# LAUNCHING OF THE EURO AND ITS IMPACT ON WORLD TRADE AND FINANCE 1999-2001 

Submitted by

SALLONG YADEN

Dissertation submitted to the Jawaharlal Nehru University in partial fulfillment of the requirements for the award of the degree of

MASTER OF PHILOSOPHY

WEST EUROPEAN STUDIES DIVISION CENTRE FOR AMERICAN AND WEST EUROPEAN STUDIES SCHOOL OF INTERNATIONAL STUDIES JAWAHARLAL NEHRU UNIVERSITY<br>NEW DELHI - 110067

# JAWAHARLAL NEHRU UNIVERSITY 

## NEW DELHI-110067

Dated: April 2002

## CERTIFICATE

Certified that the Dissertation entitled "Launching of Euro and its Impact on World Trade and Finance 1999-2001", submitted bySallong Yaden, in partial fulfillment of the requirements for the award of the degree of Master of Philosophy of this University. This Dissertation has not been submitted for any other degree of this university, or any other university.

We recommend that this dissertation be placed before the examiner for evaluation.


Prof. Rajendra K. JAIN
(Chairperson)


## Prof.B.VIVEKANANDAN

(Supervisor)

To Mom \& Dad

## PREFACE

International monetary economics is one of the most important branches of economic science. The most significant recent development in this field was the launch of the euro in January 1999. Despite its less than remarkable performance in the last three years, many economists all over the world feel that the euro will emerge as a major world currency, and that it will have major implications for world trade and world finance in particular, and the world economy in general. Therefore, the objectives of this dissertation are: to study developments leading to the European Monetary Union and the launch of the euro; to analyse the impact of the euro on world trade and currency market; to examine whether the euro can compete or complement the dollar; to evaluate the reasons behind the fluctuation of the euro vis-à-vis the dollar and, to a lesser degree, the pound sterling and the yen since its launch; to examine the performance of euro during the first three years after its launch; and, finally, to assess its future problems and prospects.

This study is based on both primary and secondary sources. The libraries that I would like to mention in this connection are the Jawaharlal Nehru University Library, Library of the European Union Delegation, and materials available at various libraries in New Delhi. The primary sources that I have used for writing this dissertation include the European Union and European Central Bank Reports and reports and documents from various multilateral agencies. The secondary sources include books, journals, articles, magazines and research reports.

During the writing of this dissertation, I have received help and assistance from several sources.

First of all, I wish to sincerely thank my supervisor, Prof. B Vivekanandan for guiding and inspiring me through this dissertation. He has constantly provided me with the impetus and momentum to work perfectly and to improve on all handicaps. My words are few to express my gratitude for his invaluable supervision from the beginning till the end of this dissertation.

I wish to thank my family for their immense love, support, understanding and motivating me towards higher achievements and always believing in me. I also express my gratitude to Rosie, J L Akhai, T Shimray, D Worngam, M Uniel, R M Robert, B Churchill, M Teibor, M Uttam, the Paul family, Tianaro and to all my other friends for helping and supporting me throughout the last two years. Last but not the least, I thank the staff of JNU Library and the Library of the EU Delegation in New Delhi.


April 2002

## CONTENTS

## PREFACE

$$
\text { CHAPTER - I INTRODUCTION } 1-15
$$

- The Gold and gold Bullion Standards
- Monetary System and Monetary Order
- Bretton Woods and Fixed Exchange rates
- Euro-currency Market
- The Two Tier system
- Floating Exchange Rates
- The European Monetary Snake
- European Monetary System


## CHAPTER - II BACKGROUND OF THE EMU 16-37

- Models of Monetary Arrangement
- Towards EMU
- Barre Report
- Werner Report
- Basle Agreement and the Snake
- European Monetary System
- Delors Report
- Maastricht Treaty and Convergence Criteria
- Birth of the euro


## CHAPTER - III EURO AND THE WORLD CURRENCY 38-74 MARKET

- Euro Versus Dollar
- Euro Impact on the global Financial Markets
- The Fall of the euro
- Future Prospects

CHAPTER - IV IMPACT ON THE WORLD ECONOMY 75-116

- A New Global Monetary Order
- Trade Creation, Trade Diversion and Trade Invoicing
- Impact on World Trade and Global Transactions
- Impact on North Africa, The Mediterannean, Central and Eastern Europe
- Impact on Emergent Market Economies
- Implications for Developing and Transition Countries
- Impact of the Euro on America
- Impact on India
- Developments Since 1999


## CHAPTER - V CONCLUSION: PROBLEMS AND <br> 117-134 PROSPECTS

- Role Of European Central Bank
- Co-ordination of Economic Policy
- Social Implications
- Tax Harmonisation
- Use of euro as Reserve Currency
- Adoption of euro in Eastern Europe
- Bigger Role of EU in International Economic Policy Discussions
- Future Implications for International Trade and Currency
- Towards a Political Union

ANNEXURES 135-152
BIBLIOGRAPHY
153-162

## Chapter I

## Introduction

## The Gold and Gold Bullion Standard

The first modern international monetary system was the gold standard. Operating during the late $19^{\text {th }}$ and early $20^{\text {th }}$ centuries, the gold standard provided for the free circulation, between nations, of gold coins of standard specification. Under the system gold was the only standard of value.

The advantages of the system lay in its stabilizing influence. A nation that exported more than it imported would receive gold in payment of the balance; such an influx of gold raised prices, and thus lowered the value of the domestic currency. Higher prices resulted in decreasing the demand for exports, an outflow of gold to pay for the now relatively cheap imports, and a return to the original price level.

A major defect in such a system was its inherent lack of liquidity; the world's supply of money would necessarily be limited by the world's supply of gold. ${ }^{1}$ Moreover, any unusual increase in the supply of gold, such as the discovery of a rich lode, would cause prices to rise abruptly. For these reasons and others, the international gold standard broke down in 1914.2 During the 1920s the gold standard was replaced by the gold bullion standard, under which nations no longer minted gold coins but backed their currencies with gold bullion and agreed to buy and sell the bullion at a fixed price. This system, too, was abandoned in the 1930s.

Fifty seven years ago, when the conference at Bretton Woods was held, the international situation was very different from today. The world war was still

[^0]raging but thoughts had already turned to the task of reconstructing the post-war international economic system. Haunting the deliberations were the four horsemen of the 1930s: economic isolationism, depression, nationalism and instability. The specific challenge was the need to set up institutional machinery to temper the business cycle, avoid currency chaos, protectionism, trade restrictions, exchange control, dried-up lending and discrimination. It was generally agreed that management of interdependence would require some surrender of national sovereignty in exchange for a voice in supranational power. ${ }^{3}$

## Monetary System and Monetary Order

A clear distinction should be made between a monetary system and a monetary order before we proceed further. A system is an aggregation of diverse entities united by regular interaction according to some form of control. When we speak of the international monetary system we are concerned with the mechanisms governing the interaction between trading nations, and in particular between the money and credit instruments of national communities in foreign exchange, capital, and commodity markets. The control is exerted through policies at the national level interacting with one another in that loose form of supervision that we call co-operation.

An order, as distinct from a system, represent the framework and setting in which the system operates. It is a framework of laws, conventions, regulations, and mores that establish the setting of the system and the understanding of the environment by the participants in it. A monetary order is to a monetary system somewhat like a constitution is to a political or electoral system. We can think of the monetary system as the modus operandi of the monetary order.

[^1]The IMF Articles of Agreement signed at Bretton Woods, New Hampshire did not create a new international monetary system. On the contrary, it almost made it impossible for the existing international monetary system to function. ${ }^{4}$ According to the agreement, countries were required to maintain exchange rates within one percent of the par value. This clause would have forced a revolutionary change in operating procedures in the United States which did not, as a rule, intervene in the foreign exchange market. As the system had operated since the devaluation of the franc in 1936 and the Tripartite Agreement in the same year, the United States bought and sold gold within narrow margins of its fixed parity. Most of the other countries fixed their currencies to the dollar, directly or indirectly through the pound sterling or one of the other reserve currencies. The exchange rate rule would have required the United States to support all the foreign currencies in the New York market or else close it.

To negate this obligation--almost as an afterthought--the United States had a crucial sub-clause, Article IV-4(b) inserted into the articles. This sub-clause enabled a member to fix the price of gold in lieu of adhering to its exchange rate obligations. When the United States notified the Fund that it was buying and selling gold freely (to foreign monetary authorities for official monetary purposes) it was relieved of its exchange rate obligations. This sub-clause established the legal basis for the asymmetrical post-war international monetary system, a system that been in existence since the late 1930s. It was a dollar standard, anchored to gold. ${ }^{5}$

[^2]
## Bretton Woods and Fixed Exchange Rates

In the decades that followed World War II, international trade was conducted according to the gold exchange standard. Under such a system, nations fixed the value of their currencies not with respect to gold, but to some foreign currency, which was in turn fixed to and redeemable in gold. Most nations fixed their currencies to the US dollar and retained dollar reserves in the United States, which was known as the "key currency" country. At the Bretton Woods Conference in 1944, the system of fixed exchange rates was adopted, and a new and unique institution, the International Monetary Fund was created with the task of maintaining stable exchange rates on a global level. The creation of the fund represents a major effort at international cooperation. Although by no means the first in the field, it is the most detailed attempt deliberately to organise the conduct of international monetary affairs. ${ }^{6}$ This system was based on two principles:

- The dollar became the benchmark currency.
- Currencies were pegged to official parities.

