Finance Statistics	100 (100%)	60	90	100	none
BUSINESS INDICATORS					
Industrial production index	47 (~95%)	14	40	~95%	EL, LU, AT
Industrial output price index for domestic markets	34 (~90%)	14	35	~95%	LU, AT
Industrial new orders index	54 (~85%)	28	50 (40)	~95%	EL, LU, AT
Industrial import price index	na	7	45	~60%	BE, ES, IE, IT, LU, AT, PT
Production in construction	77 (~95%)	16	45	~90%	EL, LU, AT, FI
Turnover index for retail trade and repair	35 (~80%)	15	30	~90%	BE, EL, IE, LU, AT
Turnover index for other services	n/a	n/a	60	~95%	EL, IE, LU
Corporate output price index for services	n/a	n/a	60	~20%	BE, DE, EL, ES, IE, IT, LU, AT, NL, PT
LABOUR MARKET INDICATORS					
Unemployment rate (monthly)	34 (~65%)	5	30	<80%	EL, IT
Job vacancy rate (quarterly)	n/a (n/a)	5	45	~70%	BE, GR, ES, IE, AT, PT, FI
Employment (quarterly)	105 (~90%)	5 (monthly)	45	~95%	EL, LU
Labour cost index (quarterly)	80 (~60%)	30	70	~90%	BE, EL, IE, LU
EXTERNAL TRADE INDICATORS					
External trade balance: intra- and extra-MU; intra- and extra-EU	49 (~95%)	44	45	100	none

Explanatory notes and comments:

The target dates for the release of European aggregates (Eurozone, EU-15) have been set in the Communication of the Commission to the European Parliament and the Council on Eurozone statistics (Com (2002) 661 final). The commitments have been made by National Statistical Institutes in autumn 2002 and updated in spring 2004. The current release of European aggregates is described by the number of calendar days after the end of the reporting period. Their coverage by Member States data was calculated with 2002 GDP weights for all indicators except HICP (2004 consumption weights) and labour market indicators (LFS employment weights 2002). Member States are classified as missing if they do not compile the respective indicator within the target time. In some cases Member States are not committed to the objective, but nevertheless delivering their data already as timely as required. For the indicators marked in **dark/red** the commitments are insufficient for achieving the objectives set in the Communication, for those in **light/yellow** adequate commitments have been made, but substantial progress has to materialise in the months to come.

⁴⁹ This table draws on that provided at Annex VI of the EFC's June 2004 status report on information requirements in EMU.

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