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## EMU: Will It Fly?

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In December 1991, the leaders of the member states of the European Union met in Maastricht, the Netherlands, to conclude the negotiations on a *Treaty on European Union*. The Maastricht Treaty, as it is commonly known, encompasses a wide range of issues, from foreign affairs and security policy to citizenship, health and tourism. Primarily, however, the Maastricht Treaty is known for formalizing the intentions of the member states of the European Union to create an economic and monetary union (EMU) by the end of this century. The main features of EMU are the creation of a single monetary policymaking body and a single currency for the European Union.

While EMU seemed certain in December 1991, within a year the outlook had turned much bleaker. In a referendum in June 1992, Danish voters rejected the treaty. This was followed by a series of exchange rate crises affecting the European Union in 1992 and 1993. Despite these setbacks, the Maastricht Treaty was ultimately approved by all member states (a second referendum passed in Denmark in 1993) and the treaty entered into force on November 1, 1993. In accordance with the treaty, the European Union is laying the groundwork for monetary union: creating the institutions and studying the technical details necessary to meld as many as 14 independent monetary policymaking bodies into one cohesive system.<sup>1</sup> Furthermore, to make themselves eligible for entry into EMU, countries are undertaking policies aimed at achieving economic convergence across the European Union.

This economic conversion is seen as an integral part of the process toward monetary union. Indeed, the Maastricht Treaty is based on the idea that economic convergence is a prerequisite for monetary union. The

treaty creates a series of criteria which countries must meet to join the monetary union. These criteria are designed to ensure that potential entrants share a commitment to that union.

Much has been written critiquing the usefulness of economic convergence prior to monetary union.<sup>2</sup> Some papers, such as De Grauwe (1994), focus on whether the convergence indicators detailed in the treaty are the proper indicators to ensure a well-functioning monetary union. This article does not enter this discussion; rather, given the criteria established by the Maastricht Treaty, it assesses the progress of the members of the European Union in meeting these criteria. After illustrating the lack of progress of the EU in meeting them, I consider the two main alternatives available to the member states that hope to achieve monetary union in the near future. One is to allow latitude in the application of the convergence criteria and the other is to view the starting date for monetary union as flexible.

### BACKGROUND

Serious discussion in Europe of a move to monetary union began in 1988 with the decision of the European Council to create a Committee for the Study of Economic and Monetary Union. This committee was chaired by Jacques Delors, the president of the European Commission.<sup>3</sup> The Delors Committee, as it was commonly known, was given a mandate to examine the issue of EMU and to develop a program aimed at its implementation. In 1989, the committee issued a report stating:

“Economic and monetary union in Europe would imply complete freedom of movement for persons, goods, services and capital, as well as irrevocably fixed exchange rates between national currencies and

<sup>1</sup> Belgium and Luxembourg already operate in a monetary union.

<sup>2</sup> See, for example, De Grauwe (1992) and Portes (1993).

<sup>3</sup> See the shaded insert, “Institutions of the European Union” on page 2 for an explanation of the institutional structure of the European Union.

## INSTITUTIONS OF THE EUROPEAN UNION

The *European Commission* is the executive branch of the European Union government. The president of the commission, who serves a two-year renewable term, is chosen by the European Council. The other 19 commissioners are appointed by their national governments for four-year renewable terms. France, Germany, Italy and the United Kingdom each appoint two commissioners and the remaining 11 EU countries each appoint one commissioner. Although the president of the commission has no control over the selection of commissioners, he does control the selection of the portfolios assigned to each commissioner. During their term in office, the commissioners are expected to represent the interests of the European Union, not those of their home countries.

The *Council of Ministers* consists of the representatives of the national governments. The composition of the Council of Ministers depends on the issue being considered. For example, issues related to the Common Agricultural Policy are addressed by the agricultural ministers of the member states, whereas finance matters are addressed by the finance ministers. Within the Council of Ministers, each country is allocated a number of votes based loosely on the size of its population. France, Germany, Italy and the United Kingdom have 10 votes each. Spain has eight. Belgium, Greece, the Netherlands, Portugal and

Sweden have five votes each. The remaining countries, Austria, Denmark, Finland and Ireland, have three votes each. In sum, there are 85 votes. To pass by qualified majority, a measure must receive at least 61 votes. Thus, two large states and two small states can form a blocking coalition.

The *European Council* consists of the heads of state or government of the member countries. The president of the European Commission is a non-voting member of the European Council. The presidency of the European Council rotates among the member states on a six-month basis. The European Council holds a meeting at the end of the six-month period (in December and June).

The *European Parliament* is the legislative branch of the European Union. The 626 members of Parliament are elected in national elections and serve renewable five-year terms. In the Parliament, members are grouped according to their party affiliation, not their nationality. The European Parliament is the weakest institution within the European Union, having mainly consultative powers. The exception to this weakness is in budgetary issues, over which it has considerable control. The European Parliament may dismiss the European Commission en masse, but cannot dismiss individual members of the Commission.

finally, a single currency. This, in turn, would imply a common monetary policy and require a high degree of compatibility of economic policies and consistency in a number of other policy areas, particularly the fiscal field. These policies should be geared to price stability, balanced growth, converging standards of living, high employment and external equilibrium" (Committee for the Study of Economic and Monetary Union, 1989, p. 17).

The recommendations of the Delors Committee formed the basis for the negotiations on EMU in the Maastricht Treaty.

In the plan suggested by the Delors Report, and incorporated in the Maastricht Treaty, EMU was to be achieved in three stages. Broadly speaking, stage one would emphasize economic convergence and stage two would emphasize institutional convergence. The final steps to full EMU would occur during stage three.