In other words, the new system hinged on the dollar. There was a fixed and final ratio between the dollar and gold, which were fully convertible. This meant, for example, that the Bank of France could always convert its dollar reserves into gold. Bretton Woods re-established gold as the basis for par values of currencies, but since the agreement did not prescribe as the sole form in which reserves could be held, it did not usher in a true gold standard. Many nations permitted their central banks to hold part of their currencies in

[^3]currencies convertible into gold. From the point of view of a central Bank, such foreign exchange holdings were superior to gold; if invested in highly liquid securities, they earned interest, whereas gold reserves entailed storage costs.

Because of the economic predominance of the United States after World War II in terms of production, wealth, and a huge gold reserve, the US dollar became the logical candidate for reserve currency status. ${ }^{7}$ The United States took on further responsibility when the US dollar emerged in widespread use as a world currency. Fixed parities were set between foreign currencies and the dollar.

However, each currency was authorized to fluctuate 1 per cent up or down. If the dollar was worth ten francs, the value of the dollar could range from 9 to 11 francs. Whenever a currency left this authorized band, the Central Banks undertook to intervene on the foreign exchange market.

After the Second World War, countries with market economies adopted the Bretton Woods system, which paved the way for international monetary stability and established the supremacy of the dollar. ${ }^{8}$ Assuming that this stability would remain the norm, those who drafted the Treaty of Rome did not consider it appropriate to include provisions on genuine monetary cooperation. ${ }^{9}$ At most, a limited dialogue on economic policy issues was set in place. The system started to show signs of weakness at the end of the 1950s. Between 1968 and 1969 turbulence on markets led to the devaluation of the French franc and the revaluation of the German mark, thus threatening the stability of the other currencies.

[^4]
## Euro Currency Market

In the early 1950s a fortuitous set of circumstances gave rise to what became known as the Eurodollar market, or more broadly, the Euro-currency market. During those cold-war days, Eastern European Banks had earned dollar balances they wished to retain denominated in US dollars. Fearing a possible blocking of deposits held in New York in the event of a crisis, they arranged for European banks (largely London) to accept deposits of dollars. To distinguish such deposits, denominated in dollars, from the regular accounts kept in domestic currency, the European Banks had to establish separate books for their Euro-dollar business. As the practice spread to other currencies and other banking centres of the world, the definition of these types of deposits broadened to include deposits denominated in a currency of a country other than where the bank is located. In the years since the first Euro-dollar deposits were accepted and loans were made, the market grew to enormous proportions.

## The Two Tier System

The International Economy was on a de facto dollar standard from 1965.10 As long as the United States maintained a reasonable degree of international fiscal balance, the system of fixed exchange rates against the dollar, rather than gold, could work. The automatic adjustment mechanism under the fixed exchange rates appeared to function well. During the 1960 s, as U.S. commitments abroad drew gold reserves form the nation, confidence in the dollar weakened, leading some dollar holding countries and speculators to seek exchange of their dollars for gold. A severe drain on US gold reserves developed and, in order to correct
the situation, the so-called two-tier system was created in 1968. In the official tier, consisting of central gold traders, the value of gold was set at $\$ 35$ an ounce, and gold payments to non-central bankers were prohibited. In the freemarket tier, consisting of all non-governmental gold traders, gold was completely demonetized, with its price determined by the supply and demand for it. Gold and the US dollar remained the major reserves for the world's reserve assets for the world's central banks, although Special Drawing Rights were created in the late 1960 s as a new reserve currency. Despite such measures, the drain on the US gold reserves continued into the 1970 s , and in 1971 the United States was forced to abandon gold convertibility, leaving the world without a single, unified international monetary system. One of the ironies of modern financial history is that while this growth in use of the US dollar was occurring, at the very same time the US dollar was running into trouble. The trouble in this case was the decline in the US reserves of gold ${ }^{11}$.

## Floating Exchange Rates

In spite of the surprising US decision in 1971 to take the dollar off the gold standard, the world still clung to the old system. In attempts to set more realistic exchange rates, the US dollar was devalued and stronger currencies, like the German mark and the Japanese yen, were revalued. But even after two devaluations, the flight from the US dollar continued. No new set of exchange rates could be sustained. Beginning 1972, the United States and European countries negotiated on the reform of the international monetary system. After four years, an agreement on an amendment of the Articles was reached in Jamaica in January 1976. Floating of currencies had been forbidden under the

[^5] Hutchinson Publishing Group, Ltd., 1977).

Bretton Woods system, but was tentatively adopted as a temporary arrangement in 1973. Now the managed float is firmly established as it appeared as the only viable system for two reasons (i) continued growth of world trade without excessive fluctuations in exchange rates; and (ii) the floating system coped with two oil crises with relative ease. ${ }^{12}$ The fixed exchange rates based on gold were abandoned all together and currencies were left to float. Although governments continued to intervene, market forces now determined exchange rates. The international community now abandoned the security and discipline of a fixed-rate metal standard and in place, the world adopted a system of "floating" exchange rates: Each currency's value moved up or down depending on international demand and the amount of confidence in its country's economy. Under the Free Floating Exchange Rate system, the currency's value is determined solely by the supply and demand in the market, rather than official policy. Countries generally permit a free float only as a temporary solution, because it could result in excessive fluctuations. Such fluctuations disrupt international transactions by constantly altering the costs of goods and value of payments between companies in different countries. On the other hand, the Managed Floating Exchange Rate system is similar to a free-floating exchange rate, but a government intervenes by buying or selling its own currency to minimize fluctuations. Australia, Canada, Jamaica, Japan, the Philippines, the United States, and others adopted this type of exchange rate. At the end of the sixties, the United States found it increasingly difficult to maintain a fixed parity between gold and the dollar. ${ }^{13}$ On 15 August 1971,

[^6]President Nixon suspended convertibility of the dollar in gold. At the same time, certain currencies (notably the deutschmark) no longer stayed within the 1 per cent spread to the dollar. As conceived in 1944, the IMS was doomed.

In 1971, the Group of Ten (the ten wealthiest countries in the world) agreed to make the system more flexible under the Washington agreements: the fluctuation band was increased to 2.25 per cent. This new system permitted considerable spreads between the currencies of the European Community (up to 9 per cent).

For example,

USD $1=$ DEM $3=$ FRF 9, which meant that DEM $1=$ FRF 3.

Assuming that the franc was very strong to the dollar at a given time and hit its cap (i.e. USD 1 = FRF 9.2025), while the mark weakened to the dollar and sank to its floor (i.e. USD $1=$ DEM 2.9325), the parity between the franc and the mark would be DEM 1 = FRF 3.138.

Assuming that the franc dropped to its floor (i.e. USD $1=$ FRF 9.7975) while the mark rose to its cap (i.e. USD $1=$ DEM 3.0675), the parity between the franc and the mark would be DEM 1 = FRF 2.868 . In other words, the parity between the franc and the mark could vary by 9 per cent.

Back in 1969, when the international monetary system was threatening to collapse, the Heads of State and Government had already decided at the Hague Summit that the Community should progressively transform itself into an economic and monetary union. In October 1970, the Werner report (drawn up by the then Prime Minister of Luxembourg) proposed:

- For the first stage, a reduction of the fluctuation margins between the currencies of the Member States.
- For the second stage, the achievement of a complete freedom of capital movements with integration of the financial markets, and particularly of the banking systems.
- For the final stage, an irrevocable fixing of exchange rates between the currencies.

The international rules were too slack for the European countries, which needed stability between their currencies in order to build an Economic and Monetary Union. Accordingly, they agreed to create their own rules.

## The European Monetary Snake

The year 1972 saw the creation of the European monetary snake. It was based on the principle of a collar combined with a snake within the collar. ${ }^{14}$ In other words, currencies were obliged not to deviate more than 2.25 per cent from their fixed exchange rate with the dollar while European countries were obliged to maintain a maximum spread of 2.25 per cent to their fixed parities. The EEC countries agreed to maintain stable exchange rates by preventing exchange fluctuations of more than 2.25 per cent. This arrangement was called "European snake in the tunnel" because the Community currencies floated as a group against outside currencies such as the dollar. By 1978, the snake turned into a worm (with only German mark, Belgian franc, Dutch guilder, Danish

[^7]krone) ${ }^{15}$. The Snake was the forerunner of the European Monetary System, which went into effect in 1979.

The "snake in the tunnel" narrowed the fluctuation margins between the Community currencies (the snake) in relation to those operating between these currencies and the dollar (the tunnel). To ensure the proper operation of this mechanism, the Member States created in 1973 the European Monetary Cooperation Fund (EMCF) which was authorised to receive part of the national monetary reserves.

The results of this mechanism were disappointing. The disruptions provoked by the rise in oil prices caused the economic policies of the Member States in the 70 s to react in diverse ways. This led to frequent and sharp fluctuations in exchange rates. There were entrances and exits from the exchange stability mechanism and the snake, originally designed as an agreement of Community scope, was reduced to a zone of monetary stability around the German mark. ${ }^{16}$ By the end of 1977, only half of the nine Member States (Germany, Belgium, the Netherlands, Luxembourg and Denmark) remained within the mechanism, the others having allowed their currencies to float freely. The Werner Plan was abandoned the same year.

This system did not fare much better than the IMS after the oil crisis hit the international community in 1973. In 1976, the Conference of Jamaica adopted a new international floating exchange rate system and from 1972 to 1978, the monetary snake was abandoned seven times. It was therefore impossible to

[^8]achieve an Economic and Monetary Union by 1980. A new form of monetary cooperation was required.

