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Background to the □uro

Economic Affairs Series

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BEN PATTERSON WITH ANTON JEVCAK AND MARIE-CLAUDE GROTTI

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A short glossary

□	The Euro	Name chosen in 1995 for the Single Currency.
BEPG	Broad economic policy guidelines	Procedure for coordinating economic policy.
Commission		EC Executive and "guardian of the Treaties".
Council (of Ministers)		Formally Member States' Foreign Affairs Ministers, but in practice also meetings of any specialist ministers.
EC	European Community/Communities	Term covering EEC, ECSC and EURATOM.
ECB	European Central Bank	Established in Frankfurt in June 1998.
ECJ	European Court of Justice	"Supreme court" on matters of EC law.
ECOFIN	Council of Economic & Finance Ministers	The economic/financial manifestation of the Council.
ECSC	European Coal and Steel Community	Established by Treaty of Paris in 1951. Now lapsed.
ECU	European Currency Unit	A "basket" of currencies, used for accounting and also for bond issues, etc. Replaced in 1999 by □**.**
ecu	*écu d'or*	Old French coin. Originally-chosen name for the Single Currency (see also ECU).
EEC	European Economic Community	Established by the Treaty of Rome in 1957.
EMI	European Monetary Institute	Created in 1994 from the Committee of Central Bank Governors. Replaced in 1998 by the ECB.
EMS	European Monetary System	Created in 1979. Lapsed from 1999.
EMU	Economic and Monetary Union (*not* European Monetary Union)	Three-stage process culminating in the introduction of □ notes and coins in 2002.
EP	European Parliament	625 Members, directly-elected for 5-year terms.
ERM	Exchange Rate Mechanism	System for linking national currencies, and ECU, within the EMS. Replaced by ERM II from 1999.
ERM II	Exchange Rate Mechanism II	Voluntary mechanism linking non-□**-area currencies** with the □ **since 1999. Now covers only** □ **and Danish** Crown.
ESCB	European System of Central Banks	All 15 EU national central banks, plus the ECB.
EU	European Union	Adopted by Maastricht Treaty. Covers European Community, + foreign policy and judicial "pillars".
EURATOM	European Atomic Energy Community	Established with EEC in 1957.
Euro area	The currency area using the □	Currently 12 out of the 15 EU Member States
Eurobarometer	An official poll of opinion in the EU.	Published quarterly by the Commission.
Eurogroup	The twelve finance/economic ministers from participants in the □ **area.**	An informal body, originally called "Euro 11" (or " Euro 12" following Greek membership of the □ **area).**
European Council	The EU Heads of State or Government (French President and Prime Minister both attend)	Formally the Council, "meeting in the composition of Heads of State or Government". Meetings generally referred to as "Summits".
Eurosystem	Sub-group of ESCB	The 12 Central Banks of the Euro area, plus the ECB
IGC	Inter-governmental conference	Negotiations between EU Member States to reach agreement on Treaty changes.
M3	One definition ("broad money") of the money supply	Cash + bank reserves at Central Bank + current and savings deposits + some short-term debt.
Maastricht Treaty	Formally the "Treaty on European Union"	Signed in Maastricht on 7 February 1992. Included detailed provisions for EMU.
OCA	Optimum Currency Area	OCA theory originated by Mundell in 1961.
The "snake"	Exchange rate system of early 1970s	Established under the Werner Plan. Collapsed 1973.

I. The Theory of Currencies

Why should we pay Moscow for printing unconvertible roubles, when we can print our own? Money is power![1]

The Functions of Money

Almost anything can be money if people believe it to be so. Adam Smith, writing in *The Wealth of Nations* in 1776, quoted Homer to make the point:

The armour of Diomede.…cost only nine oxen; but that of Glaucus cost an hundred oxen.

Oxen, however, are unwieldy and have the inconvenient habit of dying. Considerations of portability, durability and divisibility eventually led to the emergence of metals, then paper and now electronically-stored data as the main monetised commodities.

The classical purposes of money are to act as a means of exchange; a store of value; and a unit of account. The general acceptance of a single monetary standard makes possible rational judgements about comparative prices and about current and future values. The greater number of transactions in a geographical area, and the greater the mobility of people, goods, services and capital within it, the greater the value of such a standard. The area will form an "optimum currency area".

At the same time, control over the supply of money has always been a matter of great political interest. Having one's own currency has been widely thought an essential element of national sovereignty (see the quotation at the head of this section).

We should not be deceived, though, into thinking that this is a matter of high constitutional principle, above mere economics. A monopoly over the issue of money brings governments certain pecuniary advantages which are not necessarily to the benefit of their citizens.

First, there is the *seigniorage*[2] which the issuer of money enjoys. In addition, what Adam Smith called the "*avarice and injustice of princes and sovereign states*" enabled medieval kings, for example, to borrow money in coins of one weight or purity, and then pay off their debts in debased coinage. Such operations became even easier in the age of paper money. Governments which borrow from their own citizens have been able to make the debts vanish simply by inflating the currency *via* the printing presses – a trick which works at least until interest rates soar, credit-ratings plummet and the currency eventually collapses.

But if the value of money is debased in this way, its utility as a unit of account and as a store of value is impaired. In this sense it is no different from a system for measuring weight or distance or time. Hence the search for "sound money".

In an ideal world, according to the American economist Milton Friedman, the supply of money would increase at a steady rate in line with productive potential. Most developed countries – including the European Union itself – have recently attempted to achieve something like this effect by giving their central banks "independence": i.e. protecting them as far as possible from political pressures to bail out imprudent or corrupt governments.

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[1] Comment in 1991 by the then chairman of the Ukraine Parliamentary Commission on Economic Reform, Volodymyr Pilipchuk.

[2] Apart from the costs of minting or printing, the issuer of currency enjoys, free, its initial purchasing power.

Exchange Rates

The international monetary system is characterised by a multiplicity of different currencies. For the most part, these are based on sovereign nation states – a situation which the philosopher John Stuart Mill famously described as "barbarism". As the structure of modern government has developed, currency areas have often become economically segregated, notably through the imposition of exchange controls and inconvertibility.

The main economic case for separate currencies is that movements of exchange rates – either by administrative decision in the case of managed rates, or through market forces in the case of floating rates – provide a convenient way of adjusting for imbalances in countries' economic performances. If a country's goods become uncompetitive for some reason, it can price itself back into the market through a fall in the external value of its currency.

Altering exchange rates, however, is neither a simple nor a painless option. In the first place, much depends upon whether the change is made to correct a "fundamental" misalignment; or whether it is merely an apparently easy way out of real economic problems, which can only be genuinely cured by internal structural reform. The temptation on governments to inflate their way out of debt is compounded by the temptation to evade the external consequences through devaluation.

It is clear that the under-valuation or over-valuation of a country’s currency – though no agreed benchmark exists as to what a correct or "equilibrium" exchange rate might be – can enhance or damage that economy’s international competitive position. An under-valued currency will boost exports, while an over-valued one will make exporting more difficult, leading to a possible trade deficit and reduced economic growth. In each case, though, there is a reverse side to the coin. Depreciation will raise the price of imports, which may increase inflation through producer prices and secondary effects – for example, wage pressure. Appreciation makes imports cheaper, which may help to curb inflation.

But in recent years, most economists have lost faith in the macroeconomic activism theoretically permitted by flexible exchange rates, and much of their faith in the ability of exchange rate changes to correct economic disequilibria. Doubts also exist as to whether flexible exchange rates are compatible with barrier-free markets. For example, there have been fears that countries inside the EU's Single Market, but outside the euro area, might engage in "competitive devaluation". All exchange-rate changes shift demand between countries, thus having some "beggar-thy-neighbour" effect.

Alternative systems

Much of the academic and political debate in the past concerning exchange rates has been about the relative merits of managed systems (fixed rates, "crawling pegs", exchange-rate mechanisms, currency boards, etc.) and those of free floating rates. Both have drawbacks.

For example, any managed system presupposes the use of monetary and other instruments to maintain parities at some chosen level (as, for example, in the case of the European Monetary System's Exchange Rate Mechanism); or, at least, to effect parity changes in an orderly manner. These instruments include intervention by central banks on the currency markets; and changes in short-term interest rates.

Such measures, however, can have damaging consequences for internal monetary policy. A policy of bringing down the external value of a currency through the purchase of other currencies with central bank money will create internal inflationary pressures unless the transaction is "sterilised" though special deposits and other measures. A policy of using gold

and convertible currency reserves and borrowing to prop up a particular parity can lead to disastrous losses if the measure fails – as the United Kingdom discovered to its cost in 1992.

This same episode also illustrated the dangers of relying on short-term interest rate changes. In the years immediately before 1992, both internal inflation and external Sterling weakness indicated higher interest rates. As inflation fell, however, high *nominal* rates became high *real* rates, exerting a deflationary squeeze. Internal economic conditions required lower rates.

But Sterling was under an obligation to remain within the narrow fluctuation bands of the ERM. The situation came to a head in August/September, when large speculative positions were taken against the Pound. The first line of defence was official intervention in the exchange markets, backed by activation of the ECU borrowing programme. The second was an adjustment of interest rates. Yet neither intervention, nor a fall in German short-term interest rates, nor a rise in the UK interest rate to 15%, convinced the markets that the existing parity was sustainable; and the needs of the domestic economy appeared to preclude further UK rises. On 16 September – "Black Wednesday" – Sterling left the ERM.

These events have had a profound effect on official and public opinion in the UK. Not only is there an antipathy to managed exchange rate systems like the EMS (which Mrs. Thatcher's one-time economic advisor, Prof. Alan Walters, memorably described as "half-baked"). The experience has also soured attitudes towards the very different project of a Single Currency.

Volatility

Systems of floating exchange rates, however, also have drawbacks. Chief among these are:

- the effects of volatility on investment, trade and the conduct of economic policy; and
- that markets tend to produce parities which are out of line with economic fundamentals.

Irrespective of the actual level of exchange rates, volatility can have important economic consequences. High volatility will raise the cost of hedging against currency fluctuations, so raising the costs of trade between currency areas. Paradoxically, as an IMF study[3] notes, such cost-raising effects have recently increased as a result of "*dramatically lowered transaction costs in financial markets"*, itself due to the revolution in telecommunications and information technology. High exchange rate volatility also affects the domestic economy by influencing the behaviour of firms. Apparently profitable investment can become unprofitable, though no economic fundamental has changed.

Uncertainty about a country's exchange rate stability may also result in both less domestic investment and less FDI (Foreign Direct Investment). It is important to note at this point, however, that a healthy inward flow of FDI (as in the current case of the UK outside the euro area) is not necessarily a sign that exchange-rate risk does not matter. Volatility can result in the *misallocation* of investment as well as too little: a diversification of capacity in separate currency zones, so creating costs which would not exist were the zones to merge.

Financial markets, moreover, do not necessarily – or even usually – produce "equilibrium" exchange rates: that is, rates which can be justified by trade flows, comparative costs or other indicators. Large exchange rate movements can take place as a result of speculative activities, which can turn out to be self-fulfilling. Volatility also feeds on itself: small fluctuations can rapidly become larger as the result of "bandwagon" effects and the tendency of the foreign exchange markets to overshoot.

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[3] Mussa M. et al., *Exchange Rate Regimes in an increasingly integrated world economy*, IMF, April 2000.

Optimum Currency Areas

The advantages of being able to change the external parity of a currency are therefore anything but clear-cut. Whether this increases or reduces the welfare of citizens is theoretically determined by whether they live in an "optimum currency area".

The initial formulation of what should determine the geographical coverage of a currency is widely attributed to a paper published in 1961 by R. Mundell[4], now a Nobel Prize winner. Since the purpose of money was to be "a convenience", he argued, the ideal currency area was "*the world, regardless of the number of regions of which it is composed"*. Given the practical need for stabilisation policies in existing economies, however, an area needed a separate currency if, given some macroeconomic shock, the economic costs of adjustment through changes in wage and price levels, or through factor mobility (labour and capital), would be higher than those of altering the exchange rate.

McKinnon[5] added that exchange rate policy was in any case an inappropriate instrument of adjustment for any small, open economy trading a substantial proportion of GDP.

The theory therefore implied that any two countries reacting to a shock in the same way – i.e. *symmetrically* – and trading significant proportions of their GDP bilaterally, should fix their exchange rates or form a currency union. Milton Friedman had already observed in 1953 that

> *"A group of politically independent nations all of which firmly adhered to, say, the gold standard would thereby in effect submit themselves to a central monetary authority, albeit an impersonal one. If, in addition, they firmly adhered to the free movement of goods, people and capital without restrictions, and economic conditions rendered such movement easy, they would, in effect, be an economic unit for which a single currency… would be appropriate"* [6].

Specialisation, Asymmetry and Interest Rates

The theory of Optimum Currency Areas has of course been much refined since Mundell's 1961 paper. For example, a paper by P.B. Kenen in 1969 stressed the importance of product diversification as a criterion for delineating an optimum currency area. He believed that

> *"diversity in a nation's product mix…may be more relevant than labour mobility*[7]*".*

The more a particular region specialised, the more likely it would be to react *asymmetrically* to common economic shocks. Hence an area within which there was a high degree of regional specialisation would be better off *not* having a single currency.

In the case of the European Union, therefore, it has been possible to argue that disparities of economic structure caused by specialisation have made it unsuitable as a single currency area. In fact, the statistics for employment by sector, when taken over time, show that European economies are becoming *more* like each other as the result of market integration. The figures for employment in agriculture over the decade 1986-1996 show not only a steady fall in the percentage of the labour force employed, but also steady convergence between the percentages in different Member States, as measured by the falling standard deviation (STD).

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4 Mundell R., "A Theory of Optimum Currency Areas", *American Economic Review*, 1961.

5 McKinnon R. I., "Optimum currency areas", *American Economic Review*, 1963.

6 Friedman M., "The Case for Flexible Exchange Rates" in *Essays in Positive Economics*, Chicago, 1953.

7 Kenen P.B., "The theory of optimum currency areas: an eclectic view" in R. A. Mundell and Swoboda, A.K. (eds.), *Monetary Problems of the International Economy*, pp.41-60 University of Chicago Press, 1969.

In the case of employment in industry, there has been a marked similarity of structure throughout the EU, as measured by the low standard deviation. In the case of employment in the services sector there is a similar steady convergence.

Much of the debate about monetary union in Europe has nevertheless focused on the issue of asymmetry, and the related question of whether a "one size fits all" monetary policy can prove optimal. Regionally-differentiated reactions to economic events can arise from causes other than specialisation: for example, varying trade and overseas investment patterns, or simply because they are at different stages in the business cycle. A rise in short-term interest rates may have differing effects because differing monetary transmission mechanisms affect the real economy with varying time-lags.

Since the ESCB assumed responsibility for euro area monetary policy, therefore, the question has constantly been raised as to whether central bank interest rates have been set at the "correct" level. Clearly, if inflation rates differ between parts of the same currency area, a uniform *nominal* interest rate will result in differing *real* interest rates (see Table 1). The real interest rate will be lower – and perversely more expansionary – the higher the inflation[8].

Table 1: Real ECB minimum bid rate in euro area countries (nominal 3.25%)

Country	Inflation rate (12 month average)	Real interest rate
Austria	1.8	1.45
Belgium	1.8	1.45
Finland	2.3	0.95
France	1.7	1.55
Germany	1.1	2.15
Greece	3.8	- 0.55
Ireland	4.8	- 1.55
Italy	2.4	0.85
Luxembourg	1.7	1.55
The Netherlands	3.9	- 0.65
Portugal	3.5	- 0.25
Spain	3.1	0.15
EURO AREA	2.1	1.15

Source: EUROSTAT

One method of calculating the "correct" short-term rate is the Taylor Rule (named after the US economist John Taylor) which links the representative short-term interest rate to two variables: the output gap and the deviation of inflationary expectations from target inflation[9]. Applications of this rule since 1999 imply that the ECB's rates have been too low for certain countries where there have been comparatively high rates of inflation[10], and where real rates

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[8] Charles Wyplosz has pointed out, in a paper for the European Parliament's Economic and Monetary Affairs Committee of May 2000, that this is called the "Walters effect" after Sir Alan Walters, UK PM Margaret Thatcher's former economic advisor.

[9] Different applications, however, give different weights to the inflation and output gap components.

[10] It might be thought that within a single currency area there can be only one rate of inflation. In practice various factors can result in differences between different regions. Patterns of consumption may differ, resulting in different weights being given to the components of price indexes (as is the case within the euro area). More fundamental is the "Balassa-Samuelson effect", which distinguishes between the prices of goods which can be traded across frontiers, and others (for example, housing) which can not. For a full explanation,

are therefore negative (see Table 1) and too high for others, notably Germany, where there has been a prolonged economic downturn (see Box 1). It has been possible to conclude that the euro area is not an OCA.

The Lucas Critique

This conclusion, however, ignores the possibility that what appear to be permanent differences may disappear when circumstances change. The Lucas critique[11] of much existing research is precisely that asymmetries which appear to preclude a given area from being an OCA, will actually – if monetary union nevertheless takes place – have a far smaller effect than anticipated because union will in itself change behaviour.

One opponent of UK membership of the euro area, for example, emphasises the prevalence of variable interest rate liabilities in the UK compared to other EU countries.

> "*....mortgage debt is 60% of GDP in the UK but only 40% in Germany, 25% in France and less than 10% in Italy…The variable interest rate liabilities of the UK personal sector total 64% of GDP. They are only 16% in France, 3% in Germany and 2% in Italy"*[12].

Yet variable-rate mortgages are the legacy of a past "inflation culture", which should no longer exist within EMU. There are indeed already signs, observed by Eltis himself, that the low level of UK inflation in recent years has encouraged a switch to fixed-rate borrowing.

Fiscal Policy

A further issue, of some considerable current political interest, is how far the existence of a currency union implies co-ordinated or harmonised fiscal policies.

For example, fiscal expansion in one part of the area will clearly have spillover effects in neighbouring parts. Initially there will be positive trade effects: rising demand in the expanding economy will increase imports from trade partners. However, a larger budget deficit and increased borrowing in the fiscally expanding region will also create inflationary pressures. This, in turn, will lead the monetary authority to raise interests rates for the whole currency area, with deflationary effects. These are likely to cancel out the trade effects. Such a cycle can be observed within the EMS following German re-unification.

Moreover, though the final overall effects of "fiscal expansion in one country" may be negative, there is a temptation for any one part of a currency area to take such a step. Within a monetary union, the discipline that excessive fiscal expansion will lead to domestic currency depreciation no longer exists. Uncoordinated fiscal policies can therefore create an "*in-built bias towards lack of fiscal constraint"*[13].

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see "Inflation differentials in a monetary union" in the ECB's *Monthly Bulletin* for October 1999, and "Price level convergence and competition in the euro area" in the *Monthly Bulletin* for August 2002.

[11] Formulated by R.E.Lucas Jr. in 1976: when economic circumstances change, little may be learned from past experience. ("Econometric policy evaluation: a critique", *Carnegie-Rochester Conference Series on Public Policy*, Amsterdam). The principal targets of Lucas' critique were large econometric models which attempted to predict the effects of policy changes on the economy, without account being taken of the effects on behaviour of the forecasts themselves.

[12] Eltis W., *Further Considerations on EMU*, Centre for Policy Studies, June 1998.

[13] "One Market, One Money: an evaluation of the potential benefits and costs of forming an economic and monetary union", *European Economy*, No. 14, October 1990.

Box 1: Interest rates under the Taylor Rule

A calculation of "Taylor Rule" interest rates for the euro area as a whole, for some of the participating countries and for the UK has been made by the Global Economic Strategy and Research department of UBS Warburg.

The version of the Rule used was

$$r = r_n + \text{inflation target} + \tfrac{1}{2}(p-p^*) + \tfrac{1}{2}(y-y^*)$$

where r is the nominal interest rate, or implied policy rate, r_n is the neutral real interest rate, $p-p^*$ is the deviation of actual inflation from target, $y-y^*$ is the deviation of actual output from trend: i.e. the output gap.

The calculations were based on an inflation target of 1¾%. The output gaps were estimates by OECD. In October 2002 the interest rate set by the ECB for the euro area was 3¼%. That set by the Bank of England for the UK was 4%.

Table 2: Interest Rate Gaps implied by the Taylor Rule

	HICP inflation	Inflation Gap	Output Gap	Taylor Rate	Implied Interest Rate Gap
Euro area	**2.1**	**+ 0.3**	**- 1.6**	**3.36**	**- 0.11**
Germany	1.1	- 0.6	- 2.6	2.38	+ 0.87
France	1.7	- 0.1	- 0.5	3.72	- 0.47
Italy	2.4	+ 0.6	- 2.3	3.17	+ 0.08
Spain	3.6	+ 1.9	- 1.2	4.34	- 1.09
Netherlands	3.9	+ 2.2	- 1.3	4.45	- 1.2
Ireland	4.8	+ 3.1	+ 1.7	6.39	- 3.14
Portugal	3.5	+ 1.7	- 1.1	4.31	- 1.06
UK	*0.9*	*- 0.9*	*- 0.3*	*3.43*	*+ 0.57*

Source: "UK Preparations for EMU", UBS Warburg

The resulting gaps between the rates of interest given by the Taylor Rule and those actually applied show that the rate set by the ECB for the euro area as a whole was very marginally low. In the cases of France, Spain, the Netherlands and Portugal it was low by larger margins; and in the case of Ireland was only just over half that implied by the Taylor Rule. In the case of Italy the rate was very slightly high; in the case of Germany high by a wider margin.

These figures imply that the interest rate policy of the ECB is broadly correct. A paper published by the Bank for International Settlement in 1999 ("The Taylor Rule and Interest Rates in the EMU Area", *Working Paper 73*, August 1999) concluded that

> *"if the ECB were to conduct monetary policy using the Taylor Rule, it would in fact not deviate much from past (weighted) interest rate setting behaviour in the countries forming the EMU area".*

It is also worth noting that the 4% rate set by the Bank of England was also too high by over half a percentage point. Applying the 3¼% rate set by the ECB for the euro area would have been a *more* appropriate rate for the UK under the Taylor Rule, given the assumed inflation target.

This can be re-enforced by the problem of "moral hazard". A fiscal authority may accumulate unsustainable deficits and debt, secure in the knowledge that it will be "bailed out" if there is a risk of default[14]. Expectations of assistance will be particularly strong if the debt in question forms an important part of others' external portfolios.

Considerations such as these imply that the component parts of a monetary union must accept some degree of constraint on their freedom to conduct fiscal policies – even if these conflict in some measure with considerations of national, state or parliamentary sovereignty. The Delors Report of 1989 indeed concluded that

> *"uncoordinated and divergent national budgetary policies would undermine monetary stability."*

Such constraints can take the form of rules for the funding of budget deficits and debt; or specific limitations on the levels of deficits and debt. Both have been introduced in the euro area (see Chapter III).

The aggregate fiscal stance

The need for the co-ordination of national fiscal policies within the euro area is re-enforced by the virtual absence of a central, "federal" budget. In an analysis of public finance issues carried out in 1993, the Commission observed that

> *"…in all mature federal countries, it is the central government that takes care of macroeconomic stabilization for the union as whole"*[15].

Federal budgets are sufficiently large both for the "automatic stabilisers" to operate, and even to permit more proactive policies (see Box 2). The autonomous fiscal stances of the constituent states are either insufficient to disturb the federal stance, or cancel each other out.

By contrast, the European Community Budget – at 1.2% of GDP, as compared to nearly 50% for EU national budgets, and about 22% for the US federal budget – is small. Even if the Budget were to rise to between 5 and 7% of GDP, as proposed by the McDougall Report in 1977, this is far below the 20-25% of existing federal budgets, and the stabilising effects would be correspondingly weak. Moreover, the Community Budget is funded through the complex system of "own resources", which effectively muffles stabilising effects on the revenue side. This leads to the conclusion that fiscal stabilisation can only be achieved through the "aggregate fiscal stance" of the national budgets taken together; and that such an optimum stance can only be achieved by fiscal and economic policy co-ordination.

Redistribution

A further issue arises from the role played by public finance in the redistribution of income. In most modern economies such redistribution will take place between individuals, groups and regions, the extent depending upon the social policies of the administration.

In the context of a monetary union, it is *geographical* redistribution which is most at issue. Where a currency area has a significant central budget, financed out of general taxation, this acts as a "fiscal pump". Funds are automatically transferred from richer areas, which pay more taxation and receive lower social security and other payments, to poorer areas which pay less in tax and receive more in benefits.

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[14] The US provides the recent examples of New York City and Orange County.

[15] "Stable Money - Sound Finances: Community public finance in the perspective of EMU", *European Economy*, No. 53, 1993.