During stage one, which began in July 1990, the member countries of the European Union were to achieve greater convergence in economic performance through increased policy coordination. Stage one was also to be characterized by the completion of the single internal market and removal of all

capital controls.<sup>4</sup> In addition, all currencies would be linked in the Exchange Rate Mechanism (ERM), and procedures would be established for budgetary policy coordination.<sup>5</sup> The goals for the completion of stage one have yet to be met because the currencies of five countries do not participate in the ERM.

In accordance with the Maastricht Treaty, stage two began on January 1, 1994. During this stage, the member states are to make their central banks independent. As part of the steps toward independence, central banks are prohibited from providing overdraft facilities to their governments and from directly financing the government debt. The European Monetary Institute (EMI) began operations at the start of stage two. It is charged with ensuring cooperation between national central banks and strengthening the coordination of national monetary policies. The EMI is also to begin preparations for a single currency and the conduct of a single monetary policy. Perhaps most importantly in this regard, it is to create the instruments and procedures necessary for the operation of a single European monetary policy. Also, during stage two, countries are to achieve further economic convergence, as detailed by the criteria in the Maastricht Treaty.

The most important role of the EMI is to ensure that the technical barriers to EMU are removed prior to the start of stage three. These barriers include cross-country differences in the conduct of monetary policy, financial regulations, payments systems and currencies. The EMI is studying issues related to the conduct of monetary policy. For example, should the future European Central Bank target the money supply as the German Bundesbank does, or should it target inflation, as the Bank of England does? Another issue being studied by the EMI is the design and implementation of the single currency system. This is a politically volatile issue because each country has an interest in having the new currency resemble its own.

Stage three will mark the final transition to a full-fledged monetary union. At the start of stage three, exchange rates between member countries will be permanently fixed. The governments of the member countries of

the monetary union, acting in consultation with the European Commission and the European Central Bank, will determine the exchange rates at which currencies are to be fixed. The determination of these fixed exchange rates requires the unanimous consent of the member states. As the final step to EMU, individual currencies will be replaced with a common currency. Monetary policy decisions will be made by the independent, supranational European Central Bank. According to the Maastricht Treaty, stage three must start by January 1, 1999.

The exact starting date will be determined as follows. By December 1996, an inter-governmental conference comprised of the leaders of the European Union countries must meet to determine if EMU is ready to commence. Prior to this meeting, the European Commission and the EMI are to issue reports detailing the progress made by each country in meeting the convergence criteria. These reports will be sent to the Council of Ministers. The Council of Ministers will use these reports to determine:

- whether each member state fulfills the necessary conditions for the adoption of a single currency; and
- whether a majority of the member states fulfill the necessary conditions for the adoption of a single currency (*Treaty on European Union*, Article 109j.2).

The decisions of the Council of Ministers will be made on the basis of a "qualified" majority vote. The determinations of the Council of Ministers will be forwarded to the European Parliament, which will make its own recommendation on the readiness of the member states to move to the final stage of monetary union.

Taking into account the decisions of the Council of Ministers and the European Parliament, the European Council at the inter-governmental conference must then decide, again by qualified majority:

<sup>4</sup> In accordance with the Maastricht Treaty, Greece was allowed to maintain capital controls until the end of June 1994.

<sup>5</sup> The Exchange Rate Mechanism, created in 1979, set narrow margins for exchange rate fluctuations between member countries. Normally, each currency was allowed to fluctuate by  $\pm 2.25$  percentage points against any other member currency. Some currencies, however, were given wider margins of fluctuation ( $\pm 6$  percentage points) to smooth their transition upon entering the ERM.

**Table 1**

## Progress in Meeting Convergence Criteria

	Number of Criteria Met				
	1990	1991	1992	1993	1994
Belgium	2	3	3	3	3
Denmark	5	4	4	3	3
France	5	5	4	4	4
Germany	5	4	4	3	5
Greece	0	0	0	0	0
Ireland	4	4	4	3	3
Italy	0	0	0	0	0
Luxembourg	5	5	5	4	5
Netherlands	3	4	3	3	3
Portugal	0	0	0	0	0
Spain	1	1	1	1	0
United Kingdom	3	3	2	2	3
Austria	4	4	3	2	3
Finland	2	2	1	1	2
Sweden	2	3	2	1	1
Number meeting criteria	4	2	1	0	2

- whether a majority of the member states meet the necessary conditions for monetary union;
- whether it is appropriate ... to enter the third stage; and if so,
- set the date for the beginning of the third stage (*Treaty on European Union*, Article 109j.3).

If no date for the start of monetary union has been set by the end of 1997, the treaty obligates the leaders of the European Union countries to meet by July 1, 1998, to determine, based on the same procedure outlined above, which member states fulfill the conditions for monetary union. These states are then to enter the third stage on January 1, 1999. For monetary union to begin prior to 1999, a majority of countries must meet the criteria established by the Maastricht Treaty. However, in 1999,

according to the treaty, EMU will commence for those countries (however few) that meet the entry conditions.

The countries that do not meet the entry conditions and are excluded from EMU will, according to the Treaty, be referred to as "member states with a derogation" (*Treaty on European Union*, Article 109k.2). This exclusion, however, need not be permanent. At least once every two years, following the guidelines outlined above, the European Council will decide by qualified majority which member states with a derogation have fulfilled the entry criteria and admit them to the monetary union.

## CONVERGENCE CRITERIA

As noted above, entry into EMU is dependent upon the fulfillment of what the Maastricht Treaty calls "necessary conditions." What are these conditions? First, to facilitate the common monetary policy, each member must guarantee the independence of its central bank and pass national legislation in accordance with the protocol establishing the European Central Bank. Second, in making their reports on the progress of countries in meeting the necessary conditions, the European Commission and the EMI are to consider the progress made in developing a common currency, "the results of the integration of markets, the situation and development of the balances of payments on account and an examination of the development of unit labour costs and other price indices" (*Treaty on European Union*, Article 109j.1).

Most attention, however, has been focused on the conditions that the Maastricht Treaty says are designed to ensure "the achievement of a high degree of sustainable convergence" (*Treaty on European Union*, Article 109j.1). Convergence must be achieved in exchange rates, inflation rates, long-term interest rates and government finances. The treaty and two separate protocols detail these convergence criteria as follows:<sup>6</sup>

- The currency of each member state must have remained within the normal fluctuation margins of the ERM for a least two years prior

<sup>6</sup> See Protocol on the Convergence Criteria referred to in Article 109j of the Treaty Establishing the European Community (1992) and Protocol on the Excessive Deficit Procedure (1992).

to the examination. Specifically, a member state may not have devalued its currency against any other currency within the ERM on its own initiative.

- The average inflation rate for any member state during the year prior to the examination by the European Commission must have been no more than 1.5 percentage points above the average rate of inflation in the three best-performing countries during this same period.
- The long-term interest rate (on government bonds or comparable securities) of any member state during the year prior to the examination by the European Commission must have been no more than 2 percentage points above the average long-term interest rate of the three countries with the lowest inflation rates during this same period.
- The government budget deficit of any member state may not exceed 3 percent of that country's GDP at the time of the examination.
- The government debt of any member state may not exceed 60 percent of the country's GDP at the time of the examination.<sup>7</sup>

Table 1 summarizes the performance of each current EU member state in fulfilling the convergence criteria during the years 1990-94. As this table shows, the path toward convergence has not been smooth. On the basis of these five criteria, more countries met the eligibility requirement in 1990, the year before the treaty was concluded, than in any subsequent year. Denmark, France, Germany and Luxembourg met all five convergence criteria in 1990.<sup>8</sup> The number of countries fulfilling the criteria declined in each following year, reaching a low of zero in 1993. In 1994, the performance of the members of the European

Union improved slightly, with Germany and Luxembourg meeting all five criteria.

As the performance of the countries in 1990 and 1994 is compared, only Belgium improved its overall performance on the criteria. In contrast, six countries met fewer criteria in 1994 than they met in 1990. This worsening performance reflects the crises in the ERM and a deterioration in the public finances of many countries.

### *Exchange Rate Criterion*

Although the ERM had functioned smoothly since 1987, it was beset by a series of crises during 1992 and 1993. These crises resulted in the September 1992 withdrawal of the British pound and the Italian lira from the ERM, and the February 1993 devaluation of the Irish pound. The Portuguese escudo and the Spanish peseta were devalued several times throughout 1992 and 1993. As a result of these crises, fewer countries met the exchange rate convergence criterion in 1994 than in 1990 (see Table 2).

The exchange rate crises ended in August 1993 with the expansion of the bilateral bands from  $\pm 2.25$  percent to  $\pm 15$  percent for all pairs of currencies with the exception of the Dutch krona/Deutsche mark. The consensus within the European Union is that these wider bands have reduced currency speculation and thus have lessened the prospects for exchange rate crises within the ERM. Thus, no return to the narrow margins is likely. The maintenance of the expanded margins presents no problem for the fulfillment of the convergence criteria as long as the European Commission and the European Council agree that the treaty's reference to "normal fluctuating margins" means margins of  $\pm 15$  percent.

In March 1995, the currencies within the ERM again experienced sharp fluctuations. The movement in the exchange markets away from dollars and into Deutsche marks caused problems for weaker currencies within the ERM. As a result of this turbulence, the escudo and the peseta were both devalued. In the absence of any further devaluations, only eight of the 15 member countries of the European Union would meet the exchange

<sup>7</sup> As discussed in the *Protocol on the Excessive Deficit Procedure*, the deficit and debt ratios are based on general government budgets, that is, the central government, regional or local governments and social security funds. Commercial operations of the public sector are excluded. The deficit is defined as net borrowing by the government. Net borrowing excludes any portion of the deficit that is used for "the acquisition of loans or other financial assets" by the government. Thus, for example, the funds borrowed by the German government that were in turn lent to agencies in eastern Germany do not show up in these deficit figures (Collignon and others, 1994). Privatization proceeds cannot be used to reduce the deficit, although some countries are trying to change this provision. Whereas the deficit ratio is based on net borrowing, the debt ratio is based on gross debt.

<sup>8</sup> If Austria had been a member of the European Union, it too would have met all five convergence criteria in 1990. Although it was not a member of the ERM, its currency has shadowed the Deutsche mark.

**Table 2**  
**Convergence Indicators: Exchange Rate**

	1990	1991	1992	1993	1994
Belgium	yes	yes	yes	yes	yes
Denmark	yes	yes	yes	yes	yes
France	yes	yes	yes	yes	yes
Germany	yes	yes	yes	yes	yes
Greece	n.m.	n.m.	n.m.	n.m.	n.m.
Ireland	yes	yes	yes	no	no
Italy	no	no	no	n.m.	n.m.
Luxembourg	yes	yes	yes	yes	yes
Netherlands	yes	yes	yes	yes	yes
Portugal	n.m.	n.m.	no	no	no
Spain	no	no	no	no	no
United Kingdom	no	no	no	n.m.	n.m.
Austria	n.m.	n.m.	n.m.	n.m.	n.m.
Finland	n.m.	n.m.	n.m.	n.m.	n.m.
Sweden	n.m.	n.m.	n.m.	n.m.	n.m.
Number meeting criterion	7	7	7	6	6

Notes: n.m. indicates that the country was not a member of the ERM during any part of the relevant year.

The Irish pound was devalued by 10 percent in February 1993.

The Italian lira was devalued by 3.7 percent in January 1990 when it was incorporated into the narrow (2.25 percent) bands. The lira left the ERM in September 1992.

The Portuguese escudo was devalued by 6 percent in November 1992 and by 6.5 percent in May 1993.

The Spanish peseta was devalued by 5 percent in September 1992, by 6 percent in November 1992 and by 8 percent in May 1993.

rate criterion at the end of 1996. The currencies of five countries — Finland, Greece, Italy, Sweden and the United Kingdom—are not participating in the ERM and therefore will not meet the two-year rule by the end of 1996. As a result of the recent devaluations of their currencies, Portugal and Spain will not meet the criterion by the end of 1996.

### *Inflation Criterion*

Comparing 1990 to 1994, the performance of the EU countries with regard to the inflation criterion has improved. As shown in Table 3, seven of the present 15 EU

countries met the inflation criterion in 1990. This number fell to five in 1993, but rebounded strongly with 11 countries meeting the criterion in 1994. Greece, Italy, Portugal and Spain were the countries with inflation rates exceeding the criterion in 1994. Although these four countries have not met the criterion in any year, each country has made progress in lowering its inflation rate over the period in question.

The economic recovery currently under way in Europe is expected to lead to a slight increase in inflation in most member countries by 1996. Because the criterion is based on the performance of the three countries with the lowest inflation, a general increase in the rate of inflation will not affect the overall performance of countries. As shown in Table 3, the increase in the inflation forecast for 1996 is not expected to reduce the number of countries satisfying the inflation criterion. Moreover, the inflation performance of the countries not currently meeting the criterion is expected to improve over the next two years.

### *Interest Rate Criterion*

The interest rate criterion has been the one that countries have usually found easiest to meet. Furthermore, the member countries showed steady improvement over the period 1990-94. In 1990, as shown in Table 4, nine countries had long-term interest rates within the limit set forth in the Maastricht Treaty. This number rose to 10 in 1991 and increased to 11 in 1993. In 1994, however, the number of countries meeting the interest rate criterion slipped back to 10. In 1994, Greece, Italy, Portugal, Spain and Sweden did not meet this criterion. The former four have never met the criterion.

### *Public Finance Criteria*

The two public finance criteria have caused the biggest problems for countries in their quest to join the EMU. In 1990, nine of the current 15 EU countries met the deficit criterion while only three met it in 1994. Similarly, nine countries met the government debt criterion in 1990 but only four

**Table 3**

## Convergence Indicators: Inflation

	Percent						
	1990	1991	1992	1993	1994	1995	1996
Belgium	3.7	2.5	2.1	2.6	2.4	1.9	2.4
Denmark	2.7	2.4	1.8	1.0	1.7	2.3	2.7
France	2.8	3.2	2.4	2.2	1.8	1.9	2.1
Germany	2.8	4.0	4.7	3.8	2.7	2.3	2.5
Greece	19.2	18.8	15.1	13.6	10.9	9.6	8.9
Ireland	1.4	2.5	2.8	1.6	3.0	2.9	2.7
Italy	5.9	6.9	5.2	5.1	4.7	5.2	4.5
Luxembourg	3.6	2.9	2.8	3.6	2.2	2.3	2.5
Netherlands	2.2	3.2	3.0	2.1	2.2	1.8	2.2
Portugal	11.7	12.5	10.0	7.9	5.1	4.5	4.5
Spain	6.5	6.4	6.4	5.6	5.1	4.9	4.5
United Kingdom	5.5	7.4	4.7	3.4	2.5	3.0	3.0
Austria	3.1	3.4	3.9	3.5	3.3	2.8	2.9
Finland	6.0	5.6	4.1	3.9	1.6	1.7	3.3
Sweden	9.6	10.2	2.2	5.8	3.0	3.2	3.2
Convergence criterion	3.6	4.0	3.6	3.1	3.4	3.3	3.7
Number meeting criterion	7	8	7	5	11	11	11

Notes: Prior to 1992, data for Germany is for western Germany only.

Data for 1995 and 1996 are forecasts

Convergence criterion is based on data for the 12 member states prior to 1995 and the 15 states thereafter.

SOURCE: *European Economy* (April/May 1995, Supplement A, Table 10)

did in 1994. Much of this decline can be attributed to the expansionary nature of fiscal policies in reaction to the recession of the early 1990s, from which Europe is just beginning to recover. The effect of the recession on public finances can be seen by considering the example of Finland. Output growth in Finland fell from 5.7 percent in 1989 to -7.1 percent in 1991. Consequently, Finland's government budget balance declined from 5.4 percent of GDP in 1990 to a low of -7.8 percent in 1993. The government budget deficit shrank in 1994 as its economy moved out of recession.

The economic recovery currently under way in Europe is expected to lead to a gradual improvement in the budget balances of the EU countries. Nevertheless, only six of the 15 countries are expected to meet the budget deficit criterion in 1996. The recovery

is expected to have less of an effect on countries' performance with respect to the debt criterion. The ratio of debt to GDP is expected to increase through 1996 in most countries.

The criterion limiting the government debt to 60 percent of GDP has been the most difficult for countries to meet. Only Luxembourg has a debt ratio well below that level. The other three countries that met this criterion in 1994 (France, Germany and the United Kingdom) all have debt-to-GDP ratios close to 50 percent. Among those countries not meeting the criterion, some have debt ratios so high that they would have to run substantial budget surpluses for a number of years to meet it. For example, Buiter, Cosetti and Roubini (1993) calculated that based on the 1991 debt levels and assuming a 5 percent nominal GDP growth

Table 4

**Convergence Indicators: Long-Term Interest Rates**

	Percent				
	1990	1991	1992	1993	1994
Belgium	10.1	9.3	8.6	7.2	7.8
Denmark	11.0	10.1	10.1	8.8	8.5
France	10.4	9.5	9.0	7.0	7.5
Germany	8.9	8.6	8.0	6.3	6.7
Greece	18.5	18.8	17.7	18.2	n.a.
Ireland	10.1	9.2	9.1	7.7	8.1
Italy	13.4	13.0	13.7	11.3	10.6
Luxembourg	8.6	8.2	7.9	6.9	6.4
Netherlands	9.0	8.7	8.1	6.7	7.2
Portugal	16.8	18.3	15.4	12.5	10.0
Spain	14.7	12.4	12.2	10.2	9.7
United Kingdom	11.8	9.9	9.1	7.8	8.2
Austria	8.7	8.6	8.3	6.6	6.7
Finland	13.2	11.9	12.1	8.2	8.4
Sweden	13.6	10.9	10.4	8.5	9.5
Convergence criterion	12.0	11.5	11.2	9.7	9.4
Number meeting criterion	9	10	10	11	10

SOURCES: *European Economy* (1995, Number 59, Table 54) and *OECD Economic Outlook* (June 1995, Number 57, Annex Table 36)

rate, Belgium needs a government surplus of more than 9 percent of GDP a year for each year through 1996 to meet the convergence criteria. To meet the criteria by the end of 1998, Belgium would need an annual government surplus greater than 5 percent of GDP.

### Summary on Convergence

To summarize, the data indicate that inflation and interest rate convergence are taking place in the European Union. The outlook for the next two years anticipates further convergence with respect to these two criteria. In contrast, the public finances of the EU members have worsened since the establishment of the convergence criteria. Although the government budget balances of

most member states are expected to improve through 1996, the debt ratios are unlikely to show significant improvement. Turning to the exchange rate criterion, five countries are not members of the ERM and thus do not meet the convergence criterion. For the remaining 10 countries, although the wider bands eliminated tensions within the ERM between August 1993 and March 1995, there is now evidence that even these bands cannot prevent pressure from accumulating on weak currencies.

### PROSPECTS FOR EMU

For the 1996 inter-governmental conference to set a date for monetary union, eight countries must fulfill all of the convergence criteria. If there are no further devaluations within the ERM, eight countries—Austria, Belgium, Denmark, France, Germany, Ireland, Luxembourg and the Netherlands—will fulfill the exchange rate criterion in 1996. Thus, if EMU is to get off the ground prior to 1999, all eight of these countries must meet the other four convergence criteria. However, the debt/GDP ratios of four of these countries—Belgium, Denmark, Ireland and the Netherlands—are not expected to be close to the 60 percent reference value by the end of 1996.

Thus, based on the five convergence criteria, it is almost certain that a majority of the EU countries will not be ready for monetary union when the inter-governmental conference is held in 1996. If EMU is postponed, the next issue is: How many countries will be eligible at the start of 1999, the last possible date for monetary union in accordance with the treaty? Barring unforeseen economic shocks, Germany and Luxembourg should both be eligible for monetary union. The eligibility of the remaining 13 countries is less certain, even leaving aside the uncertain future of the ERM. Austria and France are the most likely additional candidates. Both, however, could run into problems meeting the government budget requirement, and Austria is not expected to meet the debt criterion.

Belgium and Italy have public debts totaling more than 100 percent of their

respective GDPs. It will be many years before these debt ratios come close to meeting the 60 percent limit. Denmark, Finland, Ireland, the Netherlands and Sweden also have high debt ratios unlikely to fall within the target range by the end of the century. The Dutch central bank last year calculated that if the Netherlands limited its annual public sector deficit to 1 percent of GDP, and achieved an average nominal GDP growth of 4 percent a year, it would still take 10 years to reach the 60 percent public debt target (*Financial Times*, January 17, 1995). While 4 percent was the average nominal GDP growth for the Netherlands during 1985-94, its average yearly budget deficit has been more than double 1 percent of GDP over the last 10 years.<sup>9</sup>

Portugal and Spain are likely to have difficulty meeting several of the criteria. Although they both have substantially lowered their inflation rates in recent years, the 5.1 percent Portuguese and Spanish inflation rates remain outside the ceiling. The debt ratios of both countries also have grown recently and that of Spain is likely to remain a problem as long as it maintains its high unemployment rate (estimated at more than 22 percent in 1994). No one expects that Greece will be a candidate for monetary union for many years to come. It alone among the EU countries still has double-digit inflation.

The remaining country, the United Kingdom, is a good candidate for meeting all of the eligibility requirements for monetary union, except the exchange rate criterion. The United Kingdom is unlikely to rejoin the ERM in the next few years. Even ignoring this problem, opposition to EMU is strong within the British government and Britain is one of two European Union countries that have the right to refuse entry into the monetary union.<sup>10</sup> A change in the government from the ruling Conservative party to the opposition Labour party is likely to increase the prospects for Britain joining EMU simply because the latter is much more amenable to the idea of monetary union than the former.

## *Responses to the Lack of Progress in Meeting the Convergence Criteria*

The reality that a majority of countries will not meet the convergence criteria in 1996, and that most, including some key countries, are unlikely to meet the criteria in 1998, has generated three responses within the European Union. One reaction has been to label the idea of monetary union impractical. A second suggests that the public finance criteria for monetary union can be and should be interpreted with some leeway. A third reply suggests that the timetable for monetary union should be interpreted with some flexibility.

### *Abandoning EMU*

Those who have reacted to the difficulty in meeting the convergence criteria by labeling EMU impractical are basically opposed to the idea of monetary union. They see the lack of progress in meeting the criteria as a means to gain support for the idea of abandoning the treaty. Proponents of this view, most notably some members of the British Parliament, have reacted to each crisis within the ERM with predictions of the demise of monetary union. For example, British Prime Minister John Major responded to the August 1993 widening of the bands of the ERM with the statement that the Maastricht timetable for monetary union was now "totally unrealistic." The reaction of Norman Lamont, the former chancellor of the exchequer in Britain, was even more pointed. He claimed that the crisis in the ERM meant "the end of monetary union in Europe" (*Financial Times*, August 3, 1993). In practice, this group supports strict adherence to the convergence criteria, since this will delay the starting date for monetary union.

### *Flexibility in Interpreting the Convergence Criteria*

In opposition to this group are those who not only support EMU but believe that the earlier the starting date the better. This latter group favors a liberal interpretation of the convergence criteria. One reason for

<sup>9</sup> A reduction in public debt can occur through several means besides a government surplus. Both nominal GDP growth and a reduction in interest rates on government debt will reduce the debt/GDP ratio. Nominal GDP growth may be achieved through growth in output or inflation. This might lead one to think that inflating away the debt would be a compelling option. Such a strategy, however, will only work in the short run. An increase in inflation raises the interest rate at which the government must borrow to finance its debt. The shorter the maturity of the outstanding debt, the shorter the period of time before which the engineered inflation will affect the interest rate on the debt. Furthermore, any such attempt by the government to meet the debt convergence criterion through inflation is likely to have long-term repercussions for the interest rate at which the government borrows by reducing the government's credibility.

<sup>10</sup> In Maastricht, the United Kingdom refused to conclude negotiations on the treaty unless it was given the right to opt-out of EMU. Denmark is the other country with the right to opt-out of monetary union. It negotiated this right following the rejection of a referendum on the treaty. After securing the opt-out provision, a new referendum approved the treaty.

supporting a quick move to monetary union is the belief that a long transition period may itself be the source of instability. A proponent of this view is Portes (1993). In addition to arguing that a long transition period creates instability, Portes contends that the convergence criteria are unnecessary because “monetary union will deliver convergence—at least the extent required to maintain it.” De Grauwe (1994) takes this argument one step further by claiming that the convergence criteria cannot be met prior to EMU.

Although support for a quick move to monetary union is generally tied to the belief that convergence is not a necessary prerequisite for EMU, support for a flexible approach to the criteria is based on additional reasons. One is to provide a wide participation in EMU. Another is the fear among countries that have little chance of meeting the requirements that non-participation in EMU will be costly both politically and economically. In the political sphere, countries are afraid that remaining outside EMU will reduce their political power within the EU, particularly as the inner core of countries (the members of EMU) become more interdependent. In economic terms, countries are concerned that exclusion from EMU may be viewed as a mark against them, and result in a higher interest rate premium and a weakness in their currencies.

Supporters of a flexible approach to the convergence criteria make reference to the Maastricht Treaty to bolster their case. The treaty provides an opening for a relaxation of both the deficit and the debt criteria. The 3 percent deficit/GDP ratio and the 60 percent debt/GDP ratio are referred to in the treaty as reference values, not fixed limits as are the criteria for inflation and interest rates. The treaty says that these reference values must be met unless, in the case of the deficit:

- either the ratio has declined substantially and continuously and reached a level that comes close to the reference value; or
- alternatively, the excess over the reference value is only exceptional

and temporary and the ratio remains close to the reference value (*Treaty on European Union*, Article 104c.2.a).

In addition, in preparing its report on whether an excessive deficit exists, the Commission is to take into account:

- whether the government deficit exceeds government investment expenditure (gross fixed capital formation); and
- all other relevant factors, including the medium-term economic and budgetary position of the Member State (*Treaty on European Union*, Article 104c.3).

These clauses provide the commission a means by which to relax the deficit requirement. As noted by Collignon and others (1994), the treaty could be interpreted as applying the deficit criterion to only the part of the deficit not accounted for by government investment, and only requiring the 3 percent ratio to be met “when the economy was near full capacity.” Looking at the data in Table 5, one could argue that Austria, Denmark and the Netherlands all meet the deficit criterion since their budget deficits remain close to the reference level, and that the elevated levels are merely temporary — caused by the recession.<sup>11</sup>

With respect to the debt criterion, the Maastricht Treaty states that the reference level (60 percent debt/GDP) is binding “unless the ratio is sufficiently diminishing and approaching the reference value at a satisfactory pace” (*Treaty on European Union*, Article 104c.2.b).

The debt levels of all the countries, with the exception of Ireland and the Netherlands, have increased between 1990 and 1994, as shown in Table 6. In Ireland’s case, substantial progress has been made in reducing its debt ratio. Ireland has met the deficit convergence criterion in every year and has reduced its debt ratio from 97 percent of GDP in 1990 to 90 percent in 1994. In the fall of 1994, the European Council, assessing the progress of countries toward the

<sup>11</sup> During the Maastricht negotiations, several countries proposed adopting a concept of cyclically adjusted deficits. The proposal was rejected because of measurement problems (Bini-Smaghi and others, 1994).

**Table 5**

**Convergence Indicators: Government Budget Balance**

	Percent of GDP						
	1990	1991	1992	1993	1994	1995	1996
Belgium	-5.4	-6.5	-6.7	-6.6	-5.3	-4.2	-3.9
Denmark	-1.5	-2.1	-2.9	-4.5	-4.0	-1.9	-1.2
France	-1.6	-2.2	-3.9	-6.1	-6.0	-4.9	-3.9
Germany	-2.1	-3.3	-2.9	-3.3	-2.5	-2.1	-2.4
Greece	-14.0	-11.6	-12.3	-13.2	-12.5	-11.3	-10.2
Ireland	-2.2	-2.1	-2.4	-2.4	-2.3	-2.8	-2.6
Italy	-10.9	-10.2	-9.5	-9.6	-9.0	-7.9	-8.1
Luxembourg	5.9	2.3	0.8	2.1	2.3	1.4	1.5
Netherlands	-5.1	-2.9	-3.9	-3.3	-3.1	-3.2	-2.5
Portugal	-5.5	-6.5	-3.3	-7.0	-5.8	-5.6	-4.7
Spain	-3.9	-4.9	-4.2	-7.5	-6.6	-6.0	-4.8
United Kingdom	-1.5	-2.6	-6.1	-7.8	-6.9	-4.8	-2.9
Austria	-2.2	-2.4	-2.0	-4.1	-4.0	-4.6	-3.9
Finland	5.4	-1.5	-5.9	-7.8	-5.6	-5.0	-1.1
Sweden	4.2	-1.1	-7.8	-13.4	-10.4	-9.1	-5.8
Convergence criterion	-3.0	-3.0	-3.0	-3.0	-3.0	-3.0	-3.0
Number meeting criterion	9	9	5	2	3	4	6

Notes: Prior to 1991 the data for Germany are for western Germany only.

Data for 1995 and 1996 are forecasts.

SOURCE: *European Economy* (April/May 1995, Supplement A, Table 21).

Maastricht criteria, accepted the recommendation of the commission and determined that Ireland met the debt criterion. This decision indicates some willingness on the part of the European Union to reward countries that are making efforts to control public deficits yet remain outside the numerical targets. However, it does not mean that such a policy will be followed at the inter-governmental conference in 1996. The decision that Ireland met the debt convergence requirement was not without controversy. Germany, in particular, had severe reservations about the exemption. Furthermore, while the previous European Commission, the term of which ended in December 1994, supported a flexible interpretation of the convergence criteria, it is not clear that the present commission also supports this

view. In May 1994, the then-commissioner for economic and monetary affairs stated that it had "always been understood that the judgement on whether a member state fulfills the conditions for participation in stage 3 would be based on an assessment, and not on a mechanical application of the convergence criteria" (*Financial Times*, May 16, 1994). In contrast, the president of the current commission, Jacques Santer, in his first speech before the European Parliament, pledged that the commission would insist on strict application of the criteria (*Financial Times*, January 18, 1995).

### *Flexibility in the Starting Date for Monetary Union*

In contrast to those who have responded to the lack of progress in meeting the convergence criteria by suggesting that the

Table 6

## Convergence Indicators: Government Debt

	Percent of GDP						
	1990	1991	1992	1993	1994	1995	1996
Belgium	130.8	130.1	131.1	137.2	136.1	134.3	132.3
Denmark	59.6	64.6	69.0	80.3	75.6	76.1	75.4
France	35.4	35.7	39.6	45.8	48.5	51.2	52.8
Germany	43.8	41.5	44.1	48.2	50.1	58.2	58.1
Greece	82.6	86.1	92.3	115.2	114.1	115.3	116.2
Ireland	96.8	96.9	94.2	97.0	89.8	84.6	86.8
Italy	97.9	101.3	108.4	119.4	125.4	124.9	124.4
Luxembourg	5.4	4.9	5.7	6.9	7.2	7.6	7.8
Netherlands	78.8	78.9	79.9	81.4	78.1	78.1	77.1
Portugal	68.6	69.3	61.7	66.6	69.2	70.5	70.7
Spain	45.1	45.8	48.3	59.9	62.3	64.6	65.2
United Kingdom	35.0	35.7	41.9	48.5	50.1	51.5	51.5
Austria	58.3	58.7	58.4	62.8	64.5	66.2	67.4
Finland	14.5	23.0	41.5	57.1	60.1	64.4	64.6
Sweden	43.5	53.0	67.1	76.2	79.1	84.6	85.7
Convergence criterion	60.0	60.0	60.0	60.0	60.0	60.0	60.0
Number meeting criterion	9	8	7	6	4	4	4

Notes: Data for the United Kingdom in 1990 are based on OECD calculations of general government gross financial liabilities. All other data are based on the Maastricht Treaty's definition of public debt.

Prior to 1991 the data for Germany are for western Germany only.

Data for 1995 and 1996 are forecasts.

SOURCES: *European Economy* (April/May 1995, Supplement A, Table 22) and *OECD Economic Outlook* (June 1995, Number 57, Table 34).

convergence criteria be treated with flexibility are those who believe that the 1999 deadline should be viewed as flexible. The proponents of a flexible timetable believe that strict adherence to the convergence criteria is a necessary condition for a well-functioning monetary union. Thus, rather than relaxing the criteria to guarantee that an optimal number of countries will participate in EMU, they suggest that the date for monetary union be delayed if the criteria are not met by a sufficient number of countries. German Chancellor Helmut Kohl was the first leader to publicly address this issue. In 1993, he stated that strict adherence to the convergence criteria might delay monetary union beyond 1999.

The October 1993 ruling of the German Constitutional Court supported those who

argue that the timetable for monetary union is more flexible than the criteria. The court, in ruling on the constitutionality of the Maastricht Treaty, wrote that strict adherence to the convergence criteria was essential to Germany's participation in EMU. In other words, the criteria could not be weakened without the consent of the German parliament.

The German central bank, the Bundesbank, has been perhaps the most vocal advocate of a strict application of the convergence criteria. Both Hans Tietmeyer, the current president of the bank, and his predecessor, Helmut Schlesinger, have made statements on several occasions favoring a strict interpretation of the Maastricht criteria while claiming that the criteria are themselves not strict enough. For example, the

Bundesbank has favored an absolute limit on inflation rather than a relative one, the latter based on the behavior of other countries. The reason for this is to ensure not simply convergence in inflation rates, but also a commitment to price stability. The Bundesbank has also attacked the deficit criterion as setting too high a ceiling. Specifically, Mr. Tietmeyer has stated that the ceiling for the deficit ratio is at least double what it should be. He also has emphasized that the deficit criterion should be met throughout the business cycle (*Financial Times*, November 5, 1994).<sup>12</sup> This statement contrasts with a study prepared for the European Parliament that suggests that "It would be keeping with the spirit of the Treaty, if 3 percent were taken as the 'full employment' deficit during periods of economic expansion" (Collignon and others, 1994, p. 76).

As noted above, the emphasis on a strict interpretation of the convergence criteria is based on the belief that adherence to them is necessary for a well-functioning monetary union. The proponents of strict criteria argue that for EMU to succeed, the member states must show a prior commitment to price stability and follow sound government budgetary policies. Specifically, the emphasis on a strict interpretation of the deficit criterion is based on the idea that "a sound budget position is an indispensable precondition for a successful anti-inflationary monetary policy."<sup>13</sup> There is a concern that within a monetary union, expansionary national fiscal policies (as evidenced by budget deficits in excess of 3 percent of GDP) could conflict with the monetary policy of the supranational central bank. Such a conflict would not only create difficulties for the central bank in its effort to maintain price stability, but also could cause tension among the participants in the monetary union. Would the participants of a monetary union be willing to accept a recession brought about by the anti-inflationary policies of the central bank in an effort to combat the fiscal laxity of other members? Furthermore, although the Maastricht Treaty prohibits the central bank from extending credit to, or directly purchasing the debt of, member

states (*Protocol on the Statute of the European System of Central Banks and the European Central Bank*, Article 21), and declares that neither the central bank nor other countries shall be liable for or assume the financial commitments of any member states (*Treaty on European Union*, Article 104b.1), there are those who believe there would be pressure on the central bank to bail out countries experiencing financial difficulties.<sup>14</sup>

## CONCLUSION

Despite the many setbacks that have occurred since the December 1991 conclusion of the Maastricht Treaty, most of the countries of the European Union remain committed to monetary union. This commitment, however, has not been enough to produce the economic convergence prescribed by the treaty. Many countries have made progress in reducing their inflation rates, and the divergence in long-term nominal interest rates is declining. On the fiscal side, however, the number of countries meeting the convergence criteria has declined. The recent recession in Europe resulted in a deterioration in the fiscal balances of most countries. In addition, the 1992-93 exchange rate crises resulted in a reduction in the membership of the ERM. Thus, the European Union is further away from a fulfillment of the convergence criteria today than it was in the year prior to the negotiation of the Maastricht Treaty.

By the end of 1996, the member states of the European Union must decide if a majority of countries are ready to proceed to EMU in 1997. As detailed above, it is implausible that a majority of countries will have fulfilled the convergence criteria by the end of 1996. EMU will most certainly be delayed beyond its earliest possible starting date. The Maastricht Treaty states that the final stage of EMU must begin by January 1, 1999, with the membership decided by July 1998. Even by this date, few countries are likely to satisfy the convergence criteria.

Given the lack of progress in meeting the convergence criteria, the European Union faces two options if it is to continue to pursue EMU: Relax the criteria or relax the

<sup>12</sup> Others have claimed that even a government that has a balanced budget during upturns could have a budget deficit exceeding the Maastricht limit during a recession. See, for example, Eichengreen (1992) and Kenen (1992). Eichengreen argues that it may even be optimal for disciplined governments to occasionally have deficits exceeding 3 percent of GDP (p. 50).

<sup>13</sup> Tietmeyer (September 9, 1994).

<sup>14</sup> Support for this view is given by Fratianni, von Hagen and Waller (1992) and Craig (1994).

timetable for monetary union. Which option it chooses will likely not be decided until the July 1998 deadline for determining the membership of EMU. The choice taken by the EU will undoubtedly be influenced by the two countries without whose participation EMU will not occur: France and Germany.

Germany has strongly opposed a relaxation of the convergence criteria.<sup>15</sup> If it maintains this position, few countries are likely to meet the membership requirements for EMU by the end of the decade. More importantly, two countries considered among the core group of EU countries — Belgium and the Netherlands — are not expected to meet the criteria.<sup>16</sup> Without the participation of the core group, monetary union may not be feasible. Thus, it is likely that EMU, like its avian namesake, will remain grounded.

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<sup>15</sup> It is interesting to note that in the negotiations on the Maastricht Treaty, Germany resisted setting a fixed date for the commencement of monetary union. It believed that fixing a date would result in a loose application of the convergence criteria (*The Economist*, September 14, 1991).

<sup>16</sup> The other members of this core group are France, Germany and Luxembourg.