## European Monetary System

Consequently, a new effort to achieve monetary cooperation was launched. By March 1979, EC established the European Monetary System, and created the European Currency Unit (ECU). It prevented movements above 2.25 per cent around parity in bilateral exchange rates with other member countries. The European Monetary Cooperation Fund allocated ECUs to members' central banks in exchange for gold and dollar deposits. 20 per cent of the quota was to be held in gold. ECU was an artificial currency and was used in all intra-system balance of payments settlements and facilitated the provision of credit facilities for compensatory financing. For EMS to work, European countries had to surrender monetary sovereignty to the EMS. The EMS could then create a single European Central bank and a single European currency. ${ }^{17}$

The year 1979 hailed the birth of the European Monetary System - the EMS -, a much more forward-looking solution and a more ambitious replacement of the Snake to stabilize European currencies. It was hoped that a stable currency zone within the EU could be brought about, and to this end one of the more important parts of the EMS was to be the European exchange rate mechanism. The other vital part was the European currency unit (ECU) which it was hoped would eventually become an accepted common currency within the Union. This was to lead to a pan-European Central Bank to which the existing central banks of individual member countries would be subservient. Such long-term aims had been put on hold pending the resolution of outstanding differences

[^9]between members in the future, both politically and economically, of a more closely structured Europe. One other temporary feature of the EMS was the European Monetary Co-operation Fund. This acted as a clearing house for the separate European Central Banks, and each deposit, with it on a short-term basis, 20 per cent of their gold and foreign exchange reserves in exchange for ECUs.

The EMS was based on four principles: A common account unit was created, the ECU. The ECU is a currency basket, i.e. it consists of the currencies of EMS countries, balanced according to their respective economic weights.

- Each EEC currency had an official exchange rate to the ECU. This said, a fluctuation band of 2.25 per cent was tolerated.
- All countries helped support the official parities, which for example meant that if the Lira threatened to drop out of the fluctuation band, all Central Banks in the EMS intervened to support it.
- Reserves were pooled in order to maintain solidarity between Member States.

The EMS, in which Great Britain did not take part, was a success: it ensured the stability of European currencies, even if this meant that it was sometimes necessary to relax its rules. For example, some countries were temporarily entitled to a wider fluctuation band of 6 per cent. This system paved the way for changeover to the single currency. ${ }^{18}$

[^10]Despite superficial similarities, there was a fundamental difference between the IMS and EMS. ${ }^{19}$ Consider first the earlier system. This was an anchored reservecurrency system. Under the Bretton Woods arrangements, most of the other currencies were pegged to the dollar, whereas the US dollar was pegged to gold. US monetary policy was disciplined by its internal gold reserve ratio and by its commitment to external convertibility of the dollar (for foreign monetary authorities). European countries were constrained by the discipline of balance of payments equilibrium, but had an additional weapon-conversion of dollar balances-with which they could put pressure on the United States to contract or encourage it to expand. Although the system was asymmetrical in the sense that the dollar had a special role, there was an exchange of commitments that distributed control between the United States and the outer countries.

The ERM system was basically different. Under the ERM system the outer countries were disciplined by the balance of payments under fixed exchange rates while the centre country, Germany, could pursue an independent monetary policy geared to its version of price stability. Germany could pursue its own inflation preferences without any accountability mechanism; the other countries had no instruments to alter German monetary policy. It was a dominated system, a mark standard.

The correct analogy to the ERM is not the gold standard or the post-war system; it is the regime set up at the Smithsonian Institution in December 1971 and that lasted (albeit with a second devaluation of the dollar) until June 1973. This system was an unanchored dollar standard in which the United States could pursue its own inflation preferences, without any accountability mechanism; the other countries had no instruments to alter US monetary policy. Both the dollar and mark standards threatened to break down when the centre country pursued

[^11]monetary policies that were at variance with the needs of the outer countries. ${ }^{20}$ The dollar standard broke down in 1973 because US monetary policy, taken in conjunction with the explosion of the Eurodollar market, flooded surplus countries with reserves. Rather than accept the inflationary consequences of expansion, or revalue the currencies in fundamental disequilibrium, the system was allowed to break up.

Similarly, the mark standard threatened to break down when the German monetary policy, over-reacting to the unification shock, followed a money policy that was too tight for the rest of the ERM. Rather than import deflation (or less disinflation than was politically acceptable), several countries devalued or left the ERM. The mark standard broke up - or, more correctly, was transformed, because the Germany monetary policy, in the wake of the unification shock, was too contractionary for the rest of the ERM. When, in the summer of 1992, the mark was soaring against the dollar - reaching a low of DM1.385 - the Bundesbank should have reacted to the error signal and moderated its policies.

The defect of both the dollar and mark standards was that the monetary policies of the anchor countries were out of tune with the interests of their partners. In the case of the United States, monetary policy was too inflationary. In the case of Germany, monetary policy was too deflationary. There is an inherent defect in any unanchored currency standard that lacks a mechanism by which the partner countries can have some influence over the monetary policy of the leader and therefore the currency area as a whole.

The International Monetary System in the post-war period was built on two major foundations: fixed exchange rates and convertibility of currencies. ${ }^{21}$ When the former collapsed, it was replaced by a system of floating exchange rates that enabled the system to retain convertibility despite major international financial disturbances. The system of floating exchange rates poses for each country the question of whether or not to fix its exchange rate - and if so to what - or to float - and if so alone or jointly. To formulate an appropriate answer requires an understanding of what is an optimum currency area. The actual sorting out of which countries should float and which should fix their exchange rates, continues.

[^12]
## Chapter II

## Background of the EMU

The creation of a single European currency, the euro, is the most important development in the international monetary system since the adoption of the flexible exchange rates in the early seventies. The European Union (EU) had embarked on a path inexorably leading to the eventual replacement of member countries' currencies with a single European currency. The precise nature and the length of the transition period to Europe's monetary unification has now been determined while agreement on the political and economic structures required for the EU's monetary union to be durable is now in place. Alternate forms of monetary union, involving less than complete integration and the retention of national currencies, have been rejected as incompatible with the objectives of the Single European Act. A single European currency is a necessary condition for the creation of a single European market.

A group of countries may be perceived to constitute a monetary union if they perceive to experience identical rates of interest and inflation. That is, the definition of monetary union describes a set of monetary characteristics which implicitly involves the as if assumption that there exists a single currency throughout the union ${ }^{1}$. It follows, therefore, that a monetary union is compatible with member countries retaining their national currencies provided the following conditions are satisfied:

- There are no restrictions to the movement of capital across the union.
- Member countries' financial sectors are perfectly integrated.

[^13]Note that if national currencies are not replaced by a single union currency and the as if assumption is met, the intra-union exchange rates will be fixed even if they are not de jure fixed. ${ }^{2}$

## Models of Monetary Arrangement

There are four different theoretical models of monetary arrangements which are in theory consistent with the above definition of monetary union. ${ }^{3}$

1. Currency union: the type of monetary union preferred by the EU, which involves member countries adopting a single currency. A currency union cannot exist without perfect capital mobility across the union and a fully integrated financial sector. It follows, therefore, that the creation of a currency union must be preceded by the removal of all impediments to the movement of capital across the member states and the construction of common legal structure which will facilitate the complete integration of national financial sectors. Further, in a currency union there can exist only one independent supplier of the union currency which will be responsible for the union's monetary and exchange rate policies. Any other set of institutional arrangements which would allow member countries to retain a measure of monetary autonomy, however limited, would only serve to subvert the union's credibility and, therefore, its durability.
2. Exchange rate union: this is simply where member countries agree irrevocably to fix the cross values of their exchange rates. A central monetary authority will only be required to assist the co-ordination of monetary policy between countries. The credibility of this arrangement will be undermined by the fact that this union is far easier to dismantle than a full currency union.

[^14]3. Free intercirculation union: Another possible monetary union could involve the free movement of member countries' currencies across the union area. A currency competition may develop whereby those currencies not deemed to hold a sustainable market value are driven out of circulation. Fixed exchange rates may be required to maintain disciplinary conditions.
4. Parallel currency union: A parallel currency union bears some resemblance to the free inter-circulation model, but with the addition of a parallel currency circulating between member countries which competes with existing national currencies for market dominance. The ultimate objective is likely to be the eventual establishment of the parallel currency as the common single currency, provided it passes the test of the market place.

## Towards EMU

The desire for currency stability in Europe has deep roots, with some going back to the 19th century - the Latin Monetary Union, German currency union and the gold standard. Serious currency instability in the 1920s and 1930s reinforced that desire. Yet when the common market was established in the late 1950s, monetary union was not explicitly on the agenda. In fact, it was not until 1962 that the European Commission considered a single currency. European countries had earlier indicated an interest in, if not consensus on, European monetary integration. Proposals for monetary integration go back to the late 1950s. The Treaty of Rome had called for individual policies for achieving equilibrium in overall balance of payments, maintaining confidence in currencies, and coordinating policies through collaborations of governments and central banks. ${ }^{4}$ The arrangements for the co-ordination of short-term economic policy were made in

[^15]1960, with the setting up of a Short Term Economic Policy Committee, consisting of the representatives of the member governments and of the Commission.

Two years later, in October 1962, the European Commission submitted to the Council of Ministers a set of proposals for coordination of monetary and economic policies within the Community, leading to the eventual establishment of a monetary and economic union. In 1964, the Committee of governors of the Central Banks of the Member States was set up, along with budgetary and economic policy committees. At the same time a Medium Term Economic Policy Committee was set up, which attempted to co-ordinate the medium term programmes of the member states. In February 1968, the commission proposed that members commit themselves to adjust their exchange rate parities only by common agreement and to consider the elimination of margins on each others' currencies around the established parities. ${ }^{5}$

From 1969 economic and monetary union (EMU) took the front stage as the main common policy objective of the EC. It was the next logical step after the completion of the common market and the agricultural policy. Monetary union meant, at most, the adoption of a single community currency, at least the maintenance of fixed exchange rates between the currencies of the member states. ${ }^{6}$ In 1969 there were the first realignments of community currencies since the EC had started, and the prospect of greater monetary instability threatened to hinder trade within the common market by introducing an element of uncertainty into import and export deals; so monetary union was also seen as a means of making the common market effective. The obvious benefit that EMU brings to a single market is the

[^16]introduction of a single money. The lines of spillover from the common market and the CAP to EMU were clear. But the early history of the EMU was one of failure to make substantial progress towards the objective.

## Barre Report

DISs
332.45
Y105 La
|i| $|1|||||||||||||||||||\mid$
TH9515

The key to understanding the history of attempts to move towards an economic and monetary union is the interaction between developments in the wider international system and the different economic strategies of the member states. The Barre Report was the last occasion on which the EMU centered around the spillover effects of the custom union and the CAP. The Bretton Woods system started to show signs of weakness at the end of the 1950s. Between 1968 and 1969 turbulence on markets led to the devaluation of the French franc and the revaluation of the German mark, thus threatening the stability of the other currencies and the system of common prices set up under the Common bring about a greater co-ordination of economic policies and much closer monetary cooperation to ensure the attainment of agreed medium-term objectives. The Council agreed with many features on the Barre Report and committed members to prior consultation before a member altered its economic policies in such a way as to have an important impact on other members.

At the summit in The Hague in December 1969, the Heads of State and Government decided to make economic and monetary union an official goal of European integration. ${ }^{7}$ The Community Summit conference requested the Council to draw up a plan, based on the Barre Report, to establish by stages an economic and monetary union in the Community. On March 6, 1970, the Council authorized

[^17]the creation of a high level committee, headed by Pierre Werner Prime Minister of Luxembourg, to draw up a plan for economic and monetary union and report on how this goal might be reached by 1980. Along the lines of the Barre Report, central banks established a fund for balance of payments support by which members could draw up to $\$ 1$ billion for a period of three, extendable to six months. The Werner Report of October 8, 1970 recommended a program for the establishment by stages of an economic and monetary union by 1980.

## Werner Report

The Werner group submitted its final report in October 1970. It envisaged the achievement of full economic and monetary union within ten years according to a three-stage plan. The Werner Report's ambition to do so by 1980 was never realised, but the report did set the original framework for the development of more robust monetary policy co-ordination within the EU. 8 The ultimate goal was to achieve full liberalisation of capital movements, the irrevocable fixing of parities, a common central banking system organized along the lines of the Federal Reserve System, centralized responsibility in a Community "center of decision for economic policy" politically responsible to a European Parliament and even the replacement of national currencies with a single currency, including the establishment of a European Exchange Stabilisation Fund. It did not consider in any detail the relative merits of a currency union. The report also recommended that the coordination of economic policies be strengthened and guidelines for national budgetary policies drawn up. The member states were expected to shift their monetary and economic policies to the EC institutions. The introduction of a single European currency was viewed as potentially having a 'psychological effect' of some, but not decisive,

[^18]usefulness. ${ }^{9}$ These provisions were later watered down at French insistence, leaving undecided the exact division of powers between the Community and member states. The substance of the amended Werner Report was adopted by the Council of Ministers of February 9, 1971. Subsequent progress, however, was overtaken by the turmoil in the exchange markets in the spring and summer of 1971.

Serious divergences soon became apparent between the German insistence on policy coordination as a necessary precondition for narrowing exchange rate bands and the French emphasis on narrower bands, supported by generous borrowing facilities, as a means of including policy coordination. These contrasting views have reappeared in all subsequent debates. On this occasion the French view prevailed. The members resolved in February 1971 to narrow exchange rate margins, but their inability to agree on a uniform response to the disruption of the foreign exchange markets caused by the dramatic weakening of the dollar in May 1971 made implementation impossible. The Werner Plan assumed that the IMF international monetary system would survive and, therefore, provide the background against which intra-EC exchange rates would irrevocably be fixed and intra-EC capital movements be completely liberalised. The collapse of the IMF system and the first oil shock of 1973-74 resulted in the EC member countries abandoning the implementation of the Werner Plan. The process of European integration entered a period of stagnation that lasted until the European monetary system (EMS) came into being in March 1979.

## Basle Agreement and the Snake

A second attempt was made in 1972, after the Smithsonian Agreement had raised hopes of a more durable international monetary system in the form of a package

[^19]that included wider margins of fluctuation around the dollar. ${ }^{10}$ The Basle Agreement of 1972 resulted in the 'Snake in the Tunnel'. The fixing of bilateral exchange rates between the EC6, after the collapse of the Bretton Woods system, were made. EC6 currencies within 2.25 per cent band (the 'Snake'), and in a 4.5 per cent against the US dollar (the 'Tunnel') were brought about. The European Monetary Co-operation Fund (EMCF) was established in 1973 to assist the coordination of the Snake and some further discussion on EMU were held. Italy left the Snake in 1973 while France abandoned it in 1974, rejoined in 1975, but left again in 1976. Germany led a 'mini-Snake' arrangement with BENELUX, Denmark, Sweden and Norway until 1978. Numerous realignments were further made. In 1978, European Currency Unit (ECU) concept was conceived at the December European Council meeting in anticipation of the EMS.

The institutional centre-piece of the scheme was the 'Snake-in-the -tunnel', an arrangement for approximating the exchange rates of member currencies one to another while holding their value jointly in relation to the US dollar. ${ }^{11}$ It was to be accompanied by more determined efforts to bring national economic policies into line, with Finance Ministers meeting at least seven times per year to try to coordinate policies. Thus there would be progress on both monetary and economic union, the two running in parallel. The European plan was to maintain a 'Snake' of narrower intra-European margins within the Smithsonian 'tunnel'. As prospective EC members, the UK and the Ireland joined the Snake, but were forced by a Sterling crisis to leave within a matter of weeks. Italy and France suffered the same humiliation at later dates. Thrown off course by the oil crises, the weakness of the dollar and the differences in economic policy, the Snake lost most of its members in less than two years. By 1977 the Snake had become a very different creature from

[^20]what it had been envisaged. ${ }^{12}$ Of the nine members of the EC, only West Germany, the Benelux States, and Denmark were still members. In addition, two non-member states, Norway and Sweden, had joined. Yet during 1977 even the smaller 'Snake' was under strain, and Sweden was forced to withdraw the Krona.

These failed attempts to secure closer monetary integration formed the inauspicious background to the impassioned plea of the President of the EC Commission for a reassessment of the case for European Monetary Union and of the means by which it might be achieved. The outcome of the ensuing political process, in which the French President and the German Chancellor played the initiating roles, was the European Monetary System, established in December 1978 as 'a zone of monetary stability in Europe. ${ }^{13}$ The EMS is thought by many to have played a major positive contribution to the community economy during the 1980s. Its success in achieving exchange rate stability and macroeconomic convergence towards a low inflation, high growth equilibrium illustrated the benefits of closer economic co-operation in this field.

## Europeam Monetary System

The European Council meeting in Brussels in December 1978 agreed to create the EMS which looked remarkably like another Snake. It was to be more flexible than its predecessor, allowing wider margins of fluctuation for individual currencies, and was accompanied by the creation of a new European currency unit (Ecu). The primary institutional component of the EMS is the Exchange Rate Mechanism.

[^21]Most participants limited bilateral exchange rate fluctuations to within 2.25 per cent margins around the agreed central parities. The Ecu would take its value from a basket of national currencies of the member states with weights based on shares of EC trade and GDP, and it would be used in transactions within the EMS. With the agreement of other EC countries, except the UK, the EMS came into existence in March 1979.

The objective of the EMS was defined to be the creation of a zone of monetary stability in Europe through the monetary cooperation among the EC member countries. The choice of this particular objective was not accidental. It was preferred to the objective of monetary union because the failure of the Werner Plan had demonstrated the dangers inherent in setting ambitious goals. ${ }^{14}$ Further, it is necessary to consider the concept of 'monetary stability'. Monetary stability has two dimensions: a price and an exchange rate dimension, Second, stability does not imply fixity or constancy. Stability, in this context is measured by the predictability of inflation and exchange rates. That is, the EMS was not envisaged as a system of fixed exchange rates, but adjustable exchange rates. ${ }^{15}$ Instead, its objective was to reduce exchange rate volatility and thus promote a greater degree of exchange rate predictability. Simultaneously, it aimed at the permanent reduction of inflation rates in the EC as a means of promoting price predictability. It is an empirical fact that the higher the rate of inflation, the more unpredictable it will be. In brief, the EMS set the twin objectives of reducing the volatility of intra-EC exchange rates and of effecting a permanent reduction in member countries' inflation rates.

[^22]The EMS was viewed as a prelude to monetary unification. It was seen as a fundamental component of a more comprehensive strategy aimed at lasting growth with stability, a progressive return to full employment, the harmonization of living standards and the lessening of regional disparities within the Community. The Monetary System was to facilitate the convergence of economic development and give fresh impetus to the process of European Union. The EMS went beyond the Snake in that it created an institution, the European Monetary Cooperation Fund, and introduced a kind of pre-money, the ecu, defined as a basket of the currencies of the EC countries, weighted by a formula that took account of both trade and GDP. The ecu was to serve as numeraire for the EMS exchange rate mechanism; as a basis for indicating divergence; as the numeraire for central bank operations; and as a means of settlement between monetary authorities of the European Community. The Fund was to provide a source of ecus for settlement of central bank transactions against a deposit of 20 per cent of gold and 20 per cent of foreign exchange reserves.