In the absence of a large central budget – though the impact of the Structural and Cohesion Funds, and of operations by the European Investment Bank have been of significance for a number of economies – the main fiscal mechanisms of adjustment in the case of the euro area are the national budgets. These collectively provide a high degree of "insurance" between regions within the same Member State.

They do not, of course, provide such insurance *between* Member States. But disparities between different regions *within* Member States are substantially greater than the differences between the Member States themselves. For example, the *per capita* GDP in the Northern Italian regions is between 120% and 130% of the EU average, whereas that in the Southern regions is only between 60% and 90%.

Box 2: Fiscal policy and monetary policy

Academic opinion has generally been sharply divided on the relative effectiveness of fiscal and monetary policy, and the relationship between them. The traditional **"Keynesian"** position has been that monetary policy should be relatively passive – i.e. that interest rates and the money supply should adapt to the demand for money by the "real" economy – while fiscal policy should be proactive and counter-cyclical: that taxes should be cut and public expenditure increased in times of recession, and *vice versa*.

The contrasting **"monetarist"** school has argued that such "fiscal fine tuning" generally does more harm than good. Because of the lags between fiscal actions and their effects on the economy, they are as likely to turn out pro-cyclical as anti-cyclical. Moreover, the reluctance of governments seeking re-election to squeeze the economy creates a "ratchet" towards higher public debt and a steadily growing public sector. Any fine tuning is therefore best left to interest rate changes and controls on the money supply.

One focus of this debate is the operation of the **automatic fiscal stabilisers**. In times of rising demand, higher tax revenues and falling social expenditure automatically reduce inflationary pressures through a fiscal squeeze. Similarly, in times of falling demand, a lower tax take and higher social expenditure automatically provide a fiscal boost. Figures for EU countries give, broadly, a 0.5% rise in the budget deficit for every 1 per cent fall in GDP.

Those who take the most restrictive view on the role of fiscal policy would limit even these automatic effects, for example, through the setting of fixed limits on budget deficits (see Chapter III). What has been called the **"new neo-classical synthesis"**, however, would allow the fiscal stabilisers to operate, while advocating a proactive monetary policy.

II. A Brief History of EMU

"L'Europe se fera par la monnaie ou ne se fera pas." (Jacques Rueff, 1949).

Politicians and businessmen [will] not long live with exchange-rate volatility within a truly open market; they [will] demand action either against the volatility or the openness. (The Economist, February 13, 1993).

The 1957 Treaty of Rome, which established the European Economic Community, contained no reference to a single currency. It did, however, establish a common agricultural policy (CAP) to maintain a single level of farm prices throughout the (then) six Member States, expressed in "green dollars". However, any exchange rate fluctuations clearly affected the payments received by farmers: if the D-Mark rose against the French Franc, for example, German farmers would be getting less than French farmers, at the same "green dollar" price. Accordingly, the Commission proposed that exchange rates should be locked together.

This came to nothing. The agricultural problems were eventually solved by the expedient of special "green" exchange rates, and monetary compensatory amounts (MCAs) paid out or deducted when produce crossed frontiers. The only step which, in the light of subsequent events, can be seen as having major significance was the establishment in 1964 of the Committee of EC Central Bank Governors – the forerunner of, first, the European Monetary Institute and then of the European Central Bank.

The Werner Plan, the Snake and the EMS

The second attempt to create monetary union was more deliberate. In October 1970 the Werner Plan was published[16], which outlined three steps for the creation of monetary union.

1. Full convertibility of currencies;
2. Full liberalisation of capital and financial markets; and
3. The irrevocable locking together of exchange rates.

Decisions were actually taken during the following two years for the progressive realisation of the union. Currencies – including even the £ Sterling after the UK joined the Community in 1973 – were locked together within an exchange rate mechanism which became known as the "snake in the tunnel"[17]. But alas! It did not last. The world economy was hit by the rapid rise in oil prices which followed the Yom Kippur War in the Middle East. President Nixon cut the link between the $ and gold, and the era of relative international currency stability created at Bretton Woods after the Second World War came to an end.

In 1979 there was a new start. This was the European Monetary System (EMS), which linked most Community currencies together in an Exchange Rate Mechanism (ERM). The design of the mechanism was more sophisticated than had been the case with the "snake": there were

[16] "Report to the Council and the Commission on the realization of economic and monetary union in the Community", *Supplement to the Bulletin of the European Communities*, 8 October 1970. Pierre Werner was Prime Minister of Luxembourg, and had already in 1960 called for a currency union: he can therefore be credibly described as the "father" of the single currency. He died in June 2002 at the age of 88.

[17] The participating currencies were able to vary against each other within very tight margins (the "snake"), while the system as a whole could fluctuate within limits against external currencies (the "tunnel").

fixed margins of fluctuation not only between any one currency and the "central rate" of the European Currency Unit (ECU), but also between any pair of currencies (the "grid"). Responsibility for maintaining parities was in principle symmetric (i.e. action was required from the authorities managing both appreciating and depreciating currencies). In the event of "fundamental disequilibria" there was provision for realignment.

There were confident predictions at the time that the EMS would soon go the way of the snake. The early years indeed saw frequent realignments, largely as a result of the inexorable appreciation of the D-Mark. But in the second half of the 1980s it became clear that the system – reinforced by the Basel-Nyborg agreements of 1987 on support mechanisms – was proving a success. As realignments became less and less necessary, the main purpose of the system – a "zone of currency stability" – was achieved. Moreover, participation in the ERM began to have an effect on other factors, notably rates of inflation. This can be seen most dramatically in the case of France. In the pre-EMS days of 1975-80 French inflation ran at 10.5% a year. By the period 1985-90, during which time the Franc clung doggedly to the low-inflation D-Mark within the ERM, the rate was down to 2.9% a year.

As a result, the EMS, like the European Community, attracted new members. After ten years of UK Prime Minister Margaret Thatcher promising to join "when the time is ripe", the £ Sterling finally entered the system in 1990. Of the Member States at the time, only Portugal and Greece remained outside.

This record of success lasted until September 1992.

The Delors Report

Meanwhile, the apparent demonstration that relatively fixed exchange rates *could* be successfully maintained encouraged new initiatives towards full monetary union. A number of different arguments in any case pointed in this direction.

- From the start, the stability of the EMS had rested heavily on the role of the D-Mark as "anchor" currency. As a result, the system appeared politically asymmetric: the monetary policies of countries like France were strongly influenced by the decisions of the German *Bundesbank*, while the *Bundesbank* conducted its policy largely on the basis of German domestic requirements[18]. The French therefore saw monetary union, with a common European Central Bank, as a way of **recapturing economic sovereignty**.
- The late 1980s saw a determined drive, substantially led by members of the European Parliament, to remove non-tariff barriers to trade within the Community and create a "real common market". In March 1985 the Commission published the Cockfield White Paper, outlining a programme for the creation of Single Market by the end of 1992. Several studies had shown that such a programme would add substantially to overall GDP; but they had also shown that the gain would be even greater were there a currency union as well. Part of the motivation for the 1992 objective was to match the 250 million US market by a European one of over 300 million. The US, however, was more than a single market; it had also eliminated internal exchange costs ("the Dollar is a Dollar from Maine to California"). In sum, **a single market needed a single currency**.
- One element in the 1992 programme, in particular, was seen to reinforce the case for a single currency: the free movement of capital required by the Treaty of Rome itself. In the absence of powers to prevent "hot money" flowing between national financial

[18] Those with a knowledge of games theory will recognise this as a (von) Stackelberg strategy.

markets, it was feared that maintaining exchange rate stability between separate European currencies would prove increasingly difficult. **If the Community was not to go backwards to exchange controls, it had to go forwards to monetary union**.

- The parallel opening up of world financial markets added to this pressure. Total turnover on the foreign exchange markets was estimated at over $1000 billion *a day* – more than double the amount held as reserves by Central Banks. As the Community's Central Bank Governors observed in their 1992 Annual Report:

  "In an environment of full freedom of capital movements, massive speculative exchange rate pressures may arise even in a situation where central parities are backed by sound and stable economic conditions."

  EMU was seen as **protection from the threat of international financial storms**.

- Another feature of the American economy similarly pointed towards monetary union: the relatively low **proportion of GDP traded outside its own currency area**. This reduced the economic impact of exchange-rate movements, and allowed the Federal Reserve Bank to maintain an attitude of "benign neglect" towards the Dollar's external parity. Taken as separate currency areas, the Community Member States traded over 30% of GDP externally. But, taken as a single currency area, this would fall to something nearer US levels (10.8% in the case of exports, 13.5% in the case of imports in 2000)[19].

- It was also argued that a single European currency would be able "**to look the dollar in the face**", rivalling it as a reserve currency and a unit for raw material pricing. The merging of national bond markets would create a new, large liquid market for both sovereign and commercial debt. International portfolios would be adjusted to contain more assets denominated in the new European currency rather than dollars. Certain studies even predicted that this adjustment would lead to a run on the dollar, with consequent over-valuation of the European currency.

- Finally, there were powerful non-economic arguments. Just as opponents of EMU argued that the abolition of national currencies involved a sacrifice of national identity, so advocates saw it as powerful instrument for achieving the Treaty objective of "*ever closer union among the peoples of Europe"*. The Rome European Council of October 1990, which eventually took the decision to go ahead with EMU, explicitly declared that a Single Currency for the Community would be "***an expression of its identity and unity"*.**

As a result of these pressures, the meeting of Community heads of state and government, held in Hanover during June 1988, established a study group under Commission President Jacques Delors. Its remit was to propose "concrete stages" leading to Economic and Monetary Union.

At this point it is pertinent to ask: why *Economic* and Monetary Union?[20] The explanation goes back to the early debates of the 1960s about the way in which a single currency might best be achieved. There were two main schools of thought.

- On one side were the "**economists**". They argued, in the words of one-time *Bundesbank* President Otto Pöhl[21], that "*monetary integration cannot move ahead of general economic*

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[19] In fact, since Denmark, Sweden and the UK are outside the euro area, the proportions had fallen to 16.9% in the case of exports, and 15.4% in the case of imports by mid-2000.

[20] For long time there was a tendency to mis-read "EMU" as standing for "*European* Monetary Union".

[21] In a paper annexed to the Delors Report.

integration". The results of doing so would be that long-term structural problems would be aggravated and some areas be severely disadvantaged.

- On the other side stood the "**monetarists**". Far from having to wait on economic convergence, they argued, monetary union should be regarded as an instrument for bringing this about. Though certain regions of the Community might suffer temporary relative difficulties, these would be more than offset by the overall dynamic effects.

The conclusion of the Delors Committee was that some parallelism was needed between the economic and the monetary, even if "*perfect parallelism at each and every point of time would be impossible..".* Its Report[22] proposed that EMU should be achieved in three Stages:

1. All EC currencies would join the ERM, and a "single financial area" would be created.
2. In a transitional phase, a "European System of Central Banks" (ESCB) would be established, and the margins of fluctuation between currencies would be narrowed.
3. The third stage would begin with the irrevocable locking of exchange rates and the transfer of certain powers over economic and monetary policy to Community institutions, including a European Central Bank. It would end with the replacement of national currencies by a single currency, the "ecu".

In December 1990 a special EMU intergovernmental conference (IGC) was convened; and its findings were eventually incorporated into the Treaty on European Union, signed in the Dutch city of Maastricht in February 1992.

The Maastricht Process

The starting point of the EMU IGC was that achieving a certain degree of prior economic convergence was essential. A proposal from the UK Government that this would be unnecessary if the currency were to be "common" (i.e. exist in parallel with national currencies) rather than "single" (i.e. replace them) received little support. Instead, the discussions focused on precisely what needed to converge before a single currency became feasible. A distinction was made between "nominal" and "real" convergence.

Nominal convergence

In the case of nominal factors there was agreement that a "*high degree of sustainable convergence"* was essential, notably of inflation rates; and that whether the convergence of inflation was permanent would be apparent from movements in long-term interest rates. It was therefore decided that, to join the single currency, a Member State need to have:

- *"a rate of inflation which does not exceed by more than 1.5 percentage points that of, at most, the three best performing Member States in terms of price stability"*; and
- *"an average nominal long-term interest rate that does not exceed by more than 2 percentage points"* that of the same three countries.

The aim of a single currency also implied convergence of exchange rates to a stable level prior to their irrevocable locking together. The Maastricht criteria therefore included

- *"the observance of the normal fluctuation margins provided for by the exchange-rate mechanism of the European Monetary System for at least two years, without devaluing against the currency of any other Member State."*[23]

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[22] *Report on economic and monetary union in the European Community*, Office for the Official Publications of the European Communities, May 1989.

From the start of the EMU debate, a consensus had also emerged that the system should, in the words of the Delors Report, "*be committed to the objective of price stability"*. This would chiefly be secured by making it the primary objective of monetary policy[24]. But was there not a danger, the Report had also asked, that "*uncoordinated and divergent national budgetary policies would undermine monetary stability"*? Germany's IGC negotiators, determined that any single currency must be as stable as the D-Mark, argued forcefully that there must be prior convergence of both budget deficit levels and overall levels of public debt. They added that convergence must be towards low levels; and that, once the single currency had been achieved, the convergence must be permanent and legally enforceable.

A counter-argument was put by the UK delegation among others. The danger from budget deficits and debt levels did not arise from their actual levels, but from how they were financed. Public authorities should be free to run deficits and borrow as they saw fit, provided they paid market rates. Those which ran up deficits and debts considered "excessive" would have to pay increasingly higher interest rates, until they found it impossible to borrow at all. All that was necessary was to prevent cheating and "moral hazard": i.e. no financing of debt by "printing money"; no privileged access to funding; and no bail-out of defaulters.

In the end, both solutions were written into the Treaty.

The prior convergence criteria included "*sustainability of the government financial position"*, defined as a "*a government budgetary position without a deficit that is excessive"*. National positions would be judged against two reference values:

- a 3% ratio of planned or actual budget deficit to GDP;
- a 60% ratio of overall public debt to GDP, which national levels should be below or "*approaching.. .at a satisfactory rate*".
- In addition, an excessive deficit procedure was to operate once EMU had begun. This is incorporated in Treaty Article 104 (formerly 104c) – see next Chapter.

The no monetary financing, no privileged access and no bail-out rules were included in what are now Treaty Articles 101, 102 and 103.

Real convergence

Outside the IGC itself, however, a considerable body of academic and political opinion held that these criteria did not go nearly far enough. In addition to nominal factors, there would have to be a convergence of "real" factors like productivity, growth and unemployment rates. Otherwise, deprived of the ability to change either interest rates or exchange rates, disadvantaged parts of the Community – the "periphery" was especially referred to – would be unable to compete.

One response to such problems was found in what is known in Community terms as **"cohesion"**. This has above all meant transfers of funds through the existing Community Budget (Structural and Cohesion Funds) or through the European Investment Bank. It also encompasses other aspects of regional and social policy, such as special derogations from competition policy and special regimes for particular industries.

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[23] The events of 1992 and 1993, described later, in practice created problems of interpretation in the case of this criterion. At the time of the assessments in 1998, the Commission found it necessary to interpret both the phrase normal fluctuation margins and the two-year time period. For an analysis of the current interpretation of this criterion, see the section on "The exchange rate criterion" in Chapter V.

[24] A decision incorporated in Article 105 of the Treaty.

It was recognised from the start that monetary union would require such policies to be extended and improved. Stage 1 of EMU already included budgetary measures, notably a doubling of the Structural Funds. The Cohesion Fund was created precisely in order to help those countries which, it was thought, would find most difficulty in adjusting.

Ironically, reality has proved quite different. Since stage three of EMU began in 1999, it has been the countries of the "vulnerable periphery" – Spain, Portugal, Finland and, above all, Ireland – which have enjoyed the highest rates of economic growth; and those at the prosperous centre – above all Germany – whose performances have been most disappointing.

The events of 1992 and 1993

A great deal has subsequently been written to explain why the apparently solid "zone of monetary stability" represented by the EMS was blown apart in 1992 and 1993. In the recriminations afterwards there was strong criticism of the main politicians and bankers involved, particularly those involved in the two ECOFIN meetings immediately preceding "Black Wednesday", when the £ Sterling and Italian Lira were forced out of the ERM. The authorities, it is concluded, should either have accepted a re-alignment; or they should have taken much firmer measures to defend the existing parities.

There is also substantial agreement on the underlying causes: the general difficulty of maintaining a fixed-exchange rate system in a world of free capital movements; and the particular problems caused by the position of the D-Mark as anchor currency. German re-unification had constituted a classic "asymmetric shock", obliging the German government to raise public expenditure. This led to a rise in interest rates (8.75% in mid-1992), which, in turn, produced upward pressure on the exchange rate. Liquid capital flowed out of the Dollar into the D-Mark, and the other EMS currencies were caught in the middle. Speculating against the Pound famously netted the financier George Soros some £10 billion.

The instability of the EMS continued into 1993 with waves of speculation hitting successive currencies. The Spanish Peseta was devalued by 8% in May. Finally, in July, the French Franc came under overwhelming pressure – despite the fact that French inflation, at 2%, was less than half that of Germany. In August, the authorities admitted defeat and the normal ERM band of fluctuation was widened from 2.25% in either direction to 15%.

At the time, many commentators interpreted these events as threatening the whole Maastricht programme. In fact, the 1992/3 failures of the EMS greatly *strengthened* the case for EMU. At the end of 1992, in accordance with the Cockfield timetable, the Single Market had formally come into existence. But fears that currency instability might destroy the whole edifice were very real. The Pound Sterling was dropping rapidly, giving rise to complaints of "competitive devaluation". The last, residual powers to activate exchange controls – which had helped protect the Irish Punt in 1992 – were now gone.

The opinion of most business and commerce on the situation is summed up by the quotation from the *Economist* at the head of this chapter

The achievement of EMU

The second stage of EMU began, as planned, at the beginning of 1994. By that time all Member States hoping to join the monetary union had abolished restrictions on the movement of capital, and had instituted multi-annual programmes intended to ensure the lasting convergence necessary for the achievement of economic and monetary union.

Stage 2 also saw the creation of the European Monetary Institute (EMI), transforming the Committee of Central Bank Governors into a Treaty-based institution. Its main task was to

prepare the way for the Single Currency and a European System of Central Banks (ESCB). At the start of the third stage, it would become the European Central Bank (ECB) itself.

The Maastricht Treaty had allowed for some flexibility in timing. The fall-back date was set for 1 January 1999; but the European Council was given discretion to fix an earlier date if it so wished. In the end, it did not do so.

Even as the end-1998 deadline grew nearer, there were voices urging further postponement. Stage 2 seemed to be developing into what the *Financial Times* of 28 May 1997 described as a "*nerve-racking end-game".* A choice appeared to be looming between:

- a broad EMU of around ten or eleven Member States (Denmark, Sweden and the UK having announced their intention *not* to participate[25]), but based on a "flexible", or "political" interpretation of the convergence criteria; or
- a "hard core" of six or seven countries, based on a strict or "central bank" interpretation.

The focus of attention was the group of countries described at the time as the "Club Med": Italy, Spain, Portugal and Greece. Would they really be able to meet the convergence criteria, and in particular that on budget deficits?

Those supporting the "hard core" choice argued that any softening of the criteria to accommodate the "Club Med" would lead to an unstable EMU. Particularly in Germany there was a fear that the new Single Currency, instead of being as good as the D-Mark, would be what was rudely called "Esperanto money".

At the same time, it was widely feared that choosing the "hard core" option would be worse that no choice at all (i.e. postponement). The EU's Single Market would be split into "first" and "second" divisions, with the risk that the economies of the two divisions would subsequently diverge rather than converge. Above all, the exclusion of countries like Italy and Spain, which had been making heroic efforts to meet the criteria, could have explosive political effects both within those countries and within the EU as a whole.

As the monitoring of the convergence statistics intensified, however, it became apparent that the real position was more complex. Though it was clear that Greece would not qualify, and a question-mark hung over Italy, both Portugal and Spain seemed to have no problems in meeting the criteria. On the other hand, doubts began to arise over the ability of France to get its budget deficit below 3% of GDP without a measure of "creative accounting". Italy's level of public debt was over 100% of GDP; but so was that of Belgium.

The timetable established for the change to the Single Currency was:

- **1998, March:** The **Commission** and the **European Monetary Institute** would report on which countries had met the criteria
- **7 May:** A special session of the **European Parliament** would give its recommendation. **ECOFIN** (the national finance ministers) and the fifteen **Heads of State or Government** would then decide which countries qualified.
- **1999, 1 January:** The exchange rates of the participating national currencies would be irrevocably fixed, and the Single Currency would come into formal existence. It might be

[25] One peculiarity of the Maastricht Treaty is that countries which meet the convergence criteria are *under an obligation* to join Stage 3 of EMU, whether they want to or not. For this reason, both Denmark and the UK negotiated specific protocols exempting them from this provision. Sweden, which joined the EU later, has assumed a similar "political" opt-out (see Chapter V).

used in accounts, contracts, etc. on a "no compulsion, no prohibition" basis. Public debt would be denominated in euros.

- Other EU countries could join as they met the criteria. **Greece** did so in 2001.
- **2002, 1 January**: Euro-denominated notes and coins would come into circulation as legal tender, alongside the national currencies.
- **1 July (at the latest):** National notes and coins would be withdrawn from circulation.

By this time, a number of other decisions had also been taken. It had been assumed at the time of the Maastricht Treaty that the Single Currency would be known as the "ECU", a name which provided a happy co-incidence between the acronym "European Currency Unit" and the old French coin the *écu d'or*. In German, however, the name created certain difficulties[26]. Despite the Treaty, which only mentions the word "ECU", it was decided at the Madrid summit of December 1995 to call the new currency the "euro".

A long debate had also been taking place as to how exchange-rate tensions could be avoided in the period between the decision on "first-wave" membership in May 1998, and the irrevocable locking together of parities at the end of the year. Might there not even be a temptation for some countries to instigate a currency depreciation so as to obtain a built-in competitive advantage? Accordingly, the parities between the participating currencies were fixed in advance at their central ERM rates, to six significant figures.

The early establishment of the ECB was also decided. On 7 and 8 May the responsible European Parliament Committee interviewed, and approved[27], the six candidates for the ECB's Executive Board. On 1 June the ESCB and the ECB came into existence, though with full powers only at the beginning of 1999.

The eventual choice in May 1998 of a "broad" EMU of eleven countries took place with virtually no dissenting voices. Based on the 1997 figures, the Commission had found in March that all except Greece had met the convergence criteria (see Table 2). Belgium and Italy were considered to be moving towards the 60% debt/GDP ratio at a "satisfactory pace".

At the end of 1998, there was a trouble-free transition to the final stage of EMU. Euro area monetary policy had effectively begun on 3 December 1998, when there was a co-ordinated reduction of key lending rates to 3% by the central banks of the participating countries. When the ESCB officially became responsible, this rate was confirmed "for the foreseeable future". The □ **came into existence at an external exchange rate of around $1.17.**

The first three years

Commentators gave the first year of the □ **a mixed reception. On the one hand, the European** Central Bank (ECB) was justly praised for having entirely fulfilled its primary task of ensuring price stability. The headline rate of inflation in the euro area remained below 1.5% as 1999 ended, despite a substantial rise in the price of oil. This was comfortably below the

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[26] For example, is it "die ECU" (*Währungseinheit*, the German for "currency unit", is feminine); or "der ECU" (the translation of French *écu*)?

[27] Formally, Parliament's approval was not required; but rejection of any candidate would almost certainly have made that appointment impossible. The appointment procedure in any case resulted in some uncertainty over the position of the ECB's first President, Wim Duisenberg, who was reported to have given an undertaking to the Heads of State and Government that he would give way to the French Central Bank Governor, Claude Trichet, before the end of his eight-year term; but who also confirmed to Parliament that his independence from instructions by governments or EU institutions, required by the Treaty, had not been compromised, and that he alone would decide when to retire. He has announced that he will do so in mid-2003.

ECB's own 2% definition of price stability. Inflationary expectations, as measured by the yields on □**-denominated bonds, also remained low.**

Table 3: Convergence criteria – Commission Report of 25 March 1998

(Shaded boxes = reference levels exceeded.)

Country	Inflation Jan. 1998	Deficit (% GDP) (- in surplus)	Debt (% GDP)	Interest rates (10-year bonds) Jan. 1998
Austria	1.1*	2.5	66.1	5.6
Belgium	1.4	2.1	122.2	5.7
Denmark	1.9	- 0.7	65.1	6.2
Finland	1.3	0.9	55.8	5.9
France	1.2*	3.0	58.0	5.5
Germany	1.4	2.7	61.3	5.6
Greece	5.2	4.0	108.7	9.8
Ireland	1.2*	- 0.9	66.3	6.2
Italy	1.8	2.7	121.6	6.7
Luxembourg	1.4	-1.7	6.7	5.6
Netherlands	1.8	1.4	72.1	5.5
Portugal	1.8	2.5	62	6.2
Spain	1.8	2.6	68.8	6.3
Sweden	1.9	0.8	76.6	6.5
UK	1.8	1.9	53.4	7.0
EU Average	1.6	2.4	72.1	6.1
Benchmark	**2.7**	**3.0**	**60**	**7.8**

** The three best-performing countries*

The main source of doubt was the external value of the euro, in particular its parity against the dollar. In its first year of trading, the euro lost 14.6% of its value in dollar terms, ending the year almost exactly at 1:1. Among officials, economists and commentators, there was a widespread feeling that the currency was undervalued at this level – that, in the words of ECB President Wim Duisenberg, it had "*room for appreciation*". With euro area growth picking up, a trade surplus and low inflation, the external value would soon begin to reflect its "*fundamental strength*". Academic studies of all kinds put the euro's "equilibrium" exchange rate at anything up to $1.45[28].

But the markets thought otherwise. The exchange rate continued to fall, going under $0.90 by the beginning of May 2000, a level almost 25% below its dollar value in January 1999.

The ECB repeatedly pointed out that it was concerned only with internal price stability, and that this was not being affected by the euro's depreciation. During early 2000, however, the Bank was obliged to modify its attitude. Combined with the sharp rise in oil prices, the falling parity of the euro was putting an "*upward pressure on import and producer prices*". This threatened to trigger secondary effects, notably increased wage demands. By March 2000, indeed, the headline rate of inflation in the euro area, at 2.1%, exceeded for the first time the ECB's own 2% definition of price stability. In June 2000 it reached 2.4%; and in April 2001 it reached 3%. The ECB had already by the end of 1999 acted against the "upward

[28] The estimate, using a "Fundamental Equilibrium Exchange Rate" (FEER) model made by Wren-Lewis S. and Driver R.L. (1998), *Real Exchange Rates for the Year 2000*, Institute for International Economics, Washington DC, May 1998. For other estimates, see table 1 in Niels Thygesen's paper *The Euro Weakness - one more time*, paper for the Monetary Committee of the European Parliament, 15 May 2001.

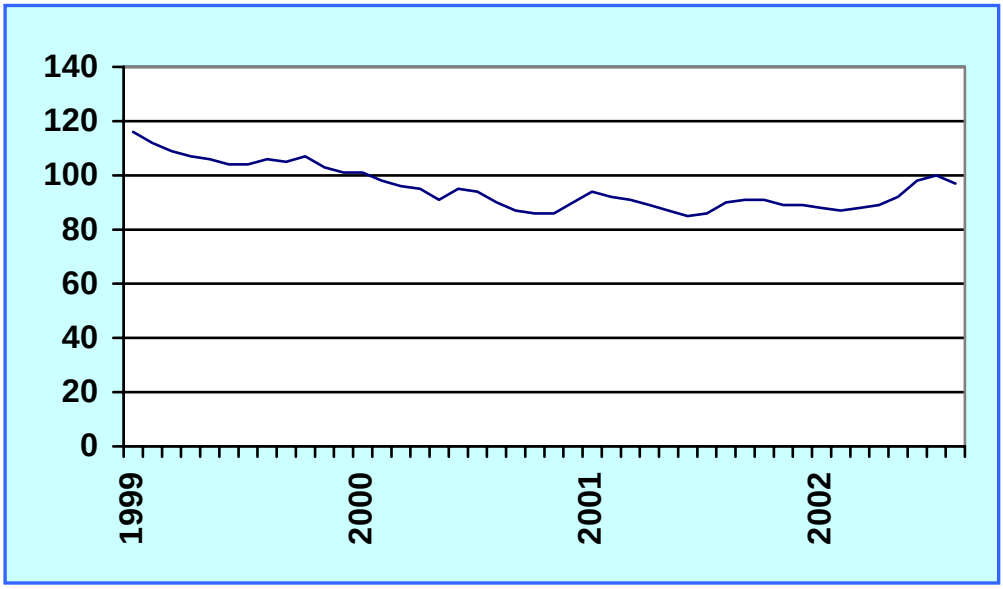
risk" to price stability, raising its three main interest rates in November. Further rises were made in February 2000, and again in March, in April, in June and in August.

These rate rises had no apparent effect on the euro's exchange rate, which fell over 10% against the dollar in the first five months of 2000. But nor were they intended to. Asked in the European Parliament's Economic and Monetary Committee in April 1999 whether the Bank had a policy of "benign neglect" towards the exchange rate, a somewhat Delphic reply had been given by Wim Duisenberg:

> *"Not having an exchange rate policy – and we have no policy – does not mean that there is benign or malign neglect. For the time being there is neglect."*

Despite this approach by the ECB, the dollar exchange rate came to dominate popular perception of the euro. Economically, a competitive euro exchange rate was arguably the correct policy – exactly what was needed to "kick start" production in the euro area. The lower exchange rate clearly stimulated euro-area exports, playing a significant part in German economic recovery during early 2000.

Figure 1: Exchange rate of the □ against the $, 1999-2002 (US cents per □)



On the other hand, the steady and unanticipated fall in the euro's rate against the dollar clearly had a damaging psychological impact. The new currency was regularly described as "weak", no matter how often the ECB pointed to its general internal stability.

> *"From birth, the euro's external value has been going downhill – not the way for a currency to build up a good reputation at home and abroad*[29]."

At the end of 2000, as at the end of 1999, most commentators predicted an imminent recovery of the exchange rate, with **□/$ parity being reached towards the end of 2001. The** sudden collapse of United States economic growth in the closing months of 2000 meant that the euro area would, for the first time in years, have a higher growth rate than the dollar area. But again the financial markets took no notice. The financial press began to write of an "asymmetry" in market responses: bad US news did the $ no harm, good news from the EU

[29] Deutsche Bank, *Economic and Financial Outlook*, 15 May 2000.

did the □ **no good. The situation was often described an "inexplicable" – although a wide** variety of explanations were in fact offered.

One of the most plausible was that offered by the Bank for International Settlements (BIS). From its creation, the euro area experienced a continuous net outflow of investment capital; and this, the BIS commented, was in part because

> "…*the newly created euro may have proved too successful. Larger and more liquid markets, along with relatively low interest rates, encouraged the issue of euro-denominated bonds whose proceeds could then be exchanged and used to finance investment elsewhere*[30]."

A high proportion of the capital outflow was indeed used for mergers and acquisitions in the US during 1999 and 2000. In 2001 there continued to be a net outflow, though at a lower level; and the same was true in the first half of 2002, though again at a reduced level (a net outflow of □**15.3 billion compared to** □**123.9 billion in the comparable period in 2001). In** May 2002 there was a net *inflow* into the euro area of □**37.1 billion.**

The events of 11 September 2001, however, had changed the international economic climate. In parallel with the Fed, the ECB acted rapidly to cut interest rates[31] and to sustain confidence: markets fell, then rose again. The □**/$ exchange rate entered a period relative** stability at a rate below $0.90. Though the Euro was still considered undervalued, the very fact that no dislocation of the area's economy occurred as a result of internal exchange rate movements – nor, indeed, was any longer possible – demonstrated that one of the primary objectives of monetary union had been achieved.

In mid-2002 a series of accounting scandals in the US, combined with the perception that the US trade deficit – running at some 5% of GDP – could no longer be financed by capital inflows, precipitated the long-expected fall in the $. The □ **once more reached parity with the** $ on 15 July.

The introduction of □ notes and coins

In 2001 the focus of attention had in any case moved away from the exchange rate towards the arrival of euro-denominated banknotes and coins at the beginning of 2002. Within two months after that, almost all the national currency of the twelve participating countries had disappeared for ever.

For the majority of euro area citizens, the start of EMU Stage 3 at the beginning of 1999 had made little practical difference. Despite the fact that the participating national currencies had legally ceased to exist, becoming "non-decimal subdivisions" of the □**, the latter had not been** perceived as a "real currency". During the three-year long transitional period, use of the □ **for** accounting, etc. was low; and research by the Commission found that public interest in, for example, prices expressed in euros actually fell, the result of a "boredom factor".

Rapid public acceptance of euro notes and coins, with a minimum of disruption to normal commerce, was therefore critical to the success of the EMU project.

The switch to euro notes and coins, as the Commission's *post mortem* report[32] has observed, was *"the largest-ever currency-changeover operation."* To begin with, storing and

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[30] *70th Annual Report*, Basle, 5 June 2000.

[31] No formal meeting of the ECB Council was held; the decision was made via telecommunication.

[32] *Review of the Introduction of euro notes and coins*, COM(2002)124, 6.3.2002.

distributing 51 billion euro coins – weighing 239 000 tons in total – and 15 billion euro banknotes – enough to reach, end-to-end, five times to the moon – was a major logistical operation. In addition to this, some 107 billion national coins and 9 billion national banknotes had to be withdrawn from circulation.

Secondly, the staff of banks, shops and other economic actors had to be prepared to handle the new notes and coins; and, in addition, to handle both euro notes and coins *and* national notes and coins during a transitional period of up to two months.

Finally, the general public had to be informed about, and become familiar with, the physical characteristics of the new notes and coins; their relative values; and their values in relation to the previous national currencies.

The preparations therefore included detailed national changeover plans, and major information campaigns at both national and euro area level. The national campaigns, partially funded from the EU budget, amounted to **□321 million. Another □80 million was spent by** the ECB and the national central banks. The Commission estimates that, when action by banks, trade associations, etc. is added, over **□0.5 billion was spent on public information** alone.

Funding the information campaigns was, of course, only one small element in the total cost of the changeover. Various estimates have put the full costs to both the public and private sector at between **□20 billion and □50 billion – but the European Banking Federation has put the** cost to that sector alone at **□20 billion. Such a wide range of estimates illustrates the** difficulty of calculating precise figures.

Implementation of the changeover

The smooth introduction of the **□-denominated notes and coins at midnight on 1 January** 2002 necessitated their prior distribution to banks and other economic agents. It was also agreed that some wider distribution would be useful to help make them familiar to members of the general public. The European Parliament, among others, pressed for such prior availability of both coins and lower-denomination notes. Considerations of security, however, led the ECB[33] and Council to agree only to "starter kits" of coins. The eventual timetable in 2001 was

- 1 September: coins distributed to banks and other credit institutions;
- 1 October: notes distributed to banks and other credit institutions;
- 1 December: both coins and notes available to retailers;
- 17 December: up to **□10-worth of □ coins available to each member of the general** public.

As the Commission reported, the kits of **□ coins proved immensely popular. Over 150** million of them, worth **□1.65 billion were sold during the final two weeks of December, and** in some countries initial stocks were exhausted within two days. This was in spite of the fact that the new coins could not be spent until the New Year (and only 77 attempts to spend euro notes and coins early were recorded throughout the whole euro area).

By January 1 2002, about 6.4 billion banknotes – 40% of the total – and 37.5 billion coins – 73.5% of the total – had already been pre-distributed.

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[33] These are outlined in detail in the ECB's own *Evaluation of the 2002 Cash Changeover,* April 2002.

The public normally collects about 70% of the banknotes it needs from Automatic Telling Machines (ATMs or "holes-in-the-wall"), and these were the early distribution outlets for the new euro notes. In some cases, the ATMs were loaded at midnight, enabling those seeing in the New Year to collect their first □ **notes before going to bed. In most cases, they were** converted during the course of the day. By 3 January 2002, 97% of euro area ATMs had been converted.

A critical vehicle for the changeover, however, was the retail trade. During the first few days of the year, customers unloaded their national notes and coins in the shops, obtaining euros through change. The pre-training of staff therefore proved its worth. The switch to the euro in cash payments was extremely swift: over half were in euros by the end of 4 January, three-quarters by 7 January, and 95% by the end of 16 January.

This aspect of the changeover, however, resulted in one of the few problems to arise. The ECB's evaluation observes that in most euro area countries bottlenecks built up in dealing with the national notes and coins "*due to a shortage of transportation, storage and handling capacity*", combined with the "*public's (unexpected) eagerness to get hold of euro cash*".

The speed with which the changeover took place has also raised the question of whether the period of dual circulation might have been shorter. The Maastricht Treaty originally envisaged a period of up to six months, though the Council reduced this to two months. In France (17 February), Ireland (9 February) and the Netherlands (27 January) the period was reduced even further. In Germany the D-Mark formally ceased to be legal tender from 1 January, but remained in *de facto* circulation until the end of February. The ECB, however, concludes that the two month period, "*even if not altogether and completely necessary*", was justified by, for example, the need to allow people "*a reasonable period of adjustment*".

Table 4: Future redemption of national notes and coins by central banks

Belgium	Notes: Indefinitely Coins: Until end-2004
Germany	Indefinitely
Greece	Notes: Until 1.3.2012 Coins: Until 1.3.2004
Spain	Indefinitely
France	Notes: Until 17.2.2012 Coins: Until 17.2.2005
Ireland	Indefinitely
Italy	Until 1.3.2012
Luxembourg	Notes: Indefinitely Coins: Until end-2004
Netherlands	Notes: Until 1.1.2032 Coins: Until 1.1.2007
Austria	Indefinitely
Portugal	Notes: Until 30.12.2022 Coins Until 30.12.2002
Finland	Until 29.2.2012

The ECB also notes that substantial quantities of former national notes and coins have still not been withdrawn. For example, by the time they ceased to be legal tender at the end of February, some □**38.6 billions-worth of national banknotes were still in circulation. Though** large numbers of national coins have been collected by charitable organisations at railway

stations, airports, shopping centres, etc., it is probable that a substantial percentage of those outstanding will have been lost, kept for sentimental reasons, or hoarded against their possible future value as collectors' items.

In most countries national currencies could no longer be exchanged for euros at commercial banks after the end of June 2002. They can still, however, be "redeemed" by the national central banks, in some cases for an indefinite period (see Table 4).

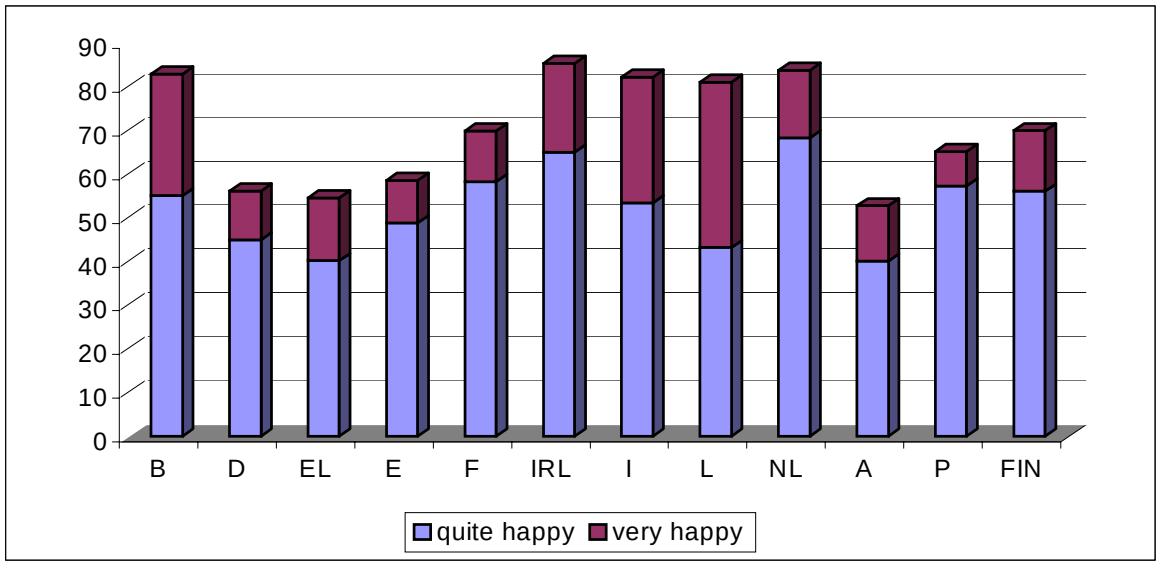
Evaluation of the changeover

The introduction into circulation of □ **notes and coins attracted massive coverage in the** media, and reports were virtually unanimous that the operation had been a success. They also noted that the forecast technical problems had largely failed to materialise, and that there had been an unexpected degree of popular enthusiasm for the new currency. ECB President Wim Duisenberg revealed to Parliament's Economic and Monetary Affairs Committee on 23 January that the Bank had prepared a large number of "emergency scenarios" in case things had gone wrong, but no scenario for the actual better-than-forecast outcome.

During 2001, considerable fears had been expressed about the opportunities the changeover apparently offered for crime and fraud. The vast quantities of notes and coins to be transported and stored seemed a tempting target for bank-robbers and hijackers. The unfamiliarity of the new banknotes created a danger that people would be unable to recognise counterfeits. In the event, incidents of bank robbery were lower than normal; and examples of counterfeits were substantially fewer than in the case of the national currencies, almost certainly the result of the exceptional security features on euro notes.

Public acceptance of the euro has been reasonably high in all the countries involved; but with significant variations. At the end of January 2002, only just above 50% were "very happy" or "quite happy" in Germany, Greece and Austria, compared to over 80% in Belgium, Ireland and the Netherlands (see Figure 2). This pattern has been repeated in subsequent polls.

Figure 2: "All in all, are you very happy, quite happy, quite unhappy or very unhappy that the euro is now your currency?"



Source: Commission Eurobarometer Flash Survey, January 2002

The prices issue

The issue which has most significantly affected acceptance of the euro is its perceived effect on prices. Indeed, this was already the case before the changeover. The March 2001 Eurobarometer found 53% of all consumers worried about "abuses and cheating" on prices. In May the figure was 61% and by July the figure reached 66%, despite considerable efforts at reassurance by traders and the authorities.

One problem has been the complexity of the mathematics. When the issue of determining the "irrevocably fixed exchange rates" was first addressed, a proposal was made to fix the ECU or *écu* (as it was then to be called) at exactly 2 D-Marks. Other exchange rates would then have been targeted to secure similarly round figures: 2000 Lire, 40 BEF/LUF, etc. The Maastricht Treaty, however, laid down that conversion should "*not modify the external value of the ECU*". This was secured by adopting the national exchange rates against the ECU as calculated on 31 December 1998 (the exchange rates *between* the participating currencies having already been fixed on 3 May 1998). The calculations were to six significant figures and resulted in the rates in Table 5 (the Drachma being added later).

Table 5: □1 at the official conversion rates

Austria (ATS)	13.7603
Belgium (BEF)	40.3399
Germany (DEM)	1.95583
Greece (GRD)	340.750
Finland (FIM)	5.94573
France (FRF)	6.55957
Ireland (IEP)	0.787564
Italy (ITL)	1936.27
Luxembourg (LUF)	40.3399
Netherlands (NLG)	2.20371
Portugal (ESP)	166.386
Spain PTE	200.482

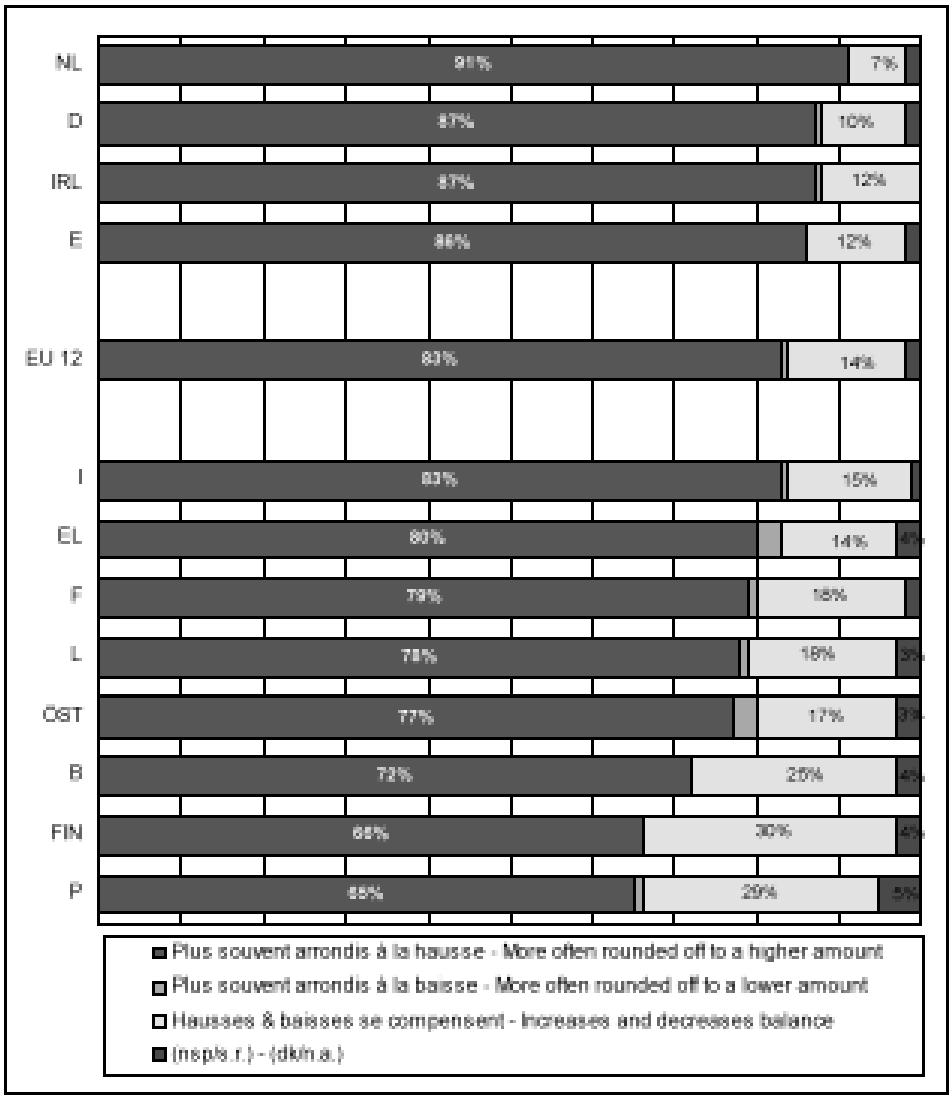
In the changeover period itself the display of prices in both national currency and euros ensured that precise conversions could theoretically be made. However, the changeover also fundamentally altered the way in which prices themselves were determined. Prior to the changeover the "lead currency" was the national one, with the □ **equivalents shown using the** conversion rates. In 2002 – and, indeed, in many cases already in 2001 as businesses began to anticipate the changeover – the □ **became the "lead currency", with the national currency** price being shown as an indicative equivalent.

This simple re-setting in euros was one potential cause of price rises. Using the statutory rates and rounding rules[34] hardly ever produced figures which were "convenient" in the sense that

[34] Very precise rules for such rounding were established at an early stage of EMU - see *The Introduction of the Euro and the Rounding of Currency Amounts*, published by the Commission in 1998 (II/717/97). In it interesting to note (though in practice the impact is marginal) that these euro rounding rules contain an in-built bias to rounding up. Where the digit to be rounded is ..5, so-called"shopkeepers' rounding" is adopted: the figure is always rounded up. This is to be distinguished from the"scientific rounding" adopted by the International Standards Organisation (ISO standard 31/0), whereby all ..5 numbers are rounded to the nearest even rounding boundary: e.g. both 15 and 25 are rounded to 20, both 35 and 45 to 40, etc.

they neatly fitted the values of the notes and coins available. For example, the round figure of LUF 1000 converted to the inconvenient □**24.79. The temptation to "round up" to** □**25 was** very strong. Retailers also frequently price goods at "psychologically attractive" levels; and the rounding rules did not automatically result in the converted price having the same marketing impact as the original. It is also possible to change quantities or pack sizes to achieve psychologically attractive euro prices, making it more difficult for consumers to compare prices before and after conversion.

Figure 3: Public opinion on the rounding up or down of prices



Source: Eurostat, May 2002

However, the forecast of ECB, the Commission and other official bodies was that the introduction of euro notes and coins would, in the long term, exert a *downward* pressure on prices through the strengthening of price competition. And in the short term, as the Editorial to the ECB's January 2002 Monthly Bulletin put it:

> *"the expectation is that this will not have significant effects on the average price level…, largely owing to strong competition in the retail sector, continued vigilance by consumers and the commitments of governments not to increase the average level of administered prices. "*

It was nevertheless conceded that "*some uncertainty still surrounds this assessment…*"

Prices: the outcome

Initial figures on inflation in early 2002 appeared to show that the changeover had indeed only affected prices marginally, if at all. Though the inflation rate rose from 2% to 2.7% between December 2001 and January 2002, this was attributed almost entirely to higher oil prices, a rise in fruit and vegetable prices as a result of bad weather, and tax increases. In February, Eurostat estimated the effect of the currency changeover on inflation at only between 0% and 0.16%, though in July it raised the estimate to 0.2%.

Yet already, from the first few weeks of 2002, anecdotal evidence began to challenge the official figures. The press reported complaints that services sector prices – notably in bars, cafes, restaurants, etc. – had generally been rounded up, resulting in often large percentage increases on individual items. Later on, surveys by consumer organisations and some official bodies found that prices appeared to have risen by more than indicated by Eurostat.

In the Netherlands, for example, the central bank revised its initial estimate of □**-induced** price rises upwards, from between 0.5% and 0.9% to 1.5%, and the consumer body *Consumentenbond* put the figure at between 1 and 2%. In Spain, the consumers' organisation OCU put the rise over the changeover period at a similar 1.6%. In France a survey by the consumer watchdog UFC, covering a "basket" of 53 products on sale in supermarkets, found that their prices had risen by an average of 1% between March and June 2002, and in some cases by over 2.5%. Similarly, in Finland, Germany, Italy and other countries, surveys showed substantial price increases in various service sectors.

These figures led to public protests, and calls for "price boycotts". In Germany the □ **was** dubbed the "Teuro"[35]. In Italy Finance Minister Giulio Tremonti called for the issuance of a □**1 banknote, on the model of the US $1 note, to "***make its value more evident*". The Eurobarometer and other surveys (see Figure 3) had already found that the public overwhelmingly believed prices to have been rounded upwards.

However, the *perceived* role of the euro in raising price levels does not necessarily conflict with the picture of little or no impact given by the overall inflation figures. First, the rounding rules result in larger percentage changes, the smaller the individual price concerned. Secondly, the public is much more sensitive to changes in the prices of goods or services bought frequently – for example, a cup of coffee – than those bought infrequently – for example, clothes or electronic goods (see Box 3).

The UFC survey in France, for example, covered only a narrow range of products. The comparable figures provided by the body charged with measuring overall inflation, *Insee*, found prices stable, using an index covering some 95% of purchases made by households, as compared to only 18% in the case of the UFC index. A 1.1% rise in the price of services had been offset by falls in the prices of, for example, clothing and petrol. The statistics for HICP inflation in the euro zone as a whole, indeed, bear out this finding (see Figure 4).

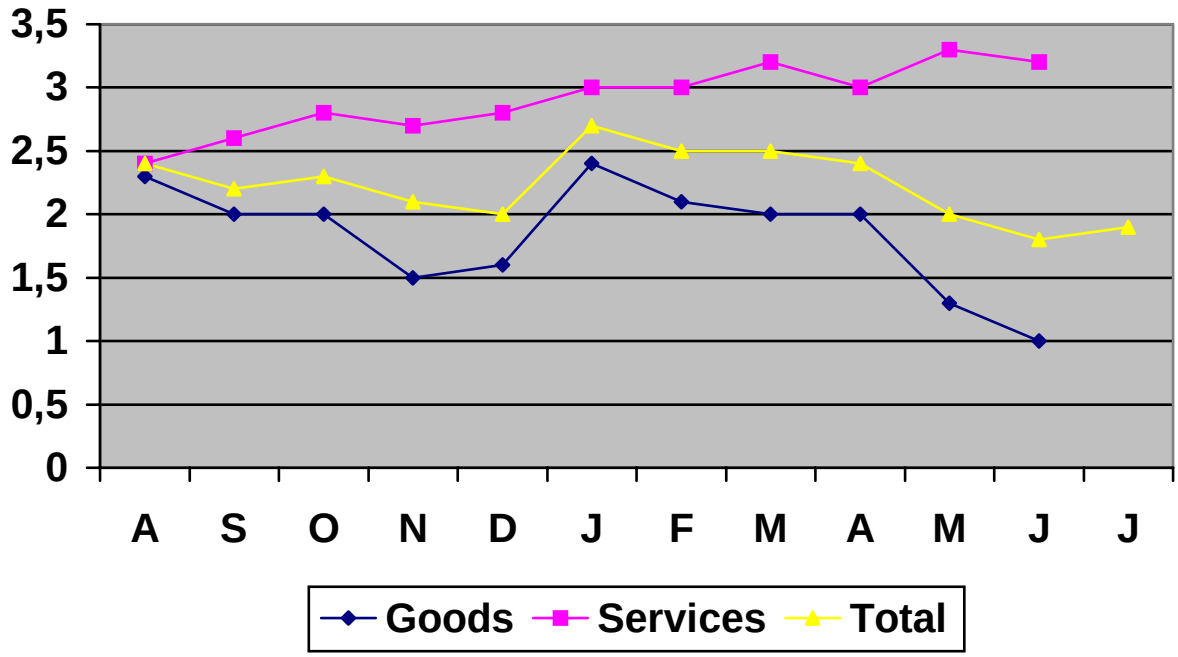
The interaction of different price changes in any case makes it virtually impossible to isolate the effect of the euro changeover from other factors. The rise in the exchange rate of the □ against the $ in mid-2002 in itself had the effect of reducing some import prices. Nor is it possible to make any clear link between the actual rates of inflation in euro area (Figure 5 and Table 6) countries and the thoroughness (or otherwise) of the preparations made for the

[35] The German word "teuer" means "dear".

changeover (see Box 4). It is finally worth observing that overall inflation for 2002 is forecast to be at around 2%, the ECB's own definition of "price stability".

Figure 4: HICP inflation in the euro area, Aug. 2001-July 2002

Annualised % changes



Source: ECB

Figure 5: Consumer price index, change July 2002/July 2001

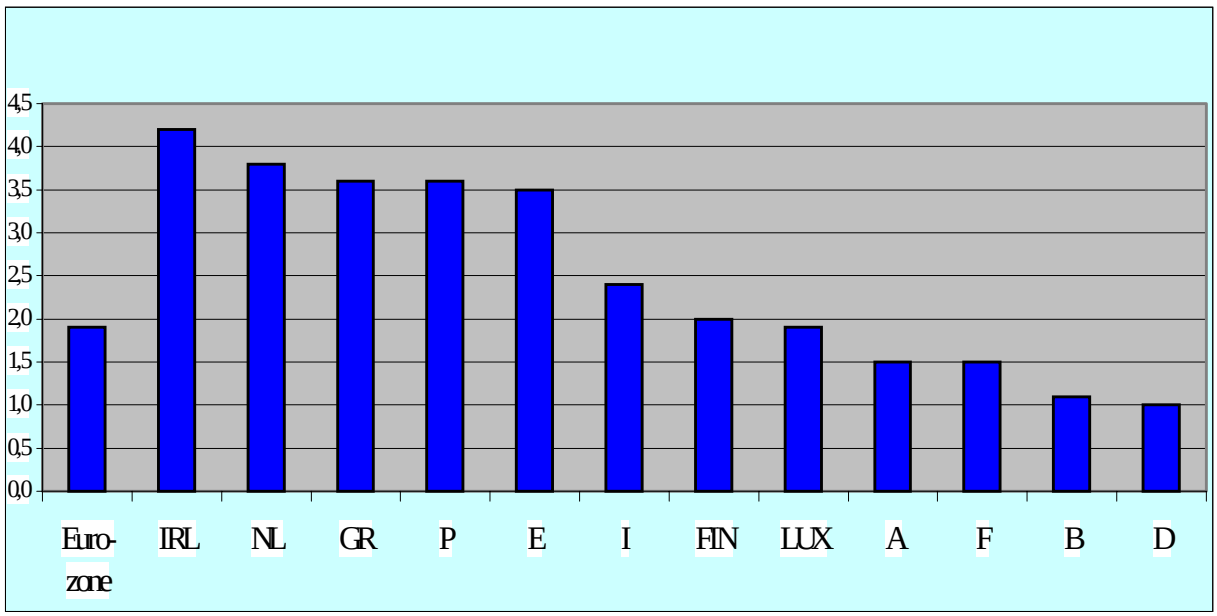


Table 6: Monthly HICP inflation by country, Jan.- July 2002

	Jan.	Feb.	Mar.	Apr.	May	Jun	Jul.
Belgium	2.6	2.5	2.5	1.7	1.4	0.8	1.1
Germany	2.3	1.8	1.9	1.6	1.0	0.7	1.0
Greece	4.8	3.8	4.4	4.1	3.8	3.6	3.6
Spain	3.1	3.2	3.2	3.7	3.7	3.4	3.5
France	2.4	2.2	2.2	2.1	1.5	1.5	1.5
Ireland	5.2	4.9	5.1	5.0	5.0	4.5	4.2
Italy	2.4	2.7	2.5	2.5	2.4	2.2	2.4
Luxembourg	2.1	2.2	1.7	1.9	1.3	1.3	1.9
Netherlands	4.9	4.5	4.3	4.2	3.8	2.9	3.8
Austria	2.0	1.7	1.7	1.7	1.7	1.5	1.5
Portugal	3.7	3.3	3.3	3.5	3.4	3.5	3.6
Finland	2.9	2.5	2.6	2.6	1.8	1.5	2.0
Euro area	2.9	2.5	2.6	2.6	1.8	1.5	2.0

Box 3: How perceptions of price may be mistaken

A Frenchman buys a cup of coffee every morning. He also buys a new shirt every month; and changes his car every three years. Each year, therefore, he buys 365 cups of coffee, 12 shirts and a third of a car.

Before the euro changeover, a cup of coffee cost him FF6; a shirt FF400 and a new car FF120000.

Following the changeover, the price of a cup of coffee was increased to the "convenient" price of **□1 (FF6.55957)** – a rise of over 9%. At the same time, the price of a shirt fell marginally to the "convenient" price of **□60 from the exact conversion price of □60.98.** Price competition also resulted in the price of a new car falling by 1%.

The Frenchman's perception of the changeover is likely to focus on the very large percentage increase in a cup of coffee, experienced every day. In fact, his cost of living, as measured by the three items, has *fallen* by 5.8%.

Item	Before changeover	After changeover	Difference
365 cups of coffee	FF2190 or **□333.86**	FF2394 or **□365**	+ FF204 or **□31.14**
12 shirts	FF4800 or **□731.76**	FF4722.89 or **□720**	- FF77.11 or **□11.76**
One third of a car	FF40000 or **□6098**	FF39600 or **□6037**	- FF400 or **□61**

Box 4: Did lack of preparation lead to price rises?

In May 2002 a "Flash Eurobarometer" survey was carried out into public opinion concerning the changeover to euro notes and coins. Among the questions asked were whether respondents had felt prepared on January 1; and what they thought of the conditions in which the changeover had taken place. The survey also asked whether people felt informed about the euro, following by a question of fact to check how far this was actually so. The ranking of euro area countries as a result of the responses were:

"Well prepared"	"Good/bad conditions"	"Felt informed"	Right answer to question on □	Inflation rate (lowest first)
Netherlands	France	Finland	Luxembourg	Germany
Belgium	Luxembourg	Netherlands	Ireland	Belgium
Luxembourg	Belgium	Belgium	Italy	France
Ireland	Germany	France	Finland	Austria
Austria	Ireland	Italy	Belgium	Luxembourg
Germany	Netherlands	Luxembourg	Austria	Finland
France	Finland	Ireland	Spain	Italy
Greece	Austria	Austria	Netherlands	Spain
Finland	Italy	Greece	France	Portugal
Italy	Portugal	Spain	Portugal	Greece
Portugal	Spain	Germany	Germany	Netherlands
Spain	Greece	Portugal	Greece	Ireland

The rankings reveal one or two points of interest. The people of the Netherlands, for example, felt well-prepared and well-informed – but perhaps were not quite as well-informed as they thought they were. By contrast, the Luxemburgers and Irish did not feel particularly well-informed – but actually were. The Italians and Finns felt, and were, quite well informed; but did not feel prepared.

When these rankings are compared to that for rates of inflation over the year August 2001 to July 2002, there are no systematic correlations. High comparative inflation correlates with bad perceived levels of preparedness, information and conditions in Greece, Portugal and Spain. Low comparative inflation, likewise, correlates with good levels in Belgium.

On the other hand, Germany recorded the lowest level of inflation combined with almost the worst level of information and only a moderate level of feeling prepared. The Netherlands and Ireland, by contrast, felt well prepared and informed, but had the worst inflation.

Except in the case of Greece, therefore – and conceivably in those of Portugal and Spain – it is not possible to attribute any unusually high price rises to lack of preparation for the euro changeover. It should also be remembered that Greece, as a late-comer to the euro area, had considerably less time to prepare.

III. Fiscal and Economic Policy: the Stability and Growth Pact

"Awareness of the extraordinary things the Pact has brought about, and will continue to bring about, should not blind us to the limitations of the institutional framework in which it is applied. Still less does it mean enforcing the Pact inflexibly and dogmatically, regardless of changing circumstances. That is what I called – and still call – stupid."

(Commission President, Romano Prodi, to the European Parliament, 21 October 2002)

I would not change one letter of the Pact. Nor would I change the interpretation.

(Theo Waigel, former German finance minister, 2002).

Already at the time of the Maastricht Treaty, the Commission had noted that EMU was

> "*unique in history*:*…a single monetary policy coupled with a largely decentralized fiscal policy"*[36].

The possibility of conflict between the two generated considerable debate, one result of which was specific Treaty provisions to prevent Member States from running "excessive deficits" (see previous Chapter).

The "excessive deficits" procedure

Article 104 of the Treaty empowers the Commission to

> *"monitor the development of the budgetary situation and the stock of government debt in the Member States with a view to identifying gross errors*".

The 3% and 60% reference values were fixed in a Protocol annexed to the Treaty.

- The **3% reference value** applies to "planned or actual" government[37] deficits. These are calculated on the basis of the borrowing necessary on the capital markets – the Public Sector Borrowing Requirement (PSBR) – rather than the statistical difference between expenditure and revenue, since definitions of the latter vary slightly between countries.
- There is, however, considerable scope for flexibility in interpretation. The ceiling does not apply if either the ratio "*has declined substantially and continuously and reached a level that comes close to the reference value"*; or "*the excess over the reference value is only exceptional and temporary and the ratio remains close to the reference value*".
- When deciding if deficits are excessive, the Commission must also take into account
  - *"whether the government deficit exceeds government investment expenditure";* and
  - *"all other relevant factors, including the medium-term economic and budgetary position of the Member State".*

[36] "Stable Money - Sound Finances: Community public finance in the perspective of EMU", *European Economy*, No. 53, 1993.

[37] "Government" is defined in Protocol 5 as "*general government, that is central government, regional or local government and social security funds, to the exclusion of commercial operations, as defined in the European System of Integrated Economic Accounts*." Further information is given in the "detailed rules and definitions" adopted under Article 104c(14): i.e. Regulation (EC) 3605/93 of 22.11.93 (*OJ L332 of 31.12.93*). This also outlines procedures for the reporting of actual and planned deficits by Member States.

- The **60% ceiling** on debt is likewise modified: it does not apply if "*the ratio is sufficiently diminishing and approaching the reference value at a satisfactory pace*".

The final decision as to whether or not a Member State has an "excessive deficit" does not rest with the Commission. This is the responsibility of the Council, acting by qualified majority. Once such a decision has been taken, the Treaty outlines a possible scenario of increasing pressure on the offending Member State.

The Council would first make confidential recommendations for action. If this did not work, the recommendations would be made public. The next step would be a more explicit demand from the Council that the Member State take deficit reduction measures within a specified time limit. There would be no right of appeal to the Court. Continued failure to comply would trigger sanctions. The Member State might be required to "*publish additional information, to be specified by the Council, before issuing bonds and securities*". The European Investment Bank might be "*invited... to reconsider its lending policy*". The Member State might be required to "*make a non-interest-bearing deposit of an appropriate size with the Community*". Finally, fines might be imposed.

The Treaty envisages keeping these procedures very much within the family: all action is determined by the Council. Decisions there are by a majority of two thirds of the weighted votes of its members, *excluding* the offending Member State. In the early stages, the details are effectively secret. The only reference to the European Parliament is the provision that "*the President of the Council shall inform the European Parliament of the decisions taken*".

The Stability Pact

The incorporation of these procedures into the Treaty, however, did not end the debate on fiscal policy. The German government, in particular, continued to argue that more stringent rules were needed to prevent the undermining of monetary policy by lax fiscal discipline. In 1995 the German Finance Minister of the time, Theo Waigel, put forward detailed proposals for substantially strengthening the excessive deficits procedure. He suggested that the reference level for deficits should be reduced from 3% to 1% of GDP; and called for an inter-governmental "Pact", which would, in effect require balanced budgets.

In June 1996 ECOFIN formally decided[38] that the procedures of the then Article 104c needed to be strengthened, notably by setting "tight deadlines" for the various steps in the procedure, and by "establishing a presumption" that sanctions would follow the persistence of an excessive deficit. The Commission itself began work on a proposal, which was presented to, and broadly approved by, an informal ECOFIN in Dublin on 21/22 September 1996.

The Commission's text did not entirely follow the original German proposal: the reference value for budget deficits was kept at 3% of GDP. The Pact was, however, adopted in 1997 under the provisions of Treaty Article 104(14), which enables the Council to interpret or replace the Protocol on the basis of Commission proposals[39].

Though the 3% as a "*reference value*" remained, the Pact made it clear that this was to be seen as "*an upper limit in normal circumstances*". The Pact also required that budgetary policies should "*create room for manoeuvre in adapting to exceptional and cyclical*

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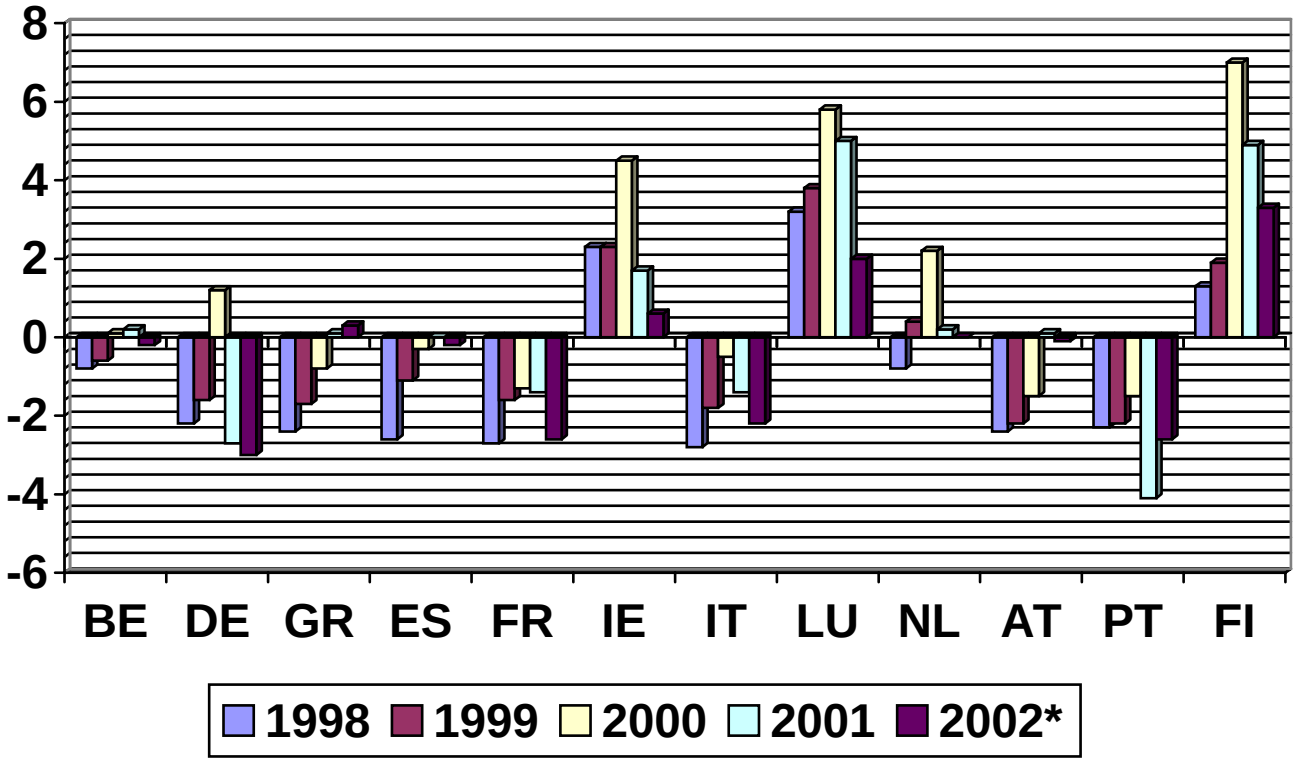
[38] See Progress Report by the Council to the European Council in Florence: "Preparations for Stage Three of Economic and Monetary Union", *UEM 15, Brussels, 4th June, 1996).*

[39] See *Stability Pact for ensuring budgetary discipline in Stage Three of EMU*, COM(96)496, 16 October 1996; and *Resolution of the European Council on the Stability and Growth Pact*, OJ C236 of 2.8.1997.

disturbances" while avoiding "*excessive deficits"*. It therefore established the medium-term fiscal objective of budgets "*close to balance or in surplus*" over the economic cycle.

In conjunction with these objectives, provision was made for three-year, rolling stability programmes[40]**,** which would outline Member States' "*adjustment paths*" towards the balanced budget objective. These, together with the broad economic policy guidelines procedure (see *Economic policy co-ordination* later), established various opportunities for early warning of deviation from the path. Finally, the provisions on sanctions were elaborated, though with possible derogations for "*exceptional and temporary*" circumstances.

Figure 6: Budget deficits/surpluses in □ area countries, 1998-2002



*Source: ECB * forecast*

The Pact in practice

Table 2 (p.25) shows that all EU Member States, with the exception of Greece, had achieved budget deficits at or below the 3% reference level in the year prior to the March 1998 assessment. Fears were then expressed that some countries, once qualification for EMU stage 3 had been achieved, might become less concerned with fiscal stringency – a danger the Pact was specifically aimed at averting. In the event, however, the process of fiscal consolidation continued following introduction of the single currency. By 2001, eight of the twelve □ **area** Member States – including Greece, which joined at the beginning of that year – had budgets either in balance or in surplus.

Four countries, however, did not; and these included the three largest national economies within the □ **area: France, Germany and Italy. Moreover the budgetary position of these**

[40] "Convergence programmes" for Member States not within the euro area.

larger economies, together with that of Portugal, had deteriorated rather than continued to improve in 2001 (see Figure 6).

This situation began to cause some concern in late 2001 and early 2002. Assessing the updated national stability and convergence programmes published at the end of 2001, the Commission proposed that Germany and Portugal should be given an "early warning", on the basis of Regulation 1466/97, because of the deterioration in their general government finances compared with the forecasts presented the year before. Both governments, however, strongly resisted the proposal; and on 12 February 2002 ECOFIN turned it down. Instead, an agreement was reached whereby the German and Portuguese governments made "declarations" committing themselves to fiscal discipline.

At the same time, doubts also began to surface about the commitments of all four deficit countries to the achievement of budgets in balance or in surplus by the year 2004. Such commitments had been re-confirmed by all Member States at the Seville European Council in June 2002. Following the elections of May and June, however, the new French Government announced substantially more expansionary fiscal policies. Finally, revised Portuguese deficit figures for 2001 showed that the even the 3% reference level had been exceeded in that year.

Criticisms and interpretations

The defence of the German Government against the Commission's "early warning" proposal had been that the operation of the Pact should take account of developments in the real economy, notably cyclical factors. The worsening of the budgetary situation had been due to a fall in the economic growth rate, itself a reflection of the deterioration in the world economy. The situation, however, would only be temporary.

The result of these events was the launching of a much more general discussion of the Pact. Some began to argue that it should be substantially revised or re-interpreted. Others, including the ECB, objected that any signs of weakening fiscal discipline might damage the credibility of the □ **itself.**

In fact, this discussion re-opened several issues already debated at the launch of EMU.

The original German proposal had been for a "Stability Pact". The agreement reached, however, was for a "Stability *and Growth* Pact", largely at French insistence. The reasoning of the French – as of a majority in the European Parliament at the time – was that EMU contained an in-built deflationary bias. The Treaty had set up an independent Central Bank, the primary mandate of which was price stability. Its secondary mandate, to "*support the general economic policies in the Community"*, was conditional on this being "*without prejudice to the objective of price stability"*. This (arguably) deflationary bias in monetary policy was combined with limitations on fiscal expansion provided by the excessive deficit procedure, which would be reinforced by the "balanced budget" requirement of the Pact.

More recently, other features of the Pact also became the subject of criticism:

- its effect on the operation of the "automatic fiscal stabilisers";
- whether cyclically-adjusted rather than nominal deficits should be used;
- its effect on public investment; and
- its apparent disregard for varying levels of debt-sustainability.

Automatic Fiscal Stabilisers

In times of rising demand, higher tax revenues and falling social expenditure automatically reduce inflationary pressures through a fiscal squeeze. Similarly, in times of falling demand, a lower tax take and higher social expenditure automatically provide a fiscal boost. The effects are therefore *counter-cyclical*. The larger the size of the public sector, and the greater the progressivity of the tax system, the larger the effect of the stabilisers. Figures for EU countries give, broadly, a 0.5% rise/fall in the budget deficit for every 1 per cent fall/rise in GDP, though this budgetary sensitivity varies between 0.3 and 0.7 for individual countries.

If the stabilisers are prevented from operating – or operating fully – however, the possibility exists that the fiscal stance will become *pro-cyclical*. This will be the case, for example, if governments cut taxes and increase public expenditure in a period of rapid economic growth. It will also be the case if taxes are required to rise and/or expenditure to be cut during an economic downturn in order to prevent a rise in, or to reduce, a budget deficit.

The official position of Commission and ECB regarding the operation of automatic stabilisers has been reasonably clear. In an analysis of "the operation of automatic fiscal stabilisers in the euro area" the ECB's *Monthly Bulletin* for April 2002 observed that:

> *"..the full benefits of automatic stabilisers can only be secured if, at the same time, countries preserve the sustainability of public finances through prudent fiscal positions and low debt."*

It also warned that there could be circumstances in which full operation of the automatic stabilisers had drawbacks:

> *"Sizeable stabilizers reflecting large public sectors can undermine efficiency because of highly distorting tax rates and can delay adjustment to a changing economic environment."*

In his opening remarks to the European Parliament's Economic and Monetary Affairs Committee on 23 January 2002, ECB President Wim Duisenberg stated that:

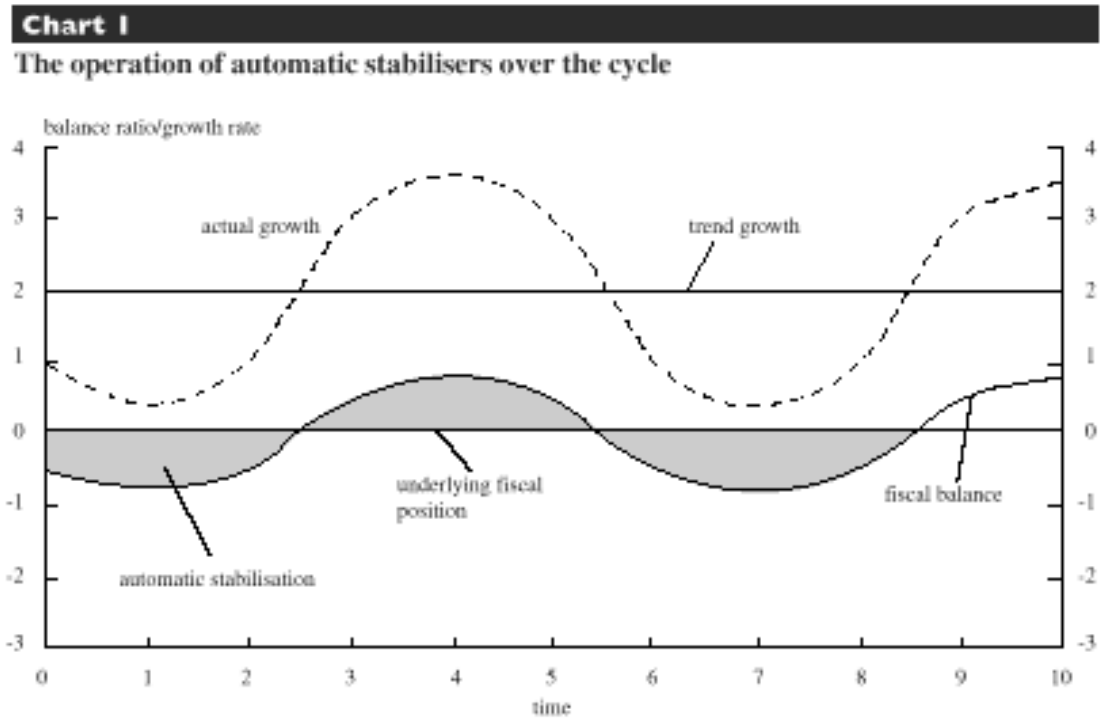
> *"…to the extent that you are adhering to the Stability and Growth Pact…so that there are surpluses or at least balanced budgets, you can also let the automatic stabilisers in the fiscal sphere do their work fully. To the extent that you…have not used the previous period, when we had a boom in the economy, to an adequate extent so that you are safely below the 3%, you can also let the automatic stabilisers function. But there are limits there. You cannot let them function fully.."*

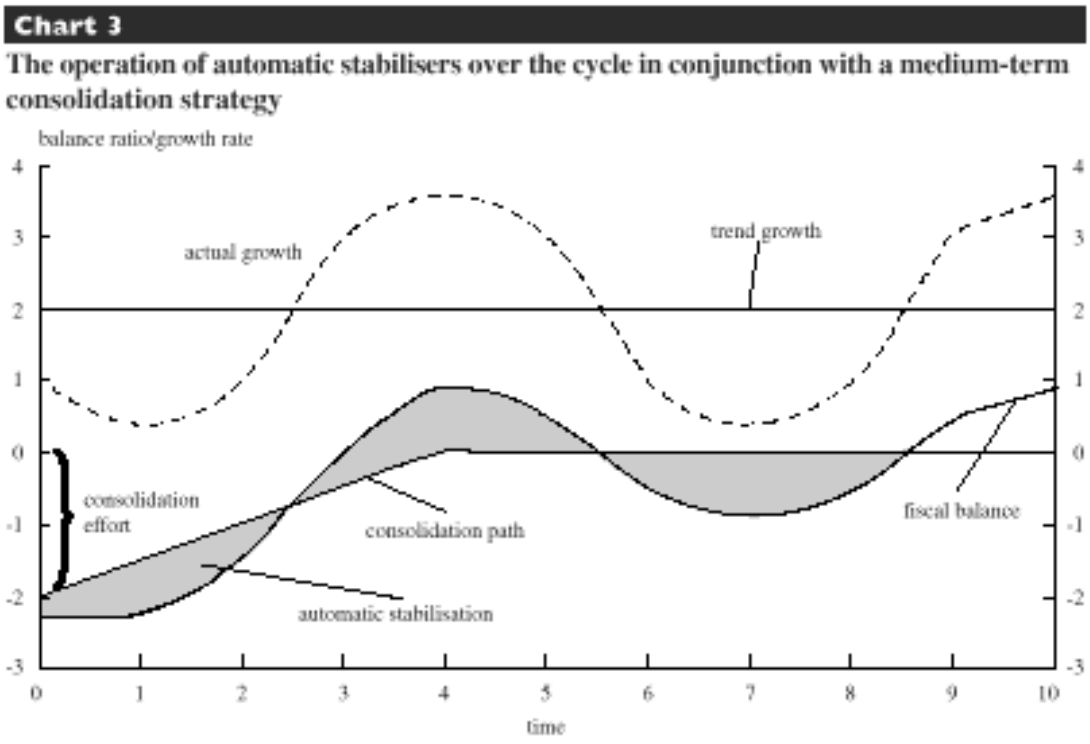
Two charts in the April *Bulletin* (see Figure 7) illustrate how the ECB envisages the operations of the stabilisers within the context of "prudent" fiscal policies. The first shows the situation where the close-to-balance position has already been attained. The second shows a strategy of consolidation combined with automatic stabilisation.

Nominal or cyclically-adjusted deficits

Immediately relevant to the issue of the automatic stabilisers is whether the budgetary balance should be defined in nominal or in cyclically-adjusted terms. Were a cyclically-adjusted budget balance (CAB) to be used, full operation of the automatic stabilisers would almost always be compatible – for those countries currently with deficits – with steady moves towards budgetary balance over the medium term.

Figure 7: Charts from April 2002 ECB *Monthly Bulletin*





The Commission and the ECB have, until recently at least, been firmly committed to nominal definitions, for the reasons outlined by the ECB President to the European Parliament's Economic and Monetary Affairs Committee on 21 May 2002:

"I am not in favour of changing the rules of the game when the game has only just begun. Although there may be merits in giving more attention to a cyclically-adjusted measure of the budget deficit, the uncertainties surrounding these measures are still so great, in particular arriving at a universally-shared view of what is precisely the cyclically-adjusted deficit, that one may be very hesitant to set aside our present methodology which concentrates on the nominal deficits as they are being published and recorded in practice."

In practice, it has always been possible to take account of cyclical positions, and to distinguish between nominal and structural budget deficits. Member States are already required to include sufficient data for "*a proper analysis of the cyclical position of the economy*" in their stability or convergence programmes. The main problems, as indicated by the ECB President, have been those of methodology: for example, how to measure trend growth, the output gap, and budgetary elasticities; and the plausibility of the assumption when estimating CABs that economic conditions for any year in question are "average"[41].

The effect on public investment

There has been a debate from the start as to whether a distinction should be made, in evaluating budgetary balances, between *current expenditure* and *capital expenditure*. The main source of concern has been that fiscal consolidation might take place largely at the expense of investment rather than current spending. A number of studies[42] analysing the results of stabilisation policies have indeed shown that raising taxes is less effective that cutting public spending; and that cutting back on *capital* projects is less effective than cutting *current* spending. In addition, capital projects are usually carried out over a longer time scale than single economic cycles, and disrupting their financing in pursuit of counter-cyclical fiscal policies can be economically inefficient. Yet there is evidence that the fiscal consolidation carried out to meet the Maastricht criteria in a number of countries was effected substantially by reductions in capital expenditure.

Though it is common to describe public borrowing as "placing a burden on future generations", this is an illusion from a macro-economic standpoint. From the point of view of future generations, the critical factor is not so much the size of the resulting debt as the use to which the initial borrowing has been put: i.e., whether the nation's stock of productive capital has been increased or reduced. The level of investment is itself a major component of the single most important determinant of debt sustainability: the level of economic growth. Put at its simplest, if GDP doubles, any given level of debt will be halved as a percentage of GDP.

It is pertinent that the United Kingdom Government currently applies a "golden rule" significantly different from the provisions of the Pact. The *current account* of the budget must balance; but net borrowing may take place to cover *net public investment*.

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[41] Conditions in any one year, of course, very seldom correspond to the average conditions over several years. See "Budgetary indicators: the cyclically adjusted budget balance" in *Public Finances in EMU,* European Economy 3, 2000; and *Potential Output: Measurement Methods, "New" Economy Influences and Scenarios for 2001-2010: a comparison of the EU15 and the US* by Kieran McMorrow and Werner Roeger, European Communities Economic Paper 150, April 2001.

[42] For example,"Fiscal Adjustment: Fiscal Expansions and Adjustments in OECD Countries" by Alberto Alesina and Roberto Perotti *(Economic Policy, October 1995)* and"Non-Keynesian Effects of Fiscal Policy Changes: International Evidence and the Swedish Experience" by Francesco Giavazzi and Marco Bocconi *(NBER Working Paper,* no. 5332, November 1995).

There are, nevertheless, arguments against distinguishing too sharply between current and capital spending. Depending upon accounting rules, current spending can be capitalised[43]; and some current spending – for example, on education – may more appropriately be considered investment. Moreover, not all investment is productive. Over-investment generates excess capacity (as recently seen in the IT sector), and in such circumstances overall welfare would be higher if the resources were spent on current consumption.

Finally, the returns from public investment are difficult to calculate; and must, in any case, be weighed against the private sector alternatives that may have been "crowded out". This may occur whether the expenditure is financed out of taxation (in which case the public has less disposable income to invest); or out of borrowing (in which case the public sector takes a higher share of net savings, and may also – depending on the volume of borrowing and debt – raise medium- and long-term interest rates, so reducing private investment).

As against these objections, however, can be set the "Keynesian" arguments touched on in the first Chapter. When an economy is operating at less than its full potential, public capital expenditure is likely to raise the overall level of investment, increasing national income through the multiplier effect. The scope for "fiscal activism" of this kind is a matter of academic and political debate (see Box 2).

Debt sustainability

The early discussions referred to at the beginning of this chapter concerning the need for controls on budget balances turned on the issue of how far financial markets would punish administrations running lax fiscal policies. Those supporting such market solutions argued that a government attempting to finance large budget deficits year after year would eventually be forced to pay ever-increasing rates of interest, and to roll over debt increasingly frequently, until financing any further deficits became impossible – provided, of course, that various kinds of "cheating" were blocked by the provisions written into the Treaty.

Clearly, a key factor in such market discipline would be the extent to which deficit financing had already been resorted to in the past, as reflected in the level of outstanding public debt. Hence the emphasis in Treaty Article 121 (formerly 109j) on "*the sustainability of the government financial position*" in assessments of a country's suitability for membership of the euro area; and also the addition of the 60% of GDP reference level for public debt in addition to the 3% reference level for budget deficits.

However, in assessing sustainability, the overall level of debt is not the only factor. Additional considerations are the maturity of the debt; and whether it is held domestically or externally. An example of how a very high level of debt can be sustainable at reasonable rates of interest was provided by Belgium, where the level of public debt at the time of the 1998 assessment stood at over 122% of GDP. Yet more than 80% of this was represented by medium or long-term loans and bonds; about the same percentage was held by Belgian residents; and Belgian taxpayers appeared quite willing to pay for large primary budget surpluses in order to fund interest payments of some 9% of GDP.

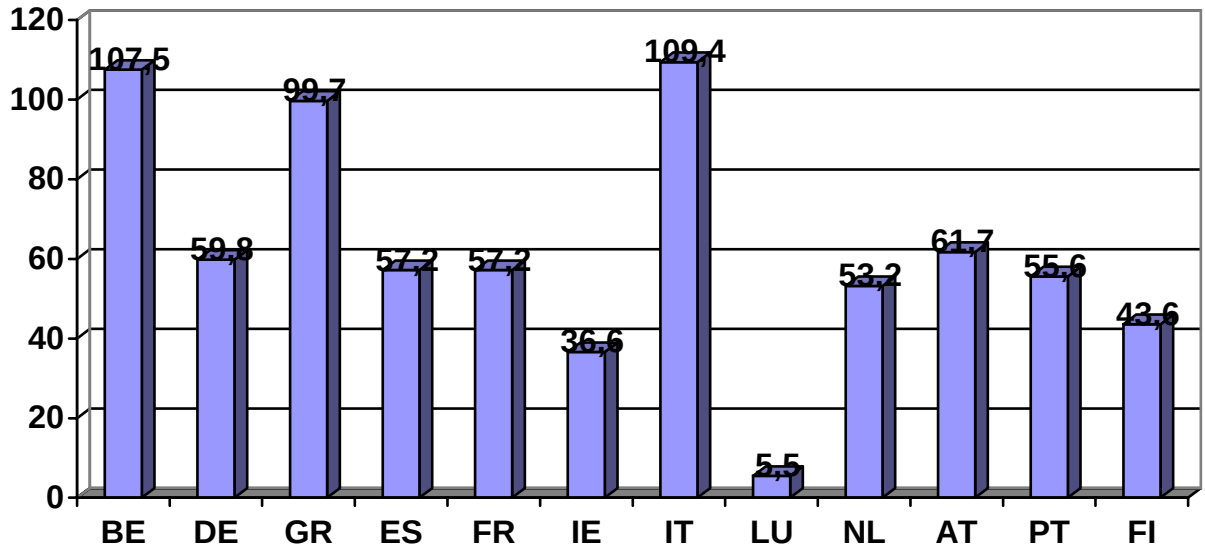
Critics of the Growth and Stability Pact have argued that such considerations of sustainability have been ignored in the assessment of budget deficits. In the case of Portugal, for example – though the deficit in 2001 was above 3% of GDP – the level of debt is still below 60%. As against this, it can be argued that high levels of public debt are in themselves undesirable, as

[43] In the private sector the ENRON and other scandals have illustrated how switches between profit-and-loss and balance sheet can falsify a company's true financial position.

are the continuing wide disparities in the debt levels of Member States (see Figure 8). A recent ECB Working Paper[44] has examined the extent to which such disparities are a source of asymmetries in the size of the public sector, the overall tax level and the tax mix, taking into account the mobility of capital and a degree of tax competition.

In addition, the standard figures for government debt do not include certain liabilities. Of these, by far the most important is the liability for future pension payments. Old age and survivors' benefits represent some 45% of total EU social protection spending, equal to 12% of GDP. For most Member States, this budgetary item is set to rise, though projected fiscal positions of vary not only as a result of demographic factors, but also as a result of differences in such commitments. Simulations indicate that, in most Member States, public pension expenditure is set to rise by between 3% and 5% of GDP during the next 50 years[45], with France, Germany, Austria, Portugal, Greece and Spain most exposed.

Figure 8: Euro area countries – government debt in 2001 (% of GDP)



Source: ECB

Virtually all these pension schemes operate on the basis of "pay-as-you-go": that is, current pensions are paid out of the contributions made by current workers. In the absence of funding, these schemes therefore take the form of a commitment to future public expenditure, in the same way as does interest on, and the repayment of, outstanding debt. A number of ways exist to reduce such potential budgetary problems; and all Member States are, to a greater or lesser extent, engaging in reforms to their pension systems.

- **Reductions in current budgetary deficits and debt levels** in order to build up a "cushion" against future pension commitments. The Commission's Report on the implementation of the 2000 Broad Economic Guidelines noted that

  "Several Member States (Belgium, Spain, France, Ireland and Finland) have created or announced the establishment of pension reserve funds…[but] these reserve funds,

[44] Krogstrup Signe, "Public Debt Asymmetries: the Effect on Taxes and Spending in the European Union", *ECB Working Paper* 162, August 2002.

[45] See Quintin O., *Making Pensions Sustainable - the approach of the European Commission*, Brussels, 2000.

with the exception of Ireland, remain relatively small in relation to the budgetary impact of ageing populations and need to be supplemented with other policies".

- **A reduction in future public expenditure commitments** through such measures as an increase in the retirement age and a change in the benefit indexation formula: e.g. by linking pensions to the price level rather than to average incomes, as in the case of the UK pension reforms of the 1980s. A recent study prepared for ECOFIN, for example, calculated that, to compensate for increased life expectancy without reducing benefits, the retirement age should be raised by 2 or 3 years.
- In conjunction with such a reduction in budgetary commitments, **a switch to funded private schemes**, possibly on a mandatory basis in the case of occupational schemes.

It is important to bear in mind, however, that a shift from public "pay-as-you-go" schemes to public or private funded schemes *does not alter dependency ratios* (see Table 7). Future pensions, whether paid out of contributions and taxation or through income from investments, must still be financed out of future production.

Table 7: Old Age Dependency Ratios, 2000-2050

Calculated as the numbers aged 65 and over divided by the numbers aged between 20-6

%	2000	2010	2020	2030	2040	2050
B	29.5	31.1	38.0	48.8	53.5	52.0
DK	25.5	29.6	35.7	42.0	47.0	43.7
D	28.0	34.1	38.6	50.3	57.0	56.1
EL	30.2	33.6	38.0	44.4	54.7	61.6
E	28.7	30.7	35.2	44.7	59.8	68.7
F	28.5	29.5	38.1	46.4	52.1	53.2
IRL	20.3	20.5	26.2	32.1	38.4	46.6
I	30.7	35.5	42.1	52.9	67.8	69.7
L	24.8	27.6	33.0	42.5	47.2	43.5
NL	23.1	26.2	34.7	44.2	50.1	46.9
A	26.3	30.1	34.5	47.0	57.0	57.7
P	26.7	28.5	32.2	37.2	46.3	50.9
SF	25.9	29.7	41.4	49.5	49.7	50.6
S	30.9	33.8	39.8	45.4	48.9	48.5
UK	27.8	28.5	33.9	43.1	49.1	48.5
EU-15	28.3	31.4	37.3	46.8	55.0	55.9

Source: COM(2000)622), Commission Communication of 11 October 2000.

The Commission and ECOFIN response

On the 9 July 2002, the European Commissioner for Monetary Affairs announced a number of proposals to introduce "greater flexibility" into the operation of the Stability and Growth Pact. Work had already been under way to agree a common method for calculating cyclically-adjusted deficits, which would be used as a "working tool" in conjunction with nominal deficits. New guidelines on the scope for budget deficits in the short term would take account of public investment, the level of public debt, and pension liabilities. ECOFIN broadly welcomed these proposals two days later, while reaffirming the need for fiscal discipline and the major thrust of the Pact.

It was the opinion of some commentators that this development represented a victory for the critics, and that the EU's support for fiscal stringency was weakening. However, a close reading of Treaty Article 104, from which the Pact derives, shows that flexibility of the kind described by the Commissioner was already implicit in the "excessive deficit" procedure. Incoming French finance minister Francis Mer also drew attention to the decision on nomenclature taken by the Council in 1997:

"We want to emphasise the growth element of the stability and growth pact"[46].

By September 2002 it was recognised that France, Germany, Italy and Portugal would be unable to meet their undertakings – reaffirmed at the Seville Council as recently as in June – to balance budgets by 2004. The Commission announced that the deadline could be extended to 2006. Even so, the draft French budget for 2003 envisaged balance being reached only in 2007. In addition, it began to seem likely that not only Portugal, but also Germany, might exceed the 3% upper limit. The German Government confirmed this overrun in October.

A meeting of the Eurogroup at the beginning of October, however, appeared to reach broad agreement on the future application of the Pact.

- No new target date was explicitly announced to replace that of 2004.
- The normal excessive deficit procedure was activated in respect of Portugal.
- Member States not in balance or surplus would reduce their structural (that is, cyclically-adjusted) deficits by 0.5% of GDP each year.

This final point was *not* agreed to by the French government in relation to its 2003 budget.

Economic policy co-ordination

Linked to the debate about the future of the Stability and Growth Pact has been one concerning the effectiveness of measures for co-ordinating general economic policies within the EU, and within the euro area in particular. All Member States – not just those within the euro area – were placed under an obligation by Article 103 of the Treaty (now Article 99) to "*regard their economic policies as a matter of common concern*, and to *co-ordinate them within the Council"*. Among the objectives was the "*sustained convergence of the economic performances of the Member States"*. Co-ordination is assisted by two procedures:

- The convergence programmes, required to prepare for EMU, have become, for participants in the euro area[47], annually updated **stability programmes**. Though formally related to fiscal policies, most Member States have expanded their scope to include general economic policy targets (growth, employment, etc.), and programmes of structural reform (taxation, social security, etc.). The programmes are the subject of annual reports by the Commission, the European Parliament and the Council.
- Article 103 (now 99) also established a procedure for laying down **broad economic policy guidelines** (BEPG), to be adopted by the Council in the middle of each year on the basis of Commission proposals.

Until 2000, not much attention was paid to this second procedure. Then, unexpectedly, the apparent inconsistency of the Irish draft Budget for 2001 with the BEPG adopted in June 2000 led to the activation, for the first time, of the disciplinary procedures contained in the

[46] Reported in the *Financial Times* of Friday, 12 June 2002.

[47] Denmark, Sweden and the UK continue to publish convergence programmes.

Article. On the basis of a Commission proposal, the Council made public "recommendations" to the Irish Government to change its policies.

This caused immediate controversy. The Irish budget was in large surplus (4.7% of GDP in 2000), and the level of public debt well below the Maastricht target of 60% of GDP (39% of GDP in 2000). The Irish government had taken a decision to use the increased revenues generated by the economic upturn to reduce taxation, in part to further reforms to the tax system; and also to increase public investment. The view taken by Commission and Council, however, was that the fiscal loosening was "pro-cyclical", and potentially inflationary.

Activation of the BEPG sanctions procedure against Ireland – the most obviously successful economy in the EU – caused great resentment in that country; and this was possibly reflected when, in May 2001, the Nice Treaty was rejected by the Irish voters in a referendum. It can also be argued that the sharp slowdown in the US economy during 2001, having a particularly marked effect on Irish FDI, justified the government's fiscal stance.

In any case, shortcomings in the procedures for the co-ordination of economic policies, particularly in the timing of different initiatives and reports, were already becoming apparent. In March 2002, the Barcelona European Council called for improvements.

In September 2002 the Commission therefore adopted a Communication[48] proposing to "*streamline and synchronise*" the various processes.

> *"…as new elements have often been added on an* ad hoc *basis without necessarily taking the wider picture fully into account, the present framework has arguably become complex and difficult to understand and explain."*

The proposed changes included rationalisation of the timetables applying to the BEPGs, the European Employment Strategy, as well as the Internal Market procedures, the Cardiff Process of economic reform, the Macroeconomic Dialogue with the social partners under the Cologne Process and the various reports and scoreboards associated with these and other policies (see Figure 9). Less emphasis had to be given to the formulation of policy guidance, and more to implementation. There also had to be

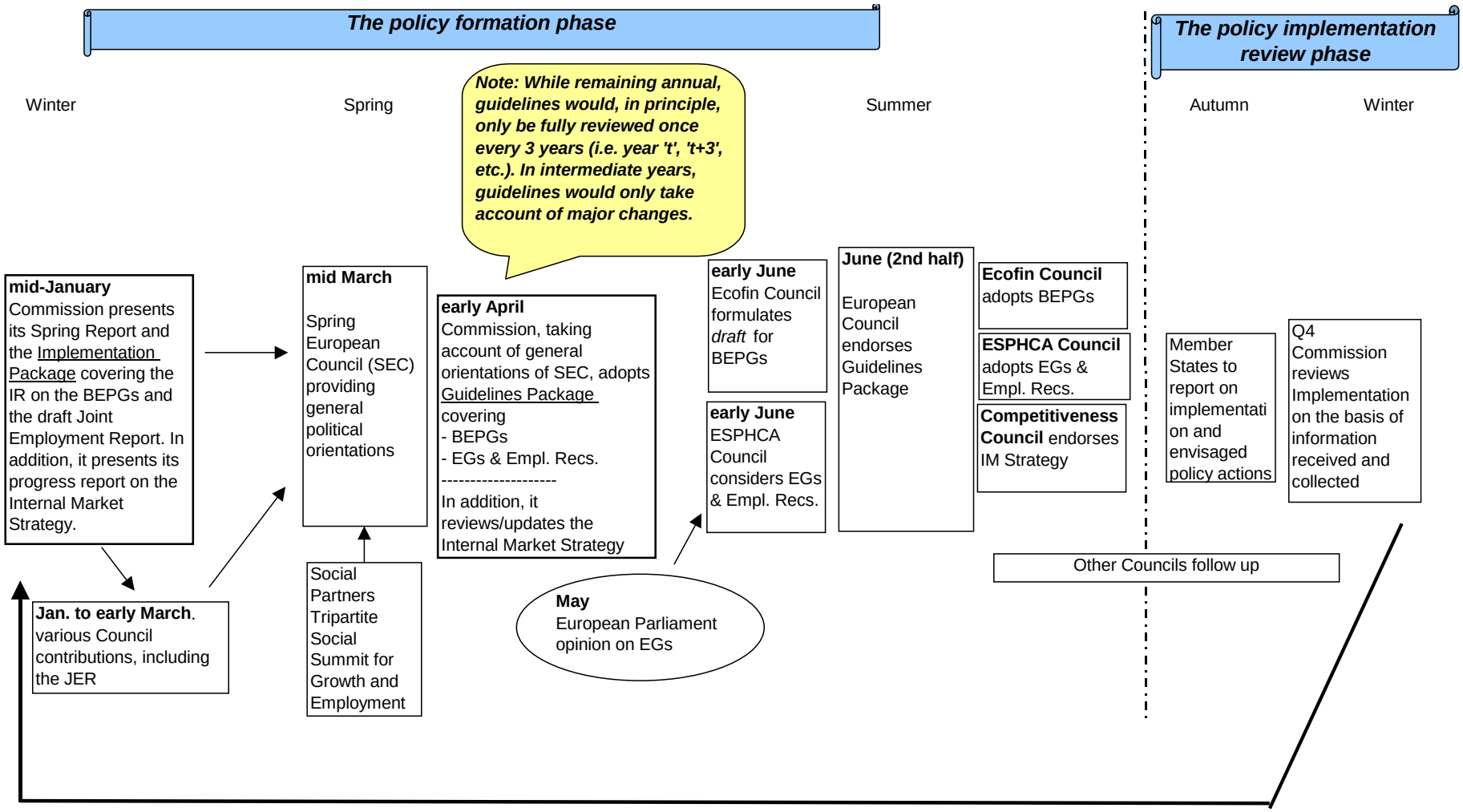
> *"a wider-shared commitment and 'ownership', including through a stronger involvement of the EP, the national Parliaments and a better consultation of the social partners and civil society".*

Glossary to Figure 9

BEPGs: Broad Economic Policy Guidelines
EGs: Employment Guidelines
Empl.Recs.: Employment Recommendations
ESPHCA: Employment, Social Policy, Health and Consumer Affairs
IM Strategy: Internal Market Strategy
IR: Commission's Implementation Report on BEPGs
JER: Joint Employment Report
SEC: Spring European Council

[48] *Communication…on Streamlining the Annual Economic and Employment Policy Co-ordination Cycles*, COM(2002)487 of 3.9.2002.

Figure 9: Flow chart on the proposed streamlined policy co-ordination cycle



IV. Some further issues

"What is Europe's telephone number?"
(attributed to Henry Kissinger)

Institutional Issues

The action taken against Ireland under the Broad Economic Policy Guidelines procedure may have had one beneficial effect, as the Irish Finance Minister himself later remarked to the European Parliament's Monetary and Economic Affairs Committee: the minds of finance ministers would be better concentrated when future broad guidelines were discussed. Strengthening the workings of ECOFIN (the Council of Economic and Finance Ministers) has indeed been one of the main elements in the search for "economic government".

Such a strengthening has, from the start of EMU Stage 3, faced an institutional problem: the fact that the membership of ECOFIN is not coterminous with that of the euro area. The Treaty provides for this situation by removing the voting rights of non-participants when matters affecting the euro area alone are to be decided. The fact that the revolving Presidency of ECOFIN can be held by a non-participating Member State is resolved by passing on the Presidency to the next country in line when euro area matters are under discussion[49].

Yet very early on the participating ministers found that a more structured arrangement was required. Accordingly, a body known as "euro eleven" rapidly emerged, comprising the ministers of the (then) eleven euro area Member States. Having a far smaller attendance than the full ECOFIN, and being informal in nature, it proved an efficient forum for economic policy discussions. It began to seem likely that decisions on economic policies in general, and not just those of direct relevance to the euro area, might in practice be agreed in advance within "□ **11". After the accession of Greece to the euro area the body briefly became "**□ 12"; and the decision was taken in 1997 by the European Council to call it the "Eurogroup".

Both the President-in-Office of ECOFIN, and the President-in-Office of the Eurogroup attend the European Parliament to present reports – sometimes in the person of one minister, sometimes of two. There are now proposals to turn the body into a "Finance Council for the Euro-area", with formal decision-taking powers.

Such complexity is also one aspect of wider institutional problems. For example, one of the more plausible explanations for the disappointing performance of the euro's exchange rate against the dollar during 2000 and 2001 was that *"nobody is in charge of exchange policy"*[50]. The Treaty gives the ECB no mandate to conduct an exchange rate policy, even if it wished to; and the remit of the Council to do so under Article 111 (formerly 109) is both limited, and contains within it the seeds of conflict with the ECB[51].

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[49] For example, during the Swedish presidency in the first half of 2001 the Presidency of the Eurogroup was held by the Belgian Finance Minister, who also became ECOFIN President-in-Office in July. The same is the case in the second half of 2002, when the Greek Finance Minister replaces the Danish President-in-office of ECOFIN for meetings of the Eurogroup.

[50] Munchau W.,"Euro suffers the perils of benign neglect", *Financial Times*, Monday 24 April 2000.

[51] The Council – having consulted the ECB, but *without* the object of reaching a consensus – has the power to *formulate general orientations for exchange-rate policy in relation to [non Community] currencies.* Also, under the same procedure as for general orientations,

The Conduct of Monetary Policy

As experience with monetary union has been gained, a number of questions have also emerged concerning the conduct of monetary policy itself. At an operational level, the ECB has been criticised on a number of counts, particularly on its presentation of policy.

At a more fundamental level, there have also been critiques of the Treaty framework within which the ECB is obliged to operate. In addition to the issue of the □**'s exchange rate, the** primacy of price stability over all other economic objectives has been contrasted unfavourably with the mandate of the US "Fed", which gives equivalent weight to factors like growth and employment.

Monetary or Inflation targets?

One particular issue, discussion of which began well before the start of EMU Stage 3, has been the decision of the ECB to base monetary policy on the "twin pillars" of:

- a 4.5% "reference value" for the annual growth of M3; and
- a "broadly based assessment" of possible price developments, based on indicators from the bond and exchange markets, producer prices and wages, the price of oil, etc.

Theoretically, a number of alternatives might have been chosen: for example, an exchange-rate target for the □**; a nominal income or GDP target; or a straightforward inflation target.**

The most pointed criticism of the ECB system has been of the monetary aggregate pillar. Again, a number of alternative definitions of money supply might have been chosen: M0 (basically cash in circulation); M1 or M2 ("narrow money"); or a much wider definition (M3+ or M4). The choice of M3 ("broad money") was partly because of the experience of the *Bundesbank* with this definition.

Since the start of EMU Stage 3, however, the growth of M3 has been consistently above the selected reference value, sometimes by several percentage points. At first this gave rise to fears that the ECB would react by over-tightening monetary policy. More recently, it has led to the charge that the ECB has effectively dropped the monetary pillar altogether.

In fact, the ECB admitted in early 2001 that its estimates of M3 growth had been distorted upwards by non-residents' holdings of money market paper and short-term debt securities. Its August 2001 Bulletin observed that, if fully corrected for this factor, the 3-month average for M3 growth would have been "broadly in line" with the reference value.

However, the somewhat opaque "twin pillar" approach of the ECB has been contrasted unfavourably with the more clear-cut inflation targeting operated by several other central banks, notably by the Bank of England. Though the latter's 2.5% target is marginally higher than the ECB's 2% definition of "price stability", the recent inflation record of the UK has been significantly better than that of the ECB. It can also be argued that the targeting of a precise rate of inflation makes it possible to make clear judgements as to the policy's success.

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where agreements concerning monetary or foreign exchange regime matters need to be negotiated by the Community with one or more States or international organisations, the Council…shall decide the arrangements for the negotiation and for the conclusion of such agreements.… Agreements concluded in accordance with this paragraph shall be binding on the institutions of the Community, on the ECB and on Member States.

No provision is made for a situation in which, even after Council/ECB consultations, the parties fail to reach agreement. The ECB, under the terms of its Statute, as well as Treaty Article 105, would be legally obliged to oppose any arrangement which, in its opinion, threatened price stability. On the other hand, the ECB could be overruled by Council.

Most recently, statements by members of the ECB's Executive Board have clarified somewhat the status of the 2% figure. ECB President Win Duisenberg told the European Parliament's Economic and Monetary Affairs Committee on 8 October 2002 that, though there was not a formal "target range" of 1-2%, were the rate were to fall below 1% this would be "approaching deflation" as a result of measurement bias.

Accountability

The ECB enjoys greater independence than any Central Bank in any political system in history, protected in a way that does not apply to even the most independent national central bank. The status of a national Bank can theoretically be changed either by the simple passage of legislation, or, at the most, by a change in the national constitution through prescribed procedures. To change the status of the European Central Bank in any way, however, it would be necessary to change the European Union Treaty itself, requiring:

- the unanimous decision of all EU Member States; and
- the approval of any change by referendum in several of these States.

Such independence can certainly be justified. A correlation appears to exist between the degree of independence of a central bank and its record in preserving the value of the currency. Put bluntly, the short-term need to be re-elected causes democratic politicians to neglect the long-term interests of the voters. The purpose of central bank independence, therefore, is not to override the democratic process, but to re-balance the system in favour of the long-term over the short (see *The Functions of Money* earlier).

Clearly, however, there is also the countervailing danger of what has been called "Central Bank *machismo"* – a desire to enhance its own reputation by breaking records for price stability, even if that leads to low growth and high unemployment. It is no accident that a major argument used by those who have opposed EMU has been that too much economic power is being handed over from "elected parliaments to un-elected central bankers". They echo the opinion of US President Andrew Jackson, who vetoed the creation of a US Central Bank in 1832 because he thought it would become a "monster".

The answer to this problem provided by the Treaties was to make the ECB broadly accountable to the European Parliament. The ECB is required to

> "*address an annual report on the activities of the ESCB and on the monetary policy of both the previous and current year*"

which the President of the ECB must then

> *"present …. to the Council and to the European Parliament, which may hold a general debate on that basis*".

In addition to this annual procedure

> "*the President of the ECB and the other members of the Executive Board may, at the request of the European Parliament or on their own initiative, be heard by the competent committees of the European Parliament*".

By agreement between the ECB and the Parliament, the second of these provisions has now been developed into a regular "monetary dialogue", based on quarterly, public appearances by the ECB President (or occasionally the Vice-President) before Parliament's Economic and Monetary Affairs Committee. The Committee, for its part, has established a panel of academic and other experts to provide Members with detailed briefing before each meeting.

All these papers, together with verbatim transcripts of the meetings themselves, appear on the Parliament and ECB Internet web pages within a few days.

Transparency

One central source of continuing disagreement between ECB and Parliament, however, concerns the extent to which the ECB's decisions are "transparent". To a considerable degree, the ECB is one of the most open central banks in the world. In addition to the Annual Report, it publishes a *Monthly Bulletin* as well as analytical *Working Papers, Occasional Papers,* Information Brochures and a large number of other background documents. The July 2002 OECD *Economic Survey* of the Euro Area observed that

> *"overall….the Eurosystem does score better on transparency than most other major central banks, and better as well than the pre-1999 Bundesbank. This assessment has been reconfirmed by a recent report by the IMF*[52]*…"*

Parliament, however, has always maintained that *"it must be possible to establish why and how the ECB is taking its decisions"*[53] . For this, it would be necessary to publish, within a few weeks, the minutes of the ECB's Governing Council at which key decisions have been taken by the six Executive Board members, together with the twelve governors of the participating national central banks.

Table 8: Comparison of the release of minutes and verbatim transcripts by the Monetary Boards of the four major Central Banks.

	Bank of England	Bank of Japan	ECB	Fed. (US)
Release of minutes after..	13 days	1 month	n.a.	5-8 weeks
Minutes provide full details of:				
• **internal debate**	Yes	Yes	No	Yes
• **individuals' views**	No	No	No	Yes
• **individuals' votes**	Yes	Yes	No	Yes
Keeping of verbatim transcripts	No	Yes	No	Yes
Release of verbatim transcripts after..	n.a.	10 years	n.a.	5 years

n.a. = not applicable

Source: J.P.Morgan, Guide to Central Bank Watching, March 2000, quoted in Briefing Paper for the European Parliament by Prof. Dr. S.C.W.Eijffinger, "Should the ECB Governing Council Decide to Publish its Minutes of Meetings?" of 11 December 2001.

It is nevertheless clear that there is not yet any meeting of minds on this issue. In 1998, a brief exchange between a Finnish Member of Parliament's Committee, Mrs. Hautala, and ECB President Duisenberg illustrated the point very well.

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[52] Euro Area: Report on Observance of Standards and Codes, *IMF Country Report*, No. 01/195, Washington, October 2001.

[53] Randzio-Plath, C. Report on *Democratic accountability in the third Phase of EMU*, adopted by Parliament on 1 April 1998, European Parliament, document A4-0110/98.

Hautala: "*I see that you won't publish the minutes until after 16 months. Isn't this rather a long time?"*

Duisenberg: *"There must have been a mis-translation, and I don't want any misunderstanding. I said 16 years."*

When pressed, he remained adamant that the minutes should not be published until the last national central bank governor who had participated in a decision had left office. Publication of the minutes after six weeks by the US "Fed", he believed, had sometime influenced markets, as had the disclosure of voting in the Bank of England's Monetary Committee.

A written reply from Executive Board member Otmar Issing later clarified the ECB position.

"The early publication of the minutes would jeopardize the open nature of the dialogue in the Governing Council, openness which is essential to the decision-making process. The disclosure of voting details would personalize the ECB's decisions, perhaps exposing members of the Governing Council to political pressure, something which is incompatible with the independence of the ECB".

One compromise suggested by Parliament has been for the publication of summary minutes, showing voting figures and the arguments deployed, but not names.

Cross-border payments

One issue which has caused considerable public anger from the start of monetary union has been the level of bank charges for transferring small sums between different Member States of the euro area. For large transfers, and to implement monetary policy, the ECB has created the TARGET system, which has worked well. But for members of the general public the creation of the single currency often appeared to have led to *higher* rather than lower charges.

Paradoxically, one reason has been the ending of exchange costs. Before EMU, all the bank charges for changing one national currency into another were covered by the "spread": there was one rate for changing currency A into B, another for changing B to A. Now that there are only single rates the charges have become more transparent; and since many of them are fixed, irrespective of the sum transferred, the charges in percentage terms are higher, the smaller the sum in question. The Commission found that, in November 1999, the *average* charge for a □**100 transfer was** □**17**[54]. In 2001 the average was put at □**20**[55].

Following intense pressure from the European Parliament[56], the Commission published a draft Regulation[39] on cross-border payments in 2001, which was adopted by Council later in

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[54] Report on *the preparations for the introduction of euro notes and coins*, COM(2001)190, 3 April 2001.

[55] Proposal for a Regulation on cross-border payments in euro (COM(2001)439 of 25.07.2001).

[56] See, for example, "Improving cross-border payments in the euro area", *Economic Affairs series*, ECON-123, Directorate-General for Research, European Parliament , Luxembourg, August 2000.

"Report on the Commission communication to the Council and the European Parliament on Retail Payments in the Single Market",for the Committee on Economic and Monetary Affairs, Rapporteur: Karla M.H.Peijs, document A5-0283/2000, Oct. 2000.

"Report on the proposal for a European Parliament and Council regulation on cross-border payments in euro", for the Committee on Economic and Monetary Affairs, Rapporteur: Karla M.H.Peijs, document A50357/2001, Oct. 2001; and

"Recommendation for a second reading on the common position adopted by the Council with a view to the adoption of a regulation of the European Parliament and of the Council on cross-border payments in euro", for the Committee on Economic and Monetary Affairs, Rapporteur: Karla M.H.Peijs, document A50453/2001, Dec. 2001.

the year. Its initial effect has been that, from 1 July 2002, banks must charge the same fee for any cash withdrawals or payments by card up to □**12 500, irrespective of whether the** resulting transfer is at national or at cross-border level.

Asset Prices, Credit and Investment

In July 2002, the Bank for International Settlement published a paper[57] questioning whether the price stability objective of monetary policy was alone sufficient to preserve general financial stability. Analysing data for asset prices and credit in the world's major economies since 1970, it found that

> "*financial imbalances can and do build up in periods of disinflation or in a low inflation environment*".

Moreover, low inflation and a high degree of monetary policy credibility could, in themselves, lead to over-optimism about the future and the possibility of asset price, credit and investment "bubbles".

The study, however, noted considerable problems of measurement. The BIS's own aggregate asset price index combines three asset classes: equities; residential real estate; and commercial real estate. But these components were not necessarily moving in the same direction at any one time, and had different weighting in different economies. Available data on property prices was scarce. It was nevertheless possible to state that

> "*typically, peaks in equity prices tend to lead by one or two years those in real estate prices. Residential property prices are normally those that turn last.*"

Secondly, movements in asset prices were not, in themselves, a sufficient explanation for periods of financial instability. "Booms and busts" in asset prices were "*just one of a richer set of symptoms"*. Other symptoms were a rapid expansion of credit; and above-average capital accumulation.

As a result of these factors, it was difficult to be precise about the consequences for monetary policy. As Charles Wyplosz has recently observed, "*Bubbles are a nightmare for central banks*"[58]. The problems they face have been highlighted by the controversy arising from the remarks by the Chairman of the "Fed", Alan Greenspan, concerning US monetary policy at the time of the rapid rise in equity prices during the late 1990s.

> *"…no low-risk, low-cost, incremental monetary tightening exists that can reliably deflate a bubble. But is there some policy that can at least limit the size of a bubble and, hence, its destructive fallout? From the evidence to date, the answer appears to be no*.[59]"

Rising asset prices do, of course, affect normal inflation figures directly, even if they are not included in the price indexes. The most obvious channel is the "wealth effect": higher stock market values or house prices make people feel better off, leading to increased borrowing and spending, and rising demand. For this reason, central banks monitor asset price movements closely as indicators of possible future consumer price inflation.

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[57] "Asset prices, financial and monetary stability: exploring the nexus", by Claudio Borio and Philip Lowe, BIS *Working Paper* 114, July 2002.

[58] See "Asset and Property Prices and Monetary Policy", *Briefing Note* for the Economic and Monetary Affairs Committee of the European Parliament, October 2002.

[59] *Economic Volatility*, Jackson Hole Symposium, 2002.

But, as Prof. Eijffinger has noted,

> *"..central banks do not have a political mandate to halt asset-price inflation. The public accepts that inflation in goods and services is a bad thing, but almost everybody regards rising equity and property prices as a good thing.*[60]"

Moreover, it may not be clear at any one time that rising asset prices are actually unwarranted: the US equity boom of the 1990s was widely attributed at the time to a major, technology-driven gain in productivity. Traditional central bank policy – as outlined clearly by Alan Greenspan in his Jackson Hole paper – is therefore to avoid policies deliberately designed to prick bubbles, and to act only if an asset price collapse occurs of its own accord.

Nevertheless, the BIS paper argued that there was a case for

> *"an alternative monetary policy regime under which it was understood that monetary policy had a role to play in preserving financial stability over and above keeping inflation under control in the short run".*

One simple answer would be to include asset prices in the indexes used to measure inflation. This solution, however, is "*fraught with practical difficulties*:"

> *"…the weight on asset prices in the CPI would be overwhelming (some calculations set this weight at 97%, leaving only 3% for the current CPI in the new index). Thus*, de facto*, central banks would be targeting asset prices, an impossible task.*[61]"

Prof. Thygesen instead advocates including asset prices in the index with a weighting reflecting the share of savings in total personal disposable income.

The BIS paper, on the other hand, advocates a policy which separates the price stability and financial stability objectives. Even if inflation, however defined, were under control, monetary policy might be mandated to respond to any build up of financial imbalances.

To the objection that financial imbalances are difficult to identify, the paper observed that

> *"periods of strong credit growth, booming asset prices and high levels of investment almost invariably lead to stresses in the financial system."*

It also notes that the costs of policy errors are asymmetric:

> *"If the economy is indeed robust and the boom is sustainable, actions by the authorities to restrain the boom are unlikely to derail it altogether. By contrast, failure to act could have much more damaging consequences, as the imbalances unravel."*

The paper ends, however, on a note of caution. For such a policy to be effective, there would need to be close co-operation between the monetary authorities and the regulators of the financial system. First, moreover, there was a need for "*more and better data*"; for "*more and better empirical research*"; and for "*more and better analytical research*".

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[60] "How should the European Central Bank assess asset and property prices as indicators for its monetary policy?" *Briefing Paper* for the Economic and Monetary Affairs Committee of the European Parliament, October 2002.

[61] Niels Thygesen, "Asset and property prices and monetary policy: a reassessment?", *Briefing Paper* for the Economic and Monetary Affairs Committee of the European Parliament, October 2002.

V. Enlargement of the Euro Area

"It would be completely dotty to exclude a country whose currency had been stable just because it had not had a formal two-year membership of the ERM".

*(*Eddie George, Governor of the Bank of England).

Three EU Member States – Denmark, Sweden and the UK – remain outside the euro area. Denmark and the UK have exercised their right to "opt out", irrespective of whether they meet the Maastricht convergence criteria or not, under the two relevant Protocols to the Treaty. The Danish currency nevertheless participates in the revised Exchange Rate Mechanism of the European Monetary System (ERM2).

Sweden has no formal "opt out" arrangement. At the time of the 1998 assessment, however, the Swedish central bank did not fully meet the condition of independence; and, like the Pound Sterling, the Swedish crown continues to be outside ERM2. Two subsequent assessments[62] have found the situation to be substantially unchanged. Sweden therefore has the status under Treaty Article 122(1) of a "*Member State with a derogation*".

The governments of all three countries are in principle in favour of euro area membership. But in all three, likewise, the issue will depend on the results of popular referenda. The state of public opinion in these countries – which in Denmark and Sweden at least has fluctuated widely between opposition and support over recent years – is therefore a critical factor. All three countries meet the inflation, interest rate and fiscal criteria (see Table 9).

Table 9: Denmark, Sweden and the UK: nominal convergence criteria, 2001.

	Inflation (%)	Long-term interest rate (%)	Budget deficit as a % of GDP	Public debt as a % of GDP
Reference rate	3.3	7.0	3.0 deficit	60
Denmark	2.5	5.1	2.8 surplus	43.2
Sweden	2.7	5.1	4.8 surplus	55
UK	1.2	4.9	0.8 deficit	43.2

Source: Commission

Denmark

A referendum on whether Denmark should apply to join the euro area took place on 28 September 2000. Despite a report on □ **area entry issued by the Danish Ministry of Economic** Affairs concluding that the overall impact would be positive, and despite wide support for Danish membership among most political parties, among business opinion and among trade union leaders, the result of the referendum was a "no" by 53% to 47%. Had the vote been only about the economics of joining EMU, the "Yes" campaign would probably have won. But political doubts, in particular fears about loss of sovereignty, tipped the balance[63].

[62] *Convergence Report 2000* (COM(2000) 277) of 3.5.2000; and *Convergence Report 2002, Sweden* (COM(2002)243) of 22.5.2002.

[63] See "The Eurozone in action - changes and challenges", Research Report by the Economist Intelligence Unit, London 2000.

Recently, however – and particularly since the introduction of the euro notes and coins – Danish opinion has been changing. A public opinion poll carried out in January 2002 found 57% of the sample in favour of the euro area membership, with 34% opposed. A similar balance of opinion has been reported by subsequent polls.

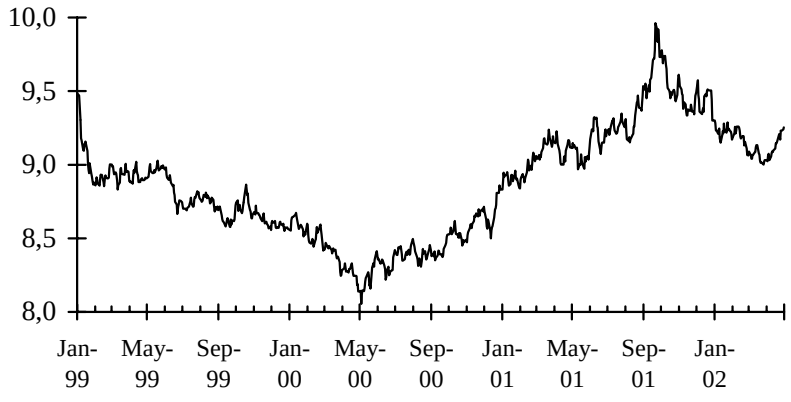
In November 2001 a general election resulted in a Liberal/Conservative coalition government under the leadership of Prime Minister Anders Fogh Rasmussen, which is strongly in favour of euro area membership. There is, nevertheless, a certain reluctance to hold a second referendum on the issue so soon after the first, given that the economic and constitutional situation has not greatly changed. Much will depend on whether Sweden and the UK also decide to vote on the issue in the near future.

Most analyses of Denmark's economic and political position, however, conclude that the country derives no real advantage from remaining outside the single currency area. It is a small, open economy, doing some 66% of its trade within the EU. The exchange rate of the currency is effectively pegged against the □**, and the central bank is effectively a "taker" of** decisions made within the European System of Central Banks, of which it is a member, but without a vote on the Governing Council.

Sweden

At the time of the 1998 assessment, Sweden fulfilled all the Maastricht convergence criteria except the requirements for central bank independence and membership of the ERM. This has continued to be the case since the creation of the euro area. Effectively Sweden has exercised an "opt out" similar to that of Denmark and the UK. But formally – unlike Denmark and the UK – Sweden is bound to join the area under the terms of Treaty Article 122[64].

Figure 10: SEK/EUR exchange rate, 1999-2002



Source : Commission services.

[64] Because non-membership of the area takes the form of a derogation from the Treaty obligations placed on countries which are members, a decision of the Council that the criteria have been fulfilled is also a decision to "*abrogate the derogations of the Member States concerned*". From the moment Sweden is judged to have met the criteria, therefore, it has no option but to become part of the euro area.

Meanwhile, the exchange rate of the Swedish crown has floated, and has fluctuated widely against the euro and other currencies (see Figure 10). This volatility, indeed, constitutes a more serious problem than the issue of formal ERM2 membership, since the Treaty makes it clear that observing the ERM fluctuation margins is required essentially to prove "*a high degree of sustainable convergence*" (see also under *The interest rate criterion* later).

As in the case of Denmark, Swedish public opinion has moved significantly in favour of euro area membership over the last year. According to Eurobarometer, support for the euro jumped from the 29% registered in the spring of 2001 to 51% only six months later. A majority in favour of euro area membership has been maintained in all polls since the launch of euro notes and coins at the beginning of 2002, even increasing further during the year.

Also as in the case of Denmark, however, there is reticence about holding a referendum until a positive outcome appears assured. Swedish Prime Minister Göran Persson has been anxious, in particular, to co-ordinate developments with fellow centre-left UK Prime Minister Tony Blair.

Mr. Persson was re-elected at general election in September 2002.

The United Kingdom

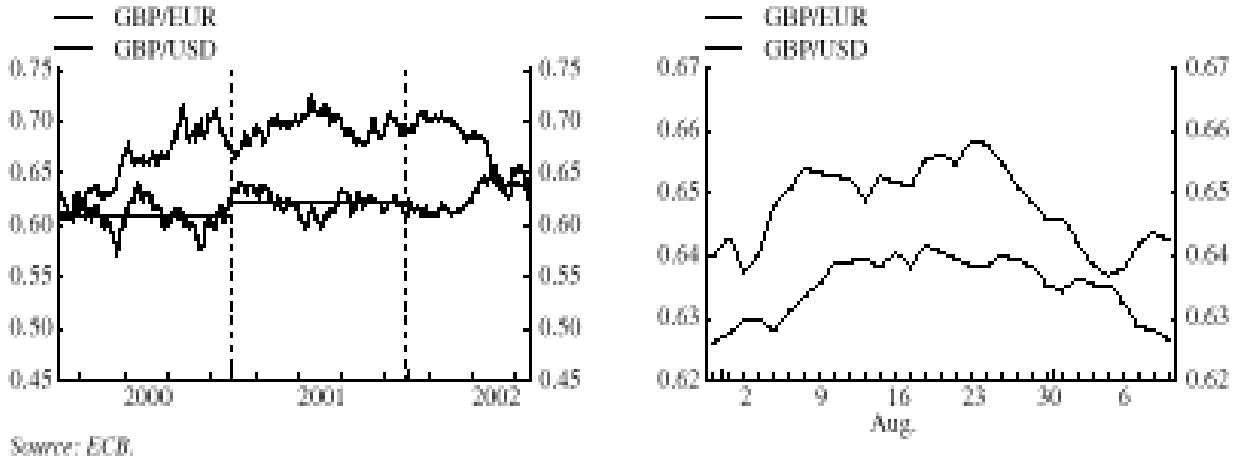
Alone among the three "out" countries, the UK has consistently shown a majority of the public hostile towards membership of the euro area.

As in the cases of Denmark and Sweden, polls indicated a sharp rise in support following the introduction of □**-denominated notes and coins. The Barclays Eurotrack survey at the time** even found a 1% majority *for* membership, on condition that the government's five economic tests were declared to have been met (see below). Subsequently, however, the division of opinion has reverted to majorities against varying between 70:30 and 60:40.

Paradoxically, however, polls have also been showing that about the same majority expect the UK to join within the next few years. According to calculation by the HSBC Bank, the financial markets are pricing in a roughly 50% chance that the UK will join during the current parliament (i.e. before 2006 at the latest).

Figure 11: Exchange rate of the £ against the $ and the □

(to August 2002)



Source: ECB.

The UK will, of course, have to meet the Maastricht convergence criteria; and, as in the case of Sweden, there is some uncertainty as to the terms on which the UK can be judged to have met the criterion concerning the exchange rate of Sterling. This has also proved somewhat volatile against the □**, tending to move in step with the $. It is possible, however, that** Sterling will now de-couple from the $, and settle in a range around 65p to the □**. Various** studies have put the "correct" rate for Sterling at between 64p-67p; 68-70p; and 65-77p.[65]

In addition, the UK Government has set five economic tests, on the basis of which it will or will not recommend membership to the electorate.

- Is there **sustainable convergence** between the UK and euro area economies?
- If there sufficient **flexibility** to cope with economic change?
- Will membership encourage or discourage companies from **investing in the UK**?
- What will be the impact on **the financial services** industry?
- Will membership be good for **employment**?

In so far as these tests can be quantified, a number of studies have shown that they have already been met. The Government, however, will issue its own assessment by June 2003. If this is positive, the referendum will follow; and, according to the UK government's latest timetable, the euro could be introduced two years later, with pounds and pence being withdrawn after two months of dual circulation.

Considerable research being carried out as a result of the need to assess the five economic tests. The UK Treasury has announced that analyses are taking place, in particular, into monetary transmission mechanisms; the housing market; national business cycles; the exchange rate; labour markets; responses to asymmetric shocks; fiscal policy stabilisers; the cost of capital; the impact on manufacturing and services; and the location of financial services. In addition, significant preparatory work has been carried out into the technicalities of changing to the euro. An outline National Changeover Plan was published in February 1997, and an updated version in March 2000.

The Applicant Countries

Eleven countries of Central and Eastern Europe, together with Cyprus (CY), Malta (M) and Turkey (TR), have applied for full membership of the European Union.

Formal negotiations are at an advanced stage with ten of these: the Czech Republic (CZ), Cyprus (CY), Estonia (EST), Hungary (H), Lithuania (LT), Latvia (LV), Malta (M), Poland (PL), Slovakia (SK) and Slovenia (SLO). Negotiations with Bulgaria (BG) and Romania (RO) are also making progress.

In the case of Turkey, the position is complicated by the status of the northern part of Cyprus, with which Turkey recently concluded an effective customs union. The member of the Commission responsible for enlargement has stated[66] that "*there are not going to be any separate accession negotiations with Northern Cyprus, and it is absolutely illusory to think that it may join the EU as part of Turkey*".

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[65] See "*United Kingdom, Sweden and Denmark on the way to EMU?*", Deutsche Bank Research, □***MU Watch*** 95, 25 August 2002.

[66] On 16.01.2001.

There is also the question of whether and when EU membership negotiations might be opened with other countries. These include Albania (AL) Yugoslavia (YU) itself (Serbia and Montenegro); and other former parts of Yugoslavia (Croatia (HR), Bosnia-Herzegovina (BIH) and Macedonia (MK)). In May and June 2001 respectively, Macedonia and Croatia took the first steps in this direction by concluding association agreements with the EU. Other potential Member States include Moldova (MD), which has cultural and political links with Romania, and the Ukraine (UA).

The Criteria for EU membership

The basic conditions for EU membership are outlined in the 1993 *Copenhagen criteria*:

- stability of institutions guaranteeing democracy, the rule of law, human rights, and respect for and protection of minorities;
- the existence of a functioning market economy;
- the capacity to withstand competitive pressures and market forces within the Union; and
- the ability to take on the obligations of membership, including the adoption of the *acquis* (existing Community law), and "*the aims of political, economic and monetary union*".

The applicant countries' progress in adopting the acquis is the subject of detailed examination by the Commission under the screening process, organised under 31 subject headings ("chapters"). Negotiations on the subject of economic and monetary union (Chapter 11) have been provisionally closed with all the current applicants except Bulgaria and Romania.

The status of new Member States in relation to EMU

Membership of the EU does not imply automatic participation in the euro area. Although simultaneous accession is not entirely impossible – subject to prior adherence to the necessary convergence criteria (see next section) – it is virtually certain that the new Member States will require a period of transition before being able to adopt the euro. In this case, the status of new EU Member States under Treaty Article 122(1), as in the case of Sweden, will initially be that of *Member States with a derogation*.

Immediately on accession to the EU, new Member States will nevertheless be under an obligation to adopt the *acquis*, and will therefore be bound by Article 4 (formerly 3a) of the Treaty, and by Title VII (formerly Title VI). These provide for membership of Economic and Monetary Union, though not initially of Stage 3 in full. In particular:

- unless an "opt out" similar to those of Denmark or of the UK is negotiated – and neither the EU nor the applicants are contemplating one – a new Member State will be required to join the euro area as soon as the entry criteria are met. Assessments are made at least every two years under Article 122 (2);
- liberalisation of capital movements will have to be complete (Article 56, formerly 73b);
- under the provisions of Treaty Article 124 (formerly 109m), a Member State outside the euro area must treat its exchange rate policy as a matter of common interest;
- though not bound by the full provisions of the Stability and Growth Pact to keep budget deficits below 3% of GDP and to maintain balanced budgets over the economic cycle, a Member State outside the euro area must endeavour to avoid excessive government deficits under Treaty Articles 104 (formerly 104c) and 116 (formerly 109e);

- likewise, all Member States are required, under Article 99 (formerly 103), to regard their economic policies as a matter of common concern and to co-ordinate them within the Council. They will be covered by the procedures outlined in the Article for multilateral surveillance and for broad guidelines;
- all Member States, whether adopting the euro or not, must abide by the three "golden rules" on public sector finance contained in the Treaty: no "monetary financing" of budget deficits; no "privileged access" to funds from financial institutions; and no "bail out" by the Community itself or other Member States;
- under Article 109 (formerly 108), national legislation, including the statutes of the national central bank, must be brought into line with the Treaty and the Statute of the European System of Central Banks (ESCB). This includes the independence of the monetary authorities and the primacy of the price stability goal. The Governors of all Member States' Central Banks will be members of the General Council (though not of the Governing Council) of the European Central Bank (ECB).

In practice, the applicant countries will need to move towards adopting much of the EMU *acquis* in the pre-accession phase. For example, the liberalisation of capital movements will in any case be necessary to fulfil the Copenhagen economic criterion of having a functioning market economy. Progress will also have to be made towards abiding by the "golden rules" on public sector finance and towards alignment of national central bank statutes with the Treaty. All the applicant states are in fact already adopting the necessary measures to meet these objectives.

Criteria for participation in EMU

Entrance into the euro area is then likely to depend upon achieving *a high degree of sustainable convergence* as measured by the criteria outlined in Article 121, (formerly 109j).

The inflation criterion

The standard established by the Treaty is "*a rate of inflation which is close to that of, at most, the three best-performing Member States*", "close" being defined in the Protocol on the convergence criteria as within 1.5 percentage points.

Strictly speaking, there is only one inflation rate for the euro itself, although price levels and their rate of change may continue to vary between different parts of the area[67]. This criterion might therefore be reasonably understood to mean within 1.5 percentage points of inflation in the euro area as a whole. The Commission's Convergence Report 2000[68], which assessed both Greece and Sweden, noted that the ECB had defined price stability as "a year-on-year increase in the Harmonised Index of Consumer Prices (HICP) for the euro area of below 2%"; adding that

> *"it therefore seems desirable that the assessment of 'a high degree of price stability' should also take into consideration the price stability performance of the euro area as well as the ECB's definition of price stability. This is all the more so since the euro area and the euro area economy constitute the economically relevant benchmarks to which countries aiming to join the euro should orient their convergence efforts."*

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[67] For an analysis of this issue see "Inflation differentials in a monetary union" in the October 1999 *Monthly Bulletin* of the European Central Bank.

[68] COM(2000)277

When Greece was adjudged to have fulfilled the convergence criteria in June 2000, however, it was assessed strictly against the then three best performing EU Member States – despite the fact that two, Sweden and the UK, were not within the euro area.

It is clear that such a strict interpretation of the Treaty creates a risk that such a country with lower inflation that that of existing members might nevertheless be refused admission.

In its Convergence Report of 2002[69], concerning Sweden, the Commission appeared to recognise this potential problem. Sweden's inflation rate was assessed, for the purposes of the report, against the three best-performing EU Member States, one of which (the UK) was not in the euro area. This gave a reference rate of 3.3%. The report also, however, added an assessment against the three best-performing *euro area* countries, which provided a reference rate of 3.6%.

Given the marginal nature of the difference, and the fact that Sweden met the criterion on either basis, the Commission made the formal assessment on the basis of the Treaty definition. The question nevertheless arises: what would have been the position if Sweden's inflation rate had been at 3.5%?

The earlier Convergence Report of 2000 had, in fact, already remarked that

> *"it is possible to envisage situations in which the average of the three best performers would not constitute an economically meaningful benchmark."*

In addition, there might arise a problem in connection with the method by which the reference rate is calculated. This is based on the 12-month average inflation rates in the three countries in question; and is an unweighted arithmetic average. There is therefore a risk that an assessment will be distorted as a result of the reference rate being partly, or even wholly based on small, low-inflation countries. In the assessment of Sweden, indeed, one of the three best-performing Member States was Luxembourg.

The interest rate criterion

The *durability of convergence* would be reflected in long-term interest-rate levels. The target level is defined in the Protocol as *an average nominal long-term interest rate* within 2 percentage points of the same three best-performing countries in terms of inflation, measured on the basis of *long-term government bonds or comparable securities, taking into account differences in national definitions.* The standard chosen in practice has been the yield on 10-year benchmark government bonds.

In addition to the same complexities as in the case of the inflation criterion, the need to assess the long-term interest rate on the basis of comparable assets may create difficulties in the case of some countries. Liquid bond markets, with a range of maturities, have not existed, or do still not exist. It is for this reason that existing estimates of conformity with the interest rate criterion by the accession countries have had to be based on proxies for a ten-year bond yield.

The exchange rate criterion

Sustainable convergence in this respect is judged by reference to

> *"observance of the normal fluctuation margins provided for by the exchange-rate mechanism of the European Monetary System for at least two years, without devaluing against the currency of any other Member State*."

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[69] COM(2002)243

This is further clarified in the Protocol as being ERM membership

> *"without severe tensions for at least two years before the examination"* and "*without having devalued on its own initiative for the same period."*

This criterion has, however, already created problems of interpretation. At the time of the original assessments in 1998, the Commission found it necessary to interpret both the phrase "*normal fluctuation margins"* and the two-year time period.

Since the ERM margins were widened in 1993 to +/- 15% either side of the central parities, they were not considered a satisfactory test of currency stability. Instead, in 1998[70] the Commission applied the criterion of +/- 2.25% around the *median* currency, which

> *"allows for deviations greater than 2.25% against the exchange rates of the remaining ERM currencies"* and "*appears most consistent with the actual working of the ERM after the introduction of the +/- 15% fluctuation bands...*"

In the case of Ireland, too, it proved necessary to interpret the Treaty. During most of the two-year assessment period the Irish Pound had moved far above the upper 2.25% limit. The Commission, however, decided to exclude movements *above* limit as a cause of non-fulfilment of the criterion.

The two-year period was defined as running from March 1996 to February 1998. The Finnish Markka had been in the Mechanism only since 14 October 1996, and the Italian lira only since 25 November 1996. Both were assessed, however, "*as if the two currencies had participated in the ERM with their current central rates for the full two-year period".*

In the case of new Member States, there is, first, the issue of whether the reference period can only begin following accession to the EU – in which case EMU membership would only be possible two years afterwards – or whether 2-year exchange rate stability *prior* to formal EU membership would be sufficient.

Linked to this is the question of whether exchange-rate systems providing for *more* stringent discipline than ERM II membership – notably the currency boards operated by Bulgaria, Estonia and Lithuania – would make the need for membership of the mechanism redundant. The counter-argument is that such systems might in fact prove *too* rigid, and that a period in ERM II would provide the flexibility needed for macro-economic adjustments (see later).

It is possible, however, that some of these problems in relation to the exchange-rate criterion will have been resolved before enlargement as a result of decisions concerning Sweden and the UK.

The position has hitherto been taken by both the UK and Swedish Governments that formal membership of ERM II is not necessary. The ERM to which the Treaty texts refer ceased to exist on 1 January 1999; and President of the European Central Bank, Wim Duisenberg himself once observed that there is no mention in the Treaty of ERM II[71].

ERM II is indeed different from ERM I in a number of respects, notably being based on bilateral exchange rate commitments against the euro, rather than the "grid" system of ERM

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[70] See pages 151-154 of "Euro 1999: Report on progress towards convergence and recommendation with a view to the transition to the third stage of economic and monetary union; Part 2: Report," European Commission, 25 March 1998.

[71] Evidence to the European Parliament's Economic, Monetary and Industrial Affairs Committee, 7 May 1998. Subsequently, however, he has agreed with the formal position taken that ERM II membership *is* necessary.

I. The Commission's Convergence Report 2002, accordingly outlines a "euro-based approach" to assessment of the exchange rate criterion.

While noting that membership of the mechanism is compatible with a 30% appreciation/depreciation against the euro, the report goes on to observe that

> *"The assessment of exchange rate stability can be made in the context of a fluctuation band of +/- 2.25% around a currency' central parity against the euro. Continuity between the approaches used in earlier assessments (when ERM still was in place) and the current one is enhanced by the fact that the median currency in the original ERM on the final day of Stage 2 was fixed irrevocably against the euro from the first day of Stage 3. The 'euro-based approach' would also imply that an appreciation/depreciation of 4.5% would be tolerated. Although, once again, a breach of the band would not necessarily correspond to severe tensions but would be assessed by reference to the same range of elements as in previous examinations."*

This description, it has to be admitted, is somewhat opaque. There follows, however, a summary of the "*conditions to be respected in fulfilling the exchange rate criterion*".

"• Participation in the ERM II at the time of the assessment is mandatory.

- *Participation in the ERM II for at least two years is expected, although exchange rate stability during a period of non-participation before entering ERM II can be taken into account.*
- *No downward realignment of the central parity in the ERM II within the two-year examination period.*
- *Exchange rate to have been maintained within a fluctuation band of +/- 2.25% around the currency's central parity against the euro in the context of the ERM II. However, the extent to which a breach of the +/- 2.25% fluctuation band would correspond to severe tensions would take account of a range of relevant considerations. A distinction is to be made between exchange rate movements above the 2.25% upper margin and movements below the 2.25% lower margin."*

It would seem, therefore, that a Member State might be able to join the euro area after perhaps as little as a few weeks' membership of ERM II – i.e. the period between the assessment by the Commission and the formal decision on membership by Council. If the "expected" membership of ERM II were chosen, however, assessment would be made on a basis similar to that applied in the case of existing euro area members.

The public deficit and debt criteria

The Treaty also requires *a government budgetary position without a deficit that is excessive*, judged against the 3% and 60% reference values.

Possibly as important as the convergence criteria themselves, however, will be the need to conform to the Stability and Growth Pact after joining the euro area, notably the requirement for balanced budgets over the economic cycle. The ability to adhere to the Pact is likely to require reforms to fiscal policy in preparation for membership even more stringent than those needed to meet the 3% criterion.

Independence of the central bank

In addition to the four tests of *sustainable convergence*, there is a fifth criterion for euro area membership: the central banks of the participating Member States must be fully independent

(Article 108) and follow a primary objective of price stability (Article 105). Article 108 of the Treaty (formerly 107) defines independence. It requires that

> *"neither the ECB, nor a national central bank, nor any member of their decision-making bodies shall seek or take instructions from Community institutions or bodies, from any government of a Member State or from any other body. Community institutions and bodies and the governments of the Member States undertake to respect this principle and not to seek to influence the members of the decision-making bodies of the ECB or of the national central banks in the performance of their tasks."*

Choices

If those countries initially outside the monetary union for political reasons soon decide to participate, there will be a strong incentive for all new Member States to do likewise. If, on the other hand, a number of countries – for example, Denmark and the UK – remain outside the euro area for a substantial period, some new Member States might choose to remain outside with them. This would, however, create a long-term division of the EU into "ins" and "outs", with possible adverse consequences for other policies, for example, the Single Market.

Precisely for this reason, there will be advantages in ensuring that euro area membership follows as quickly as possible upon EU membership. However, there are obstacles in the way of such an outcome.

Convergence

A high-level seminar held in Helsinki in November 1999, organised by the ECB and the Finnish central bank, concluded that the candidate countries should – both before and after accession to the EU – pursue in parallel the goals of nominal and real convergence with existing Member States.

- **Nominal convergence** would require reducing rates of inflation and pursuing prudent fiscal policies, as well as maintaining stable exchange rates against the euro.
- **Real convergence** would mean high levels of economic growth in order to close the very considerable gap in living standards.

Unfortunately, the policies needed to pursue the two goals are not necessarily compatible.

For example, as Prof. Charles Wyplosz has pointed out in a paper for the European Parliament[72], catching up in real terms necessitates large productivity gains; and these will give rise to the Balassa-Samuelson effect, with increases in the prices of non-traded goods inducing inflation. Yet attempts to control inflation through stringent fiscal policies, or by pegging exchange rates, could damage the process of real convergence.

In practice, a number of the candidate countries have acknowledged that complete fulfilment of the Maastricht convergence criteria is unlikely within two years of accession to the EU. For example, recent projections for the Czech budget deficit show this at between 4.9% and 5.4% of GDP, significantly above the 3% limit. The most recent figures for Hungary show a similar picture.

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[72] "The Path to the Euro for Enlargement Countries", *Briefing note* for the Committee for Economic and Monetary Affairs, May 2002.

Exchange Rate régimes

The Helsinki seminar concluded that there was no single correct exchange rate policy for the candidate countries; and, indeed, the policies currently adopted vary considerably. Three countries – Estonia, Lithuania and Bulgaria – have already linked their currencies tightly to the □ **through currency boards. At the other extreme, the Polish and Turkish currencies are** freely floating. In between are various more or less managed systems (see Table 10).

The different applicant countries are therefore likely to adopt varying strategies for achieving full euro area membership. The variety will not only relate to exchange-rate systems, but also to the internal policy mix as it affects the trade-off between nominal and real convergence. Moreover, there are inevitable interactions between internal policy choices and exchange-rate choices: for example, whether stabilisation is pursued through a direct inflation target (as is the case for the Czech Republic, Poland and Hungary) or *via* an exchange rate target.

This situation means that the different applicant countries may join the euro area with differing time-lags following their accession to the EU.

Table 10: Exchange Rate Regimes of Applicant Countries

Country	Regime
Bulgaria	Currency Board with □
Czech Republic	Managed float
Cyprus	Peg to □ **with wide band and "soft" inner band**
Estonia	Currency Board with □
Hungary	Crawling peg
Latvia	Peg to IMF Special Drawing Rights
Lithuania	Currency Board with □ **($ pre-Feb.2002)**
Malta	Peg to trade-weighted basket of currencies
Poland	Float
Romania	Managed float with $ as main reference
Slovakia	Managed float with □ **as main reference**
Slovenia	Managed float with □ **as main reference**
Turkey	Float

"Euroisation"

At the same time, possibilities also exist for full or partial use of the □ **well in advance of** formal membership of the euro area. In the past, substantial quantities of D-Marks and US Dollars have circulated in CEEC countries, particularly large-denomination bills which are used both as a store of value and a means of large-scale cash settlements. Although the D-Mark bills have not so far been fully replaced by □**-denominated bills, the use of euros as a** "parallel" currency is certain to grow as hotels, shops, transport undertakings, etc. quote prices in both national currency units and euros, and accept euros in payment.

Several voices have even been raised in favour of the full, unilateral adoption of the □ **by** certain applicant countries, even in advance of EU membership. The currency board arrangements adopted by Bulgaria, Estonia and Lithuania are already close to such a move;

and it can be noted that the □ **has already come into use as the main currency, within the** Yugoslav Federation, of Montenegro and Kosovo.

Strong opinions against such unilateral action have been expressed by the ECB, the Commission and the Council. Premature adoption of the □**, it is believed, would deprive the** countries concerned of important instruments of adjustment in pursuit of real convergence. It can nevertheless be argued that, in conditions of chronic financial and currency instability – as was the case for Bulgaria before the currency board arrangement – adoption of the □ would improve the chances of both nominal *and* of real convergence.

Again, the issue is one of trade-off. In attracting resources for economic growth, a country incurs various costs: for example, an inflation risk premium, an exchange risk premium and a default risk premium. Early adoption of the □ **can eliminate the first two; but can increase the** last. In this context Argentina's "dollarisation" experiment – both its early success and its final collapse – provides useful lessons.

Table 11: EMU convergence criteria: position of E. European accession countries (2002)

Country	Inflation	Interest Rate (10 year bonds)	Budget balance (% GDP)	Public debt (% GDP)	Exchange rate volatility (deviation last 2 years)
Bulgaria	8.0	6.4	- 0.8	59.3	- 0.4
Czech Republic	2.7	4.8	- 4.1	23.1	- 4.6
Estonia	3.0	4.4	- 1.0	5.9	-1.5
Hungary	5.6	7.8	- 4.0	51.8	- 4.7
Latvia	3.8	9.3	- 2.5	13.9	+ 5.0
Lithuania	3.3	6.4	- 1.5	28.4	+ 6.5
Poland	2.8	7.7	- 6.3	47.4	- 8.1
Romania	24.8	29.7	- 3.3	32.1	- 42.3
Slovakia	3.9	7.4	- 0.4	40.0	- 3.9
Slovenia	7.4	11.1	- 2.8	28.5	- 7.0
Reference value	3.2	7.1	- 3.0	60.0	+/- 15%*

* Current ERM2 band. Evaluation, however, likely to be made on tighter criteria (see text).

Source: Deutsche Bank Research, *EU Enlargement Monitor* no. 8. July 17, 2002

VI. The External Impact of the Euro

"Money speaks sense in a language all nations understand"

(Aphra Behn, 1681)

In terms of single currency areas, the euro area is now the world's second largest economy, accounting for about 16% of world GDP, after the United States' 21%. The euro itself is also the world's second currency, after the dollar, in terms of use as a unit of account, of payment, of finance, of investment, etc.

However, the euro is still a long way from fulfilling the hopes of those who saw it rivalling, or even replacing, the dollar as an international currency (see Box 5)

Box 5: The functions of an international currency.

A national currency can be used outside the country itself for a number of purposes, both in the private and public sector. These correspond to the three classical functions of money as a unit of account, a means of exchange and a store of value, and were outlined by Paul Krugman in *The International Role of the Dollar: Theory and Prospects* in 1991.

	Private sector	Public sector
Unit of account	Pricing Invoicing	Reference currency for exchange-rate pegs, etc.
Means of exchange	Payment Vehicle (i.e. intermediate in transactions between two other currencies).	Intervention by central banks
Store of value	Financing and Investment Portfolio allocation	Official reserves

The euro, therefore, potentially impacts upon the rest of the world in a number of ways:

- the impact of economic changes within the area itself – for example, trade creation or trade diversion effects,
- the use of the euro as a unit of account in invoicing, the pricing of commodities, etc.,
- the use of the euro as a vehicle currency in foreign exchange markets,
- the use of the euro as an investment currency in private portfolio holdings,
- the euro as an exchange rate anchor by third countries,
- the euro as a currency of intervention and of reserves by central banks,
- the use of euro cash outside the euro area itself.

Spillover effects from the economic performance in the EU

The creation of EMU has brought microeconomic efficiency gains, arising from the elimination of exchange rate uncertainty and transaction costs within the Union as well as macroeconomic stability effects, arising both from the elimination of intra-EU exchange rates and from greater discipline in monetary and fiscal policies.

Trade between member countries of the euro area has also increased since the euro was introduced by 3.3 percentage points.

The positive impact of these developments on GDP growth was, however, offset in 2001 by other economic developments inside and outside the EU, mainly by weak domestic investment and consumption demand and economic slowdown in the USA.

Table 12: Annual Percentage Change in Euro Area's GDP at Constant Prices

1997	1998	1999	2000	2001
2.3	2.9	2.6	3.3	1.5

Source: European Central Bank, Monthly Bulletin, April 2002

The result of these factors has been that the euro area's demand for imports from non-EU countries has also declined.

Table 13: Annual Percentage Change in Euro Area's Imports

1997	1998	1999	2000	2001
9.0	9.9	7.3	10.8	1.8

Source: European Central Bank, Monthly Bulletin, April 2002

It should be emphasised that these results were not caused by, but occurred despite, the introduction of euro and were probably dampened by it. Nevertheless, the United Nations Conference on Trade and Development in its annual Trade and Development Report from 29th April 2002 states that the Stability and Growth Pact of the Euro area has led to the pursuit of deficit targets with insufficient regard to the cyclical positions of the region, and monetary policy has not reacted aggressively. The report argues that while a weak euro has helped maintain foreign demand, from a global perspective, economic policy in the Euro area has been restrictive.[73]

The use of the euro as invoicing currency

In 1998 nearly all international trade that was not invoiced in the currency of either the exporter or the importer was invoiced in US dollars. Both exporters and importers have a preference for a currency with a high degree of international acceptability, and with deep, wide and liquid foreign exchange and financial markets. Nevertheless, the Commission forecast at the time[74] that the introduction of the euro would present a structural break in the invoicing practices in international trade relations. Countries which had a relatively small part of external trade invoiced in the home currency would switch to euro invoicing at an early stage of the transition period.

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[73] "The Trade and Development Report, 2002", UNCTAD Press Release TAD/INF/2850.

[74] "The Implications of the Introduction of the Euro for non-EU countries", *Euro Papers*, No. 26, July 1998, European Commission, Directorate General II - Economic and Financial Affairs, pp. 8-11.

However, in a report published in March 2001[75], the Commission stated that, despite little available evidence on invoicing, it seemed that dollar had remained by far the dominant currency and that that there had not been any significant move towards invoicing in euros. The share of the euro was put about 10-15%, as compared to 40% for the US dollar. This was comparable to the share of the DM before EMU.

A further paper published the following year[76] found that the dollar also remains the dominant quotation currency for commodities.

The use of the euro as a vehicle currency on foreign exchange markets

The use of a currency as a vehicle currency is determined by transaction costs in the bilateral markets for a particular currency.

Table 14: Denomination of Foreign Exchange Transactions

(% of daily turnover)

	1989	1992	1995	2001
USD	90	82	83	90
Euro	—	—	—	38
DEM	27	40	37	—
GBP	15	14	10	13
FRF	2	4	8	—
Other EMS currencies	3	9	13	—
JPY	27	23	24	22
Other	36	28	25	37
Total*	200	200	200	200

Source: BIS, Central Bank Survey of Foreign Exchange and Derivatives Market Activity, April 1990, 1993, 1996, 2001

**Because two currencies are involved in each transaction, the total of the shares of transactions in individual currencies amounts to 200%*

Unexpected volatility increases the inventory risk of currency holdings and thus transaction costs. Because of economies of scale in market making transaction costs decrease with transactions volume. As a result inertia is very strong in foreign exchange markets and the US dollar has therefore remained the dominant global vehicle currency since it acquired this role in the 1960s.[77] The position of the euro on foreign exchange markets was in 2001 comparable to the position held by the German mark in the middle of the 1990s.

[75] "EMU: The First Two Years", *Euro Papers*, No. 42, March 2001, European Commission, Directorate General II - Economic and Financial Affairs, p. 22.

[76] *The Euro Area in the World Economy - Developments in the First Three Years*, Communication from the Commission, COM(2002) 332, p. 38.

[77] "The Implications of the Introduction of the Euro for non-EU countries", *Euro Papers*, No. 26, July 1998, European Commission, Directorate General II - Economic and Financial Affairs, p. 12-13.

The use of the euro in private portfolio holdings

While the money market in euros has been very liquid from its inception the EU, equity markets remain relatively small. In 1996 the combined domestic market capitalisation of all 15 EU equity markets was around US$ 3.5 trillion, compared to well over US$ 6.5 trillion for the New York and NASDAQ markets.[78]

Although close integration of the euroland equity markets is still some way off, given the pronounced differences in corporate taxation and accounting standards, the elimination of currency risk should have made investment opportunities across the euro-zone more attractive. Nevertheless, the euro area has so far experienced a net outflow of both direct and portfolio investment, much of it to the United States. Part of the gross outflow of portfolio investment can however be attributed to the merger and acquisition expenditures undertaken by European companies in an effort to expand on a global scale.

Table 15: Direct Investment *(in □ billions)*

	1998	1999	2000	2001
To outside area	172.8	315.6	382.4	217.1
Into Euro area	91.5	197.5	400	123.2
Balance	-81.3	-118.1	17.6	-93.9

Source: European Central Bank, Monthly Bulletin, April 2002

Table 16: Portfolio Investment *(in □ billions)*

	1998	1999	2000	2001
To outside area	363.3	311.4	412.8	247.4
Into Euro area	253.3	265.7	301.2	288.3
Balance	-110	-45.7	-111.6	40.9

Source: European Central Bank, Monthly Bulletin, April 2002

The situation in the bond markets is, however, very different. Although there are still yield spreads between same-maturity government bonds of different member states as credit risks, liquidity, taxation and settlement practice continue to differ, the introduction of the euro has lead to the creation of a new, large liquid bond market, which has also attracted corporate borrowers.

The share of euro-denominated bond issues world-wide rose from 33% in 1998 to 44% in 2001. A relatively high increase in the euro's share in 1999 was caused by a large issuers' eagerness to establish themselves in the new currency as well as by historically low euro interest rates which increased the attractiveness of borrowing in euro also for foreign companies.[79] The drop in the euro's share in 2000 can on the other hand be attributed to reduction in the issuance of public debt in the euro area resulting from falling budget deficits in the area which was by that time not fully offset by increased issuing activity in other segments.[80] As a result, the share euro-denominated securities in the outstanding stock of

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[78] Ibid., p. 14.

[79] "EMU: The First Two Years", *Euro Papers*, No. 42, March 2001, European Commission, Directorate General - Economic and Financial Affairs, p. 22.

[80] Ibid., p. 26.

international debt securities rose to 31.7% at the end of 2001 from 28.8% at the end of 1999 while the dollar-denominated securities continued to represent around half the stock of international debt securities in circulation.[81]

Table 17: Net Issuance of Euro-Denominated International Debt Securities

% Share of total net issuance in all currencies

1997	1998	1999	2000	2001
24*	33[2]	46	38	44

Source: Monetary and Exchange Rate Policies of the Euro Area - Selected Issues, IMF Country Report, No. 01/201, November 2001, p. 50.

**Combined share of the euro-participating currencies*

The euro as an exchange rate anchor and an intervention currency

The choice of a particular currency as an exchange rate anchor depends on the importance of the trade relations with the anchor currency; the importance of the financial flows with that country; and on the stability of the anchor currency.

The percentage of the IMF member countries having some form of exchange rate peg has fallen from 86.8% in 1975 to 44.2% in 1996 as a result of the trend to adopt more flexible exchange rate regimes. The US dollar remained the main choice within this declining trend followed by the French franc.[82]

According to the European Central Bank more than 50 countries outside the euro area currently have an exchange rate regime involving an external anchor in which the euro plays a role.[83] Most of these countries are located in Europe and in Africa. Nevertheless, since the creation of EMU there has been only a marginal shift towards pegging to the euro, exclusively as a result of changes by the candidate counties (see previous chapter). There has been no move towards including the euro in the baskets to which several currencies in Asia and Latin America are pegged – the dollar has remained the dominant anchor in both areas.[84]

The dollar also enjoys dominant position as an intervention currency. The euro has, however, been used as an intervention currency by several third countries at regional level.[85]

The euro as a reserve currency

Central banks hold reserves for transactions and precautionary motives. Reserves provide the assurance that countries external obligations resulting from trade and other current account flows can be met while they also serve as a shelter from unexpected capital outflows.

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[81] "La Place de l'Euro sur les Marchés Obligataires Internationaux en 2001", *Bulletin de la Banque de France*, No. 101, May 2002, p. 39.

[82] "The Implications of the Introduction of the Euro for non-EU countries", *Euro Papers*, No. 26, July 1998, European Commission, Directorate General II - Economic and Financial Affairs, pp. 19-20.

[83] European Central Bank, Annual Report 2001, p.107.

[84] Thygesen Niels, "The Path to the Euro for Enlargement Countries", *Briefing Paper* for the Economic and Monetary Affairs Committee of the European Parliament, May 2002, p. 2.

[85] *The Euro Area in the World Economy - Developments in the First Three Years*, Communication from the Commission, COM(2002) 332, p. 39.

The introduction of the euro has not yet lead to any important reallocation of official foreign reserves. At the end of 2000, the share held by the euro was similar to the share held by the German mark in 1998. The extremely high US dollar weighting is due to the fact that the Asian countries with large reserve holdings are strongly oriented towards the US economy and thus also to the dollar exchange rate. Furthermore, the dominant position of the US dollar results from its high liquidity in foreign exchange markets given by its role as a vehicle currency which makes it the most suitable currency for official intervention.

The depreciation of the euro versus the US dollar over 1999 and 2000 might have also partly discouraged potential reallocations of third countries official reserves towards the euro. There is now some evidence, however, that the recent reversal of this trend is leading some countries to increase the proportion of euros.

Table 18: Share of Currencies in Holdings of Foreign Exchange (end of year)

	1997	1998	1999	2000
U.S. dollar	62.4	65.9	68.4	68.2
Japanese yen	5.2	5.4	5.5	5.3
Pound sterling	3.7	3.9	4.0	3.9
Swiss franc	0.7	0.7	0.7	0.7
Euro	—	—	12.5	12.7
Deutsche mark	12.9	12.2	—	—
French franc	1.4	1.4	—	—
ECUs	5.0	0.8	—	—
Unspecified currencies	8.4	9.3	8.9	9.2

Source: International Monetary Fund, Annual Report 2001

The use of euro cash abroad

Eurozone currency in circulation dropped by about 20% from □**350 billions-worth of** national legacy currencies in March 2001 to □**280 billion in March 2002. US dollars in** circulation, on the other hand, increased over the same time by about the same magnitude ($60 billion).

The drop in euro cash (compared to the national legacy currencies) can be partly attributed to the substitution of dollars for DM banknotes held outside Germany. However, according to most estimates, the amount of former DM cash held abroad amounted to less than □**20** billion. It is therefore clear that, so far, euro notes are not replacing dollar notes outside the euro area and the US – rather the reverse[86].

This may nevertheless change as euro banknotes become more familiar, especially in the candidate and other Eastern European countries. As already observed (see Chapter II), there are still considerable quantities of legacy currency banknotes in existence which have not yet been exchanged for euros.

[86] Gros Daniel: "I. The euro and Enlargement" and "II. The failure of the EU to become an actor on the global financial scene", *Briefing Paper* for the Economic and Monetary Affairs Committee of the European Parliament, May 2002.

VII. Conclusions

For most of the period between the adoption of the Maastricht Treaty in 1992 and the creation of the □ **at the beginning of 1999 it was widely thought that monetary union could not** possibly happen. Differences between national economies, the lack of a large central budget and low labour mobility meant that the EU was not an "optimum currency area". Even following the decision of May 1998 to go ahead, there were warnings that the convergence criteria had been "fudged", and that the area would soon fall apart.

In the event, many of the predictions from both optimists and pessimists have failed to materialise. The transition to monetary union took place with no disruption at all in financial and foreign exchange markets. Economic activity has not, since then, been sucked from the "poor" periphery to the "rich" core, as was once feared: on the contrary. Far from having been a one-off sleight of hand to meet the Maastricht convergence criteria, fiscal consolidation has, in the case of most countries, continued, so that overall budget deficits were only 0.8% of GDP in the year 2000 (but rising to 1.3% for the enlarged euro area in 2001).

At the same time, predictions that the □ **would soon "look the $ in the face" have been** disappointed. Net capital flows have been from Europe to America, and the □ **fell from $1.17** at its birth to below $0.85, before recovering to parity in July 2002.

Criticisms have also emerged of the ESCB/ECB's conduct of monetary policy. The twin-pillar basis of the strategy to ensure price stability – a reference value for M3 growth, and "a wide range of other economic and financial indicators" – has seemed opaque compared to a single inflation target. The Bank has been criticised for failing to make its intentions clear to the markets. M3 has consistently been above its 4.5% reference value, and inflation has recently been above the Bank's own 2% definition of price stability. Many commentators have thought the Bank too cautious in making short-term interest-rate changes.

Overall, however, there can be little doubt that EMU has been a success. Inflationary expectations, as measured by long-term interest rates, have been at an historically low level. The replacement of eleven national currencies of the euro area by □**-denominated notes and** coins at the beginning of 2002 took place with unexpectedly few problems.

The focus of attention now moves to a number of other issues.

- Questions remain about the "economic" dimension of Economic and Monetary Union. The "stability/convergence programmes" and "broad economic guidelines" procedures and the role of the Eurogroup of Finance Ministers are still developing, and need to be co-ordinated with other policy instruments.
- The euro area has not, as was once predicted, been insulated from the economic downturn in the United States. In some national economies growth remains low, and unemployment high, notably in the largest, Germany. This has made considerably more difficult the process of fiscal consolidation required by the Stability and Growth Pact, with the result that pressure has grown for the Pact to be "re-interpreted".
- Denmark, the UK and Sweden remain outside the euro area, though within the EU (and also the European System of Central Banks). It is not yet clear if they will adopt the □**.** Public opinion in Denmark and Sweden (but not the UK) is now favourable, and referenda on the issue may take place during 2003 in one or more of the countries.
- Eleven countries of Central and Eastern Europe, together with Cyprus, Malta and Turkey, have applied for full membership of the EU, and formal negotiations are at an advanced stage with ten of these. Once in the EU countries will be expected to adopt the □ **when**

they have fulfilled the convergence criteria. The euro area will therefore become much larger at some time in the future, with both economic and institutional consequences.

- Debates continue about the international monetary system. Although there are no concrete moves to replace the current system of floating rates, proposals also exist for a more structured system. Prof. Mundell has suggested that the $ and the □ **should be linked at** 1:1 within a 2 cents margin of fluctuation either way[87]. This would go a long way towards creating a world currency.

[87] "Does the $/□ **rate need to be managed?", paper delivered in Luxembourg, 8 March 2000.**

Addendum on the replaced national currencies

After the Dutch guilder (27 January), the Irish Pound (9 February) and the French franc (17 February), on Thursday 28 February Europe said its good-byes to the nine other currencies of the countries which now make up the euro area.

The Deutsche Mark

The DM was created on 20 June 1948 in West Germany, theoretically replacing the valueless Reichsmark. The latter had been introduced to succeed the old mark only two decades earlier, following the hyperinflation of 1923.

On 1 July 1990, after the fall of the Berlin wall, the Deutsche Mark was introduced in East Germany, monetary unification preceding by a few months the reunification of the Germany, which took place on 3 October.

Symbol of the German economic miracle after the war, the DM ceased to be legal tender at midnight on 31 December 2001.

The French franc

Historically, the first "franc" came into existence in 1360 in order to ransom King John II ("the Good"). After a stay in English gaols, he was then able to return to his own territory "franc" i.e. free.

After having made way for the *écu*, then to the *teston*, the franc re-appeared with the Revolution, and then under the Empire. It became official currency in 1803.

Its name was exported to several European countries: Belgium, Switzerland, Luxembourg; and also to the French colonial territories in Africa.

The Belgian Franc

The franc was declared the official currency of Belgium by King Leopold I on 5 June 1832. As a young state, independent of the adjoining Netherlands, Belgium chose to model its monetary system on that of the French.

In 1944, the Belgian franc was briefly linked to the pound sterling; then, in 1946, to the dollar.

The Luxembourg Franc

The franc became the currency of the Grand-Duchy in 1848. In 1921, Belgium and Luxembourg formed a monetary union.

The Dutch Guilder

The first guilder was struck in Florence in 1252. Thereafter, over more than two centuries, it was used as currency by numerous European countries. In the Netherlands it became official currency in 1521 under Charles V, during the golden age of Flanders.

The Italian Lira

The lira became Italy's official currency on 24 August 1862. However, it was Napoleon who had the first lira struck, in 1808 in Milan. It first circulated in the north of the country before extending to the rest of the peninsula. The term lira comes from Latin *libra*, a unit of weight adopted by the Romans in 269 BC.

The Spanish Peseta

The peseta became the official currency of Spain on 18 October 1868. Hitherto, the currency carrying the name of peseta coexisted in Spain with the *duro*, the *peso*, the *escudo* and the *real*. The first pesetas had been struck in Barcelona in 1808 by the occupying French troops.

The Portuguese Escudo

The escudo became the official monetary unit of Portugal on 11 May 1911, replacing the *real*, following the revolution of 1910 which had established the Republic. The escudo had first appeared in the 15th Century, in the reign of Alphonse V, in the form of a gold coin.

The Irish Pound

The Irish Pound, also called the *punt*, became the official currency of the Ireland on 20 August 1927, six years after the creation of the Irish Free State. It remained linked to the UK's pound sterling until 1979, when the punt joined the European Monetary System (EMS), (but the pound sterling did not).

The Greek Drachma:

The Greek drachma is regarded as the oldest currency in the world[88]. It appeared in the 7th century BC in Asia Minor. After a very long eclipse, it was chosen as national currency of Greece on 8 February 1833, when the country became independent from the Turkish empire.

The Austrian Schilling

The Schilling replaced the crown as Austria's currency in 1923, following a period of hyperinflation. After *Anschluss* (the annexation of Austria by Nazi Germany) in 1938, the schilling circulated in parallel with the Reichsmark until 1945.

The Finnish Mark

Tsar Alexander II of Russia allowed the creation of the Finnish Mark in 1860, almost sixty years before the political independence of Finland in 1917. The choice of name was a way of asserting Finnish membership of the Baltic, rather than Slavic, world.

[88] The only contender is the Israeli *shekel*, an old Babylonian unit.

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