Over a ten year period - despite all kinds of technical doubts and national particularities - the EMS did much to reduce exchange rate variability: the flexibility of the system combined with the political resolve to bring about economic convergence achieved sustainable currency stability. The EMS has been successful in: ${ }^{16}$

1. Reducing exchange rate unpredictability. Since the formation of the system there have been eleven exchange rate alignments, the last one implemented in January 1987;
2. Inducing a reduction of, and an increasing degree of convergence among member countries inflation rates;

[^23]3. Generating, as a result of (1) and (2), a greater degree of real exchange rate predictability;
4. Encouraging lower and more convergent national money supply growth rates;
5. And in reducing the variability of national inflation, money supply growth and interest rates.

The stability of exchange rates contributed considerably to the expansion of trade and to the further integration of markets. ${ }^{17}$ The EMS had a favourable effect on the formulation of economic policies by the high inflation countries making use of the exchange rate limits in their anti-inflationary programme, while the low inflation countries benefited through its effects of increasing their exports and as a result stimulating their economy. Within this framework, cooperation has been expanded in various forms, especially in the area of monetary policy. In time the results created the conditions for winding down the remaining barriers to the movement of capital, and made possible the objective of creating the Single European Market. But, perhaps, the most significant achievement of the EMS was to demonstrate the economic benefits that can be reaped through economic cooperation ${ }^{18}$. It is arguable that the success of the EMS provided the major stimulus in the formulation and subsequent ratification of the Single European Act. The system provided a strong impetus to the process of European Integration but with it came the recognition that the ability of the system to facilitate this process is limited. There emerged a consensus that such are the limitations of the EMS that the system cannot provide the monetary framework required for the creation of the Single European Market. Thus, the Single European Act commits the signatory countries to the objective of monetary union. In 1986, the Single European Act

[^24](SEA) was passed with economic and social cohesion expressed as one of the main principles of the SEA. It committed signatories to an eventual single currency. With the adoption of the Single Market Programme in 1985, it became increasingly clear that full advantage could not be taken of and the potential of the internal market could not be fully exploited as long as relatively high transaction costs linked to currency conversion and the uncertainties linked to exchange-rate fluctuations, however small, persisted. Moreover, many economists denounced what they called the "impossible triangle": free movement of capital, exchange-rate stability and independent monetary policies were incompatible in the long term.

## Delors Report

In June 1988 the European Council meeting at Hanover set up a committee to study economic and monetary union under the chairmanship of Jacques Delors, the then President of the European Commission. The Delors Plan Proposals of 1989 outlined for EMU to be embodied in the Maastricht Treaty. European Council meetings were held in Madrid and Strasbourg to discuss the proposals and others contained in the Maastricht Treaty. Spain joined the ERM in July within the wider 6 per cent band. UK also joined the ERM in October 1990 within the 6 percent band. Its report, submitted in April 1989, proposed the introduction of economic and monetary union in three stages. It stressed the threefold need for greater coordination of economic policies, rules on the size and financing of national budget deficits, and a new, completely independent institution which would be responsible for the Union's monetary policy. Although the report did not set out the timetable for moving to the final stages of EMU, it did, as requested by the European Council in 1988, set out quite clearly the concrete stages that would be needed to attain EMU if the will to do so existed.

The immediate background to the Delors Report was a decade of largely positive experience of the European Monetary System, added to the impetus towards further integration created by the single market programme. ${ }^{19}$ It had largely succeeded in establishing an island of comparative internal exchange rate stability in a world of currency turmoil. Yet there were imperfections. The DM (not the Ecu) had become the real core of the system. Also, there continued to be real economic divergences among the member states, particularly in terms of budgetary policy, which were likely, sooner or later, to translate into pressures for exchange rate adjustments. A combination of both these successes and problems within the EMS, added to the fact that the single market programme was expected to increase the volume of cross border economic transactions and thus make a single European currency more attractive, led to a majority view in the Community in around 1988 that the time was ripe for a renewed attempt at moving towards EMU. ${ }^{20}$

The Delors Report made a number of important points which are worth recalling.

First, it stated that the Economic and Monetary union would represent the final result of the process of progressive economic integration in Europe.

Second, the report described clearly how the single most important condition for monetary union would be to lock exchange rates irrevocably: only after which, national currencies should be replaced by a single currency.

Third, the report proposed a new European institution to take responsibility for the common European monetary policy which would need to accompany locked exchange rates, and which would allow centralised and collective decisions on such key matters as the supply of money, credit and instruments of monetary policy like

[^25]20
interest rates. This system would be called the European System of Central Banks. It would be independent of instructions from national governments and it would itself have two main parts: a central body and the existing national central banks.

Fourth, it suggested three stages of movement towards EMU, of which the third stage would be the vital one of locking exchange rates. In the first stage the Community currencies which remained outside the exchange rate mechanism of the EMS (UK, Greece, Portugal and Spain) would join, and the wider band of fluctuation would disappear. In the second stage economic policy would be closely co-ordinated, the band of fluctuations of currencies within the EMS would be narrowed, and the governors of central banks would meet as a committee to prepare the ground for the institution of an European Monetary Cooperation Fund. In the third stage national currencies would be irrevocably locked together, and the Ecu would become the real currency in its own right, administered by the European Monetary Cooperation Fund. Although the Report suggested that there should be a clear indication of the timing of the first stage, it added that the setting of deadlines, in particular for the move to irrevocably fixed exchange rates, was not advisable.

Fifth, the Report argued that although within an economic and monetary union there will still be scope for independent policy-making by national governments, there must be limits to national economic behaviour which could destabilise the monetary whole, and this applies particularly in the budgetary field, where binding rules are required in matters such as national budget deficits and borrowing policies.

On the basis of the Delors report, the European Council meeting at Madrid decided in June 1989, to launch the first stage of EMU: full liberalisation of capital
movements in eight Member States by 1 July 1990.21 In December 1989 the Strasbourg European Council called for an intergovernmental conference that would identify what amendments needed to be made to the Treaty in order to attain full economic and monetary union. The work of this intergovernmental conference, launched at the European Council meeting at Rome in December 1990) led to the Treaty on European Union, which was formally adopted by the Heads of State and Government at the European Council meeting at Maastricht in December 1991 and signed on 7 February 1992.

## Maastricht Treaty and Convergence Criteria

In 1991, the Maastricht Treaty on European Union plans for EMU were based on the Delors plan. A single currency was envisaged by as early as 1997 or by 1999 at the latest between the majority of EU members. The commitments made by the EU member states to a single currency actually has its roots in the SEA, but the Maastricht Treaty formalised this into a working schedule based on a progressive three stage approach with concommitant macro-economic convergence criteria. ${ }^{22}$ These guiding principles of the Maastricht's EMU agenda have their origins in the Delors Plan of 1989, which was responsible for setting the convergence criteria for EMU participants. These guidelines consisted of:

1. Price stability: an average rate of inflation that does not exceed by more than 1.5 per cent that of the three best performing member states.
2. Interest rates: an average nominal long-term interest rate that does not exceed by more than 2 per cent that of the three best performing members in terms of price stability.

21 Monica Perin, "A Look Back - The Path to the euro," (Houston) Houston Business Journal, April 1999.

22 Paul R Mason, Thomas H Krueger and Bart G Turtelboom, EMU and the International Monetary System, (Washington DC, IMF 1997).
3. Exchange rates: participation in the ERM's normal bands without devaluation from the beginning of EMU's stage three (i.e. at least two years).
4. Budget deficits: a government budget deficit of less than 3 per cent of GDP under sustainable conditions.
5. National debt: a government national debt of less than 60 per cent of GDP.

The Treaty provides for economic and monetary union to be introduced by the end of the century in three successive stages according to a precise timetable:

The first stage began on 1 July 1990. The Council was to assess the progress made with regard to economic and monetary convergence while Member States were to adopt appropriate measures to comply with certain prohibitions laid down by the Treaty (prohibition on restricting capital movements, prohibition on the granting by central banks of overdraft facilities to public authorities and public undertakings, prohibition on introducing privileged access for the latter to financial institutions);

No formal decision was taken regarding transition to the second stage, which took place on 1 January 1994. Member States were to make significant progress towards economic policy convergence: precise but non-binding rules on public financing were adopted and a new type of monitoring, this time of public finances, was introduced and carried out by the Commission. ${ }^{23}$ The coordination of monetary policies was institutionalised by the establishment of the European Monetary Institute (EMI) as a precursor to the European Central Bank, whose task was to strengthen cooperation between the national central banks and to carry out the necessary preparations for the introduction of the single currency.

Transition to the third stage, since it would mark the start of EMU, was subject to the achievement of a high degree of durable convergence measured against a number of objective criteria laid down by the Treaty. The budgetary rules were to become binding and a Member State not complying with them was likely to face penalties. A single monetary policy was introduced and entrusted to the European System of Central Banks (ESCB), made up of the national central banks and the European Central Bank (ECB), which took over from the EMI. ${ }^{24}$ The majority of EU member states were required to meet the convergence criteria targets for a single currency to be adopted between them. If this was not achieved by 1997, then 1999 was set as the next reconvenable date for the EMU but a minority number of member states were allowed to proceed during this time. The ECB was to employ monetary policy for the participating EMU members. This process was expected to culminate in the introduction of the single currency by the end of the century. The Treaty on European Union did not lay down the practical arrangements for the changeover but merely established it as an objective. ${ }^{25}$

During the process of ratifying the Treaty, the speculation sparked off by the negative result of the first Danish referendum (June 1992) and the uncertainty surrounding the French referendum (September 1992) resulted in monetary turbulence, forcing the Italian and United Kingdom authorities to withdraw their currencies from the European exchange-rate mechanism. During the summer of 1993 the French franc also came under strong pressure.

In August 1993 the ERM implodes owing to renewed market pressure. A 15 per cent band fluctuation margins of the exchange-rate mechanism was set for
${ }^{24}$ Rudiger Dornbush, C A Favero and F Giavazzi. "The Immediate Challenges for the ECB." Economic Policy,(London), Vol 26, 1998.
25 Barry Eichengreen, European Monetary Unification: Theory, Practice, Analysis, (MA, MIT Press, 1997).
participating members as a defensive move to salvage the system. Doubt was once again cast on the feasibility of EMU, both by economic and financial operators and by public opinion, which was sensitive to the unacceptable rise in unemployment and the difficulties caused by the economic recession. The Maastricht Treaty was finally ratified in all member states by November 1993 and all remaining members of the ERM managed to stay within the new bands.

With the entry into force of the Treaty on 1 November 1993 (Denmark and the United Kingdom meanwhile having obtained an opt-out), the Member States reaffirmed their political determination to achieve EMU. At the same time, the conviction was growing in economic and financial circles that the Union would have
withstood the recession more successfully if the single currency had existed ${ }^{26}$. This conviction now needed to take root in public opinion.

At the Madrid Summit in December 1995, EU leaders decided upon the name 'euro' for the single future currency. To operationalise the EMU, the member states constituted the European Central Bank and its Executive Board. The ECB alone controls the supply of euros and also sets short-term euro interest rates. Very much comparable to the charter of the Deutsche Bundesbank, the ECB ensured price stability in the member states of the EMU. The ECB was also independent of the political control of the member states and EUs political institutions.

The European Council meet in Amsterdam in June 1997 adopted the stability and growth pact, designed to ensure budgetary discipline during the third stage. The same European Council adopted the principles and fundamental elements of a new exchange-rate mechanism to regulate relationships between the euro and the

[^26]currencies of those Union Member States that would not be taking part in monetary union. In accordance with the Treaty of Maastricht, the European Council in Brussels decided on 2 May 1988, following the recommendation of the Commission and the Economic and Financial Affairs Council ("Ecofin") and Parliament's opinion, that 11 countries - Austria, Belgium, Finland, France, Germany, Ireland, Italy, Luxembourg, the Netherlands, Portugal and Spain would take part in the third stage of EMU.

The Economic and Monetary Union involves the adoption of a uniform monetary policy and a single European currency, the euro. ${ }^{27}$ The extraordinary meeting of the European Council held in Brussels on 2 and 3 May 1998 decided, in accordance with the recommendation made by the European Commission on the basis of the convergence reports drawn up by the Institute of Monetary Union and by the Commission, to begin the third phase of EMU on 1 January 1999. The euro was officially launched at the Brussels Summit in May 1998. At this time, the European Commission decided that 11 of the 15 European Union countries had met the necessary conditions to adopt the single currency, the euro, on 1 January 1999. At present the exchange rates among participating countries (Austria, Belgium, Finland, France, Germany, Ireland, Italy, Luxembourg, The Netherlands, Portugal, Spain and recently Greece) is locked and the euro will soon become the single currency of the monetary union. Denmark, Greece, Sweden, and the United Kingdom have yet to commit to joining EMU and the single European currency.

To qualify for the final stage of EMU, member states must attain a high degree of sustainable economic convergence. Progress is measured against criteria covering

[^27]inflation, government deficit and debt, exchange rate stability and long-term interest rates. Those basic criteria are as follows; 28

1. Convergence of inflation rates with other member states.
2. Budget deficit: no more than 3 per cent of gross domestic product (GDP).
3. Government debt: no more than 60 per cent of GDP.
4. Convergence of exchange rates with other members.
5. Convergence of interest rates with other members.

Countries must also meet certain other conditions, in particular central bank independence. The Commission's analysis of member states' performance was presented in its convergence report. European Union heads of state and government confirmed the list of EMU participating countries on 2 May 1998, and also determined the bilateral conversion rates of the currencies of the member countries against the euro.

## The Birth of The Euro

On the 1st January 1999 the 11 countries chosen joined the European Monetary Union and the European system of Central Banks framed and implemented the single monetary policy in euros and conducted foreign exchange operations in euros. Member states were free to issue new public debt securities in euros. Greece subsequently applied for membership and was admitted. On 1 January 2001, Greece adopted the single currency and became the 12th euro-zone country and the first member since the launch of the third phase of EMU. The euro was phased in over the last three years, beginning on the first day of 1999 when participating

[^28]countries started using it for non-cash transactions. Between 1 January 1999 and 1 January 2001, European system of Central Banks exchanged at par value currencies with irrevocably fixed conversion rates. Under the EMU timetable, euro coins and bank notes went into circulation on 1 January 2002. Six months later, the euro will replace the national currencies of the participating countries and become their only valid currency.

On 1 January 1999 euro established as a currency in its own right, 'euro' nations to lock the exchange rates of national money. ${ }^{29}$

- Governments and businesses may start keeping accounts in euros.
- European Union central bank will start running a single EU monetary policy.
- 1 January 2002 euro to go into common circulation alongside national currencies.
- Final date for introduction of euro bank notes and coins.
- Changeover of retail activity to Euro.

1 July 2002, will be the latest date on which banknotes and coins denominated in the
national currencies of EMU countries will cease to be legal tender. From this date only euro banknotes and coins can be used in these countries. National currencies are to be withdrawn from circulation. The EMU, for all practical purposes, has begun.

[^29]
## Chapter III

## The Euro and the World Currency Market

Europe's single currency, the euro, has finally become a reality after more than a decade of planning and preparations and was a gigantic attitudinal, institutional and economic step. The European single currency is expected to foster the emergence of a tripolar monetary framework based on the US dollar, the euro and the Japanese yen. The launch of the euro on 1 January 1999, together with the completion of the Single Market and establishment of a new supra-national central bank, the ECB, has accelerated economic integration and made Member States' economies increasingly interdependent, necessitating deeper and more enhanced economic policy co-ordination. In one stroke, the single currency has created the largest single economy in the world with a larger share of global trade and a greater number of consumers than the US. ${ }^{1}$ Economic and Monetary Union has now been achieved by 12 countries. EU currencies like the German mark, French franc, and Italian lira have now merged to become the euro. It includes all European Union countries except the UK, Sweden and Denmark. This could result in global exchange-rate realignment and thus influence worldwide trade and capital flows.

There are many predictions and speculations as to what role the euro performs in the international currency market. By and large, there are five key factors that determine whether a currency will play a global role: ${ }^{2}$

- The size of its underlying economy and global trade;
- The economy's independence from external constraints;

[^30]- Avoidance of exchange controls;
- The breadth, depth and liquidity of its capital markets; and
- The strength and stability of the economy and its external position.

These five criteria qualify a currency for international status. The shares of different currencies then depend on their relative positions on the criteria, and the relative importance of the criteria. The relative size of countries' economies and trade flows is of central salience. A large economy has a naturally large base for its currency and thus possesses important economies of scale and scope. A large volume of trade gives a country's firms considerable leverage to finance in their own currency. Large economies are less vulnerable to external shocks and thus offer a "safe haven" for investors. They are more likely to have the large capital markets that are required for key currency status.

Euroland is today the world's largest trading bloc, accounting for around 40 per cent of world trade, including trade within Euroland. Commerce between the 12 euro-zone nations and all others accounts for 19 per cent of global trade, slightly more than the US's 17 per cent share of world trade. Brazil, Britain, Bulgaria, Chile, the Czech Republic, Denmark, Hungary, India, Norway, Peru, Poland, Russia, South Africa, Switzerland, Sweden and Turkey, now have Euroland as their major single trading partner.

Measured in terms of population, the euro area is one of the largest economic entities in the world, with a total of around 302 million inhabitants. By comparison, the populations of the United States and Japan are 272 million and 127 million, respectively. The GDP of the euro area, including Greece, was just below EUR 6250 billion in 1999. This is equivalent to 16.2 per cent of world GDP: 5.7 percentage points less than the share of the United States, at 20.5 per cent of
world GDP, but around twice that of Japan, at 7.8 per cent. Moreover, the euro area has the highest share of world trade, with a ratio of area-wide exports to total world exports of 19.5 per cent, well ahead of the shares of both the United States and Japan, at 15 per cent and 8.5 per cent respectively. ${ }^{3}$

Euroland will represent a bond market that at the end of 1996 equalled $\$ 6.1$ trillion, or 63 per cent of the size of the $\$ 9.6$ trillion world-wide market for Dollardenominated bonds. ${ }^{4}$ These figures will even significantly increase, if other European countries join the Euro-bloc. If the euro replaces the dollar as the international currency most used for financial asset and foreign exchange transactions, the advantages enjoyed by the US Government corporations and financial institutions will shift to Europe. This scenario would have worldwide impact.

Given that trade between the individual euro area Member States is no longer recorded as international trade, at least from the point of view of the euro area, its openness vis-à-vis the rest of the world appears to be limited. Whereas the average ratio of goods exports to GDP for the individual euro area countries was around 35 per cent, the share of euro area goods exports to GDP (adjusted for intra-euro area trade) was only about 12.9 per cent in 1999. Nevertheless, the euro is still more open than the world's other two major economies. In 1999 euro area exports of goods and services made up 18.9 per cent of world exports, compared with 15.2 per cent for the United States and 9.1 per cent for Japan. ${ }^{5}$

[^31]
## Euro Versus dollar

What about the euro's impact on the almighty dollar? The dollar will be definitely affected by the euro, but to what extent will it be affected is probably the billion dollar question. ${ }^{6}$ Economists are split into two camps on this question.

One group suggests that replacing the rock solid German mark with a soggy euro will prompt investors to switch into dollars, lifting the dollar against the new European currency. Not only will the European Central Bank lack the inflation fighting credentials of Germany's Bundesbank, runs the argument, but EMU will include countries that have fudged the budgetary criteria in the Maastricht treaty on monetary union. On the other hand, another camp, however argues that the creation of the euro as a rival to the dollar may encourage central banks and investors to diversify out of dollars, pushing it down. The dollar share of foreign exchange reserves have already fallen to 64 per cent, down from 80 per cent in the early 1970s. There is scope for this to fall further: the dollar's weight in world reserves still far exceeds America's in the world economy: the share of American GDP to global output is just over one - fifth. However, economists have given little attention to what the euro will imply to the rest of the world and in particular, what will it mean for the dollar.

Central banks hold reserves for two main reasons. First, as a cushion to meet temporary shortages in the foreign currency needed to make payments for trade or to pay interest; and second, as a means of supporting the value of their currencies if the need arises. The effect EMU on the dollar largely depends on how both European and non-European central banks adjust their reserve holdings. ${ }^{7}$

[^32]Consider European central banks first. The total foreign exchange reserves of EU members currently amounts to over $\$ 370$ billion, far more than those of either America or Japan. 8 Add in their holdings of gold (valued at market prices) and the EU's reserves quadruple America's. After EMU goes ahead, the need for participating countries to hold reserves will decline on both counts. They will no longer need such big war chests to defend their currencies' positions in Europe's exchange rate mechanism against speculative attacks. And after monetary union, member countries will need to pay for much less of their imports with foreign currency because trade between them will take place in euros. Thus, they will need smaller foreign exchange reserves.

EMU will also automatically reduce participating countries' reserves, because those that are currently held in other EU currencies will no longer count as a foreign exchange. The German marks held by the Bank of France, for instance, will be converted into euros. France's reserves will immediately drop, but there will be no implications for exchange rates. Even so European central banks will still be left with excess dollars, which over time they are likely to dump. This is possible by using rough estimates of the current composition of the EU's foreign reserves, the average ratio of foreign exchange reserves to imports in the 15 countries will almost double after EMU; the ratio of total reserves (including gold) will jump from 29 per cent at present to 59 per cent. ${ }^{9}$ Not only would that leave Europe's reserves much higher relative to its imports than the equivalent ratio in America, but a hefty 90 per cent of those reserves will be in dollars. It seems almost certain, therefore, that European central banks will dump dollars, both to trim their reserves and to

[^33]diversify into other currencies, such as the yen and the Swiss franc. This will tend to weaken the dollar against the euro.

What about central banks outside the EU? The creation of a single European currency should boost the euro's attractiveness as an international currency for invoicing trade, as a tool of intervention and as an investment. If European Central Bank can establish its inflation fighting credibility, then for the first time since the end of the second world war the dollar could face a competitor of equal muscle. ${ }^{10}$ The EU's total GDP is bigger than America's and monetary union will help make European capital markets broader and more liquid, and hence more of a match for American's. On simple diversification grounds, there is a strong case for central banks to hold more euros. For example, Japan's foreign exchange reserves are thought to be almost entirely composed of dollars, and thus in the long term switching some into euros might seem prudent. As the role of the euro increases, some countries, especially in Eastern Europe, may choose to peg their currencies to it.

## Euro Impact on Global Financial Markets

EMU is also having dynamic effects and is acting as a catalyst for the further integration of the euro area economy. This is particularly obvious in the case of euro area financial markets. Even in the run-up to EMU, there was a marked decline in financial transaction costs. ${ }^{11}$ Since the introduction of the euro on 1 January 1999 this decline has accelerated.. Furthermore, trading activity has expanded, particularly in segments such as the private bond markets. As a result, it is easier for market participants to carry out large transactions within a short

[^34]period of time and with lower costs. Hence, not only bid-ask spreads but also other indicators point towards an increase in the depth and liquidity of euro area financial markets.

Progress on financial market integration is also apparent in recent structural developments in stock markets. In 1999 and 2000, a vast array of initiatives were launched by stock exchanges with a view to forming alliances or merging activities. These initiatives, also involving exchanges located in non-euro area countries, notably the United Kingdom and the United States, reflect increasing financial market integration as well as "technological" factors such as the increased potential for economies of scope and scale resulting from new information and communication technologies (ICT).

Given the weight of the euro area in the world economy and the legacy of the former national currencies which have been replaced by the euro, it is no surprise that the euro is the second most widely used currency after the US dollar. ${ }^{12}$ As regards the private use of the euro, recent trends show that it has been used extensively as a financing and instrument currency. At the end of 2000 the share of the euro in the overall stock of "truly international" debt securities (i.e. debt securities issued in a currency different from that of the country in which the borrower resides) reached 26 per cent. This share is 7 percentage points higher than the combined shares of the former national currencies of the euro area countries at the end of 1998 (at constant exchange rates). Furthermore, the share of the euro in international bank assets has also increased substantially over the last two years.

[^35]Although the international community makes use of the euro for several other reasons (such as payment, pegging, etc.), the utilisation of this currency in the global financial market is the driving force behind its internationalisation. In particular, the advent of the euro is speeding up the process of integration and innovation in the euro area domestic financial market, which may in turn influence its international use. ${ }^{13}$ This means that the euro has not simply replaced the various national denominations within the given market structure. Its introduction may determine a prominent shift in financial markets, which would imply that market participants may fundamentally revise their strategies in response. Although only a very preliminary assessment is possible at this stage, figures currently available on the international use of the euro as an investment and financing currency seem to confirm this impression.

With regard to the field of international debt securities issuance, in 1999 the euro was more widely used than its legacy currencies had been before 1998. This fact has emerged from the data published by the Bank for International Settlements, which single out the truly international component of euro-denominated issues. According to this statistical source, in the first three quarters of 1999, eurodenominated gross international issues of money market instruments, bonds and notes accounted for 38 per cent of total issues, just slightly below the share of the US dollar (41 per cent) ${ }^{14}$. By comparison, in the first nine months of 1998 the combined share of the former euro area national currencies and the ECU was only 24 per cent of total gross issuance. Of course, one-off factors may partly explain the development of the euro: issuers may have deliberately postponed deals arranged in 1998 until after the changeover and increased issuance activity in order to create

[^36]liquid benchmarks. However, issues in euro have been growing continuously over the whole year, so other factors are also likely to have played a role.

One of these factors may be market expectations concerning the future development of the domestic euro area financial markets. The introduction of the euro, in fact, involves a process of integration of national financial markets of the euro area into an area-wide single market, the size and liquidity of which will exceed that of the constituent markets. ${ }^{15}$ This implies a reduction in transaction costs and greater choice of financial instruments, which make the euro attractive as a vehicle for portfolio diversification. A virtuous circle may therefore develop the increasing international use of the euro as an investment and financing currency may feed back into the depth and breadth of Europe's domestic financial markets, thus encouraging further restructuring of the euro area financial system.

Evidence shows that the euro area money market is already highly integrated and liquid. Significantly higher trading volumes in this market have already led to lower bid-ask spreads for very short-term maturities. Efforts to integrate national securities markets and settlement systems are under way. The euro is also increasing competition in the banking sector, thus strengthening existing trends towards securitisation, as well as consolidation and/or disintermediation in this sector. Securitised financial instruments are easier to trade internationally. Furthermore, the unprecedented size of mergers and acquisitions within the euro area is encouraging the development of a large domestic market for corporate bonds. Even a high-risk market segment comparable to the US "junk" bond market is likely to emerge within the euro area over time.

## The Fall of the euro

But movement in other areas has been less rapid and encouraging. Europe's new common currency, had been expected to challenge the mighty dollar for global supremacy. So far it hasn't happened, and experts say it may be years before the euro makes a serious run at the world's premier currency. From the time of its introduction in January 1999, the euro has declined relentlessly versus the dollar. As far as we can tell, euro weakness is due to a combination of the following factors: ${ }^{16}$

- Substantial European direct investment in the US. Simply put, European companies have spent a lot more money buying US companies over the past 2 years than US companies have spent buying European companies.
- US corporations seeking to reduce their interest expense by borrowing in euros (euro interest rates have been lower than dollar interest rates). Most of the borrowed euros are exchanged for US dollars, thus putting downward pressure on the euro versus the dollar.
- The euro carry trade (speculators take advantage of low euro interest rates and the downward trend in the euro-dollar exchange rate by borrowing euros, selling the euros to obtain dollars, and then investing the dollars in higher-yielding assets or debt).
- The perception that the US debt and equity markets would provide better risk-adjusted returns than their European counterparts.
- A deliberate policy to devalue the euro, on the part of European governments and the ECB, in an attempt to boost European exports and, therefore, economic growth.

[^37]- Surging energy prices. Rising energy prices in parallel with an already declining euro exacerbated the existing currency trend due to Europe's heavy reliance on imported oil.
- The trend. Once a major trend is in place it is self-reinforcing in that a decline in a currency's exchange rate leads to a further exodus of capital and heightens the feasibility of any financing/speculative strategies that involve the borrowing or short-selling of the currency. The euro will be considered as a cheap source of funds as long as its trend is perceived to be down.

Many experts believe that it was launched at a level which, with hindsight, was too high. ${ }^{17}$ The US economy was unexpectedly strong in 1999-2000, at least in part on the back of the e-commerce bubble which has now burst. Economic forecasts for the larger Euro zone countries were overly optimistic, oil prices are quoted in US dollars, which consequently with increase of oil prices, strengthened the dollar. A number of political factors also intervened - the Kosovo crisis being the most important - and declarations about the euro which caused speculative movement. Investors, particularly institutional ones, started to test euro-dollar parities, part of the normal game of high finance. There was a certain amount of investor fatigue after the wave of giant mergers and takeovers of the late 90 's; and in the really big ones in 1999-2000 it tended to be EU investment in the US which resulted in an outflow of funds from the euro zone. The euro behaved unlike a normal currency. There was still more than one Central Bank (the central banks of euro zone countries all had a role), while the European Central Bank had no credible track record and reputation. The euro existed only on the bank accounts; there were no banknotes and coins, etc. So it remained a fiction for most people.

[^38]The euro has been falling steadily against the dollar from its first day of trading on 4 January - it lost nearly 8 percent of its value in the first three months of 1999. It even softened against the yen, creating a public perception of a puny currency and confounding market watchers who confidently predicted it would climb steadily against the dollar and the Japanese yen throughout its debut year. ${ }^{18}$

When the euro was born, the vast majority of currency forecasters and traders bet that it would head upwards. It did -- surging by 19 per cent from parity to a peak of 119 US cents, and some bet it would hit 140 before long. But the euro headed south and ever since, it's been a downhill slide. Since its introduction, Europe's single currency has depreciated against the US dollar. The euro from the brief peak of $€ 1=\$ 1.19$, and fell almost continuously to as low as $€ 1=$ US 83 cents in November 2000.19 Since then it has moved up and down in a narrow range and it is still worth about 90 cents only. The euro thus fell by about 30 per cent against the dollar and is still way below parity level with the dollar, which means an extraordinary loss in forex terms. This is as much a case of dollar strength as of euro weakness as the dollar also appreciated against sterling and Swiss franc. and corresponds to the strength of the respective economies. But the yen has been virtually constant and it too has gained against the European unit. The euro sank to a lowest of around 100 yen. That the euro is falling isn't surprising, given the currency's dismal performance since its January 1999 launch, but the yen's rally against Europe's single currency, however, is.

The consensus seems to be that the euro's depreciation has resulted largely from a slowing in growth relative to expectations in the euro zone, while, at the

[^39]same time, growth in the US has been stronger than expected. ${ }^{20}$ If this is the case, then the movement of the euro has simply mirrored what would have occurred in the currencies of the euro area in the absence of monetary union. The strengthened demand for the dollar relative to the euro has reflected a market expectation that productivity growth in the United States is likely to be greater than in continental Europe in the years ahead. The steady flow of capital from Europe to the United States in recent years is, presumably, the consequence of Europeans finding many investments in the United States persistently more attractive than those at home.

The share of the euro in settling/invoicing international trade, for example, is currently estimated to be only around 15 per cent to 17 per cent of total international trade. This is significantly below the euro area's proportion of world trade in goods and services. By contrast, the value of international trade settled in US dollars is nearly four times as high as that of US exports. Furthermore, on a global level the euro does not yet seem to be playing an important role as a vehicle currency in the foreign exchange markets (i.e. a currency that can be used as a means of exchanging two other currencies) or as a pricing and quotation currency ${ }^{21}$.

Looking at official international uses, the euro is the second most widely used official reserve currency after the US dollar. The gap between the two currencies, however, is wide. According to the latest available data, at the end of 1999 the euro accounted for around 13 per cent of the world's official foreign currency holdings

20 Nick Beams, "Surprise Interest rate cut by European Central Bank," World Socialist Web Site, 11 May 2001
${ }^{21}$ Christian Noyer, "The Euro: Six Months After Its Introduction," Speech at the Institute for International Monetary Affairs' (IIMA) Seventh Symposium on "The euro: Its Promise and Challenge to the World Economy", Tokyo, 6 July 1999.
compared with a US dollar share of around 70 per cent. ${ }^{22}$ As an anchor currency, the euro plays a role in the exchange rate regime of more than 50 countries outside the euro area. The solutions adopted by these countries range from very close or even full links to the euro, such as the formal entitlement to use the euro as legal tender, to looser types of anchoring, such as peg arrangements and crawling fluctuation bands.

It also stands in sharp contrast to the speculation, in the years leading up to the euro's debut, that there might be a massive and rapid reallocation of investor portfolios out of dollars and into Europe's new currency. Some experts estimated that such a reallocation of official and private portfolios could total in the range of $\$ 500$ billion to $\$ 1$ trillion. ${ }^{23}$ Such a massive reallocation would, of course, have resulted in an appreciating euro and depreciating dollar in the early stages of monetary union. We now know that, at least in this initial period, rapid portfolio reallocation does not seem to have occurred and the euro's exchange value relative to the dollar has moved exactly contrary to what some had predicted. The macroeconomic factors - the outlook for growth and interest rates - so far have dominated the new currency's movements, just as macro-economic factors were the driving force behind movements in the euro's chief predecessor currency, the German mark.

When the euro was launched three years ago as the common currency for most of Europe, there was a widespread expectation that it would challenge the US dollar's role as the world's most widely used currency. But so far that hasn't happened and, according to many experts, it won't anytime soon. If anything, since the euro's

22 Andrew Hughes Hallett and Laura Piscitelli, "EMU in Reality: The Effect of a Common Monetary Policy on Economies with Different Transmission Mechanisms," CEPR Discussion Paper No.2068, 1999.
${ }^{23}$ C Fred Bergsten, "The Coming Rise of the euro," Speech given before the World Economic Forum, Davos, Switzerland, 28 January 2000.
creation in January 1999, the dollar has become even more entrenched as the world's premier currency. ${ }^{24}$ In April 1999 the dollar was involved in 90 percent of foreign-exchange transactions, which averaged more than $\$ 1.2$ trillion a day, according to a survey by the Bank for International Settlements. The euro was involved in only 30 percent, and most of those were with the dollar.

After a long period of stable growth, the amount of cash in circulation across Western Europe suddenly began to shrink -- to the amazement of the European Central Bank. By January 2001, money was flowing out of the euro zone -comprising the 12 countries that have adopted Europe's single currency -- at the alarming rate of around $\$ 40$ billion a month. ${ }^{25}$ Since then, the hemorrhage has accelerated, contributing to the strength of the U.S. dollar. Such flight from the mark or the franc means a fall in the euro, compared with the dollar, because the values of the 12 euro-zone national currencies have been locked in relation to each other and the continental currency since the euro's birth in January 1999.

There are other reasons for the euro's weakness when compared with the dollar. Many investors may still believe that the United States offers the safest long-term investments because of its unchallenged role as the dominant force in the global economy. The euro's plight has been complicated by its unusual status as a phantom currency used mainly for banking transactions. ${ }^{26}$ Rather than compel everybody to shift overnight to the euro, European leaders decided that a three-year transition was necessary. Thus, since January 1999, bank assets and consumer goods have been marked in both the local national currency and the euro, though no euro cash was accepted for everyday transactions until 1 January 2002. Both euros and the old currencies will be accepted for cash transactions in most euro-

[^40]zone countries until Feb. 28, the day when the euro becomes the sole legal tender throughout the area. Banks will exchange old currencies for euros until 31 December 2002, and the national central banks will perform such exchanges at least until 2004, and perhaps indefinitely.

Politically, the arrival of the euro as a tangible currency is already being called a psychological boost for the flagging crusade to build a United States of Europe. But in the less exalted view of financial markets, the euro's persistent weakness reflects investor scepticism about its credibility and the potential for chaos. ${ }^{27}$ Now that the US Federal Reserve has lowered a key interest rate below the level of a comparable rate set by the European Central Bank, the stage should be set for a surge in the euro's value. Yet the euro is still less than 90 cents -- about 28 percent less than the value at its 1999 birth and near the point that prompted the world's major central banks in September 2001 to intervene on foreign exchange markets.

Much of the original optimism about the euro was based on the claims by political leaders that the new currency would transform the European economy and quickly rival the dollar. After all, simple arithmetic showed that the combined population and economic output of the 11 original Euroland nations -- the 12 th was added later -- would equal or surpass that of the United States. However, that arithmetic overlooked the fact that the dollar is used extensively in many parts of the world other than the United States. It is the sole currency in Panama and Ecuador, and is legal tender in Costa Rica. It is heavily used in countries as diverse as Russia, Israel and Saudi Arabia. A large share of the world's international trade is transacted in dollars, with many crucial commodities, such as oil, priced and paid for in the US currency. Moreover, the United States' huge volume of foreign trade

27 Larry Elliot and Charlotte Denny, "Euro Tumbles into Free Fall," The Guardian, (London) May 2000.
means that vast amounts of dollars are easily available to people and businesses in other countries.

The dollar also remains, by far, the dominant currency held by central banks in their official foreign-exchange reserves. ${ }^{28}$ Further increasing the demand for dollars in recent years have been foreign investors snapping up stocks, bonds, companies and other assets. That money flowed to the United States as investors pursued the most attractive rates of return, a conclusion bolstered by evidence that the US economy is the most dynamic and flexible in the industrial world.

Economists cite a variety of reasons for the euro's failure to gain on the dollar, most of them stemming from the economic structure of Euroland.

Although one institution, the European Central Bank, sets monetary policy for the 12 euro countries, they remain a dozen distinct nations with separate laws, regulations, languages and histories. The euro is a currency without a foundation in a state. While creation of the euro has helped integrate portions of the financial markets of Euroland and holds promise for the future, economic integration clearly is lagging behind monetary integration. ${ }^{29}$ This means that the European Union does not yet make full use of a huge potential for stronger growth and improved competitiveness. Expansion across national borders of important financial markets, such as equity trading and securities lending, is apparently being restrained by difficult negotiations over regulatory and legal differences.

By contrast, the United States is a single country whose economy has been fully integrated for many years, and it is generally more open, less regulated and more

[^41]innovative than that of Europe. The United States has a federal budget; federal laws governing many aspects of commerce throughout the country; a central bank, the Federal Reserve, which is the most powerful and highly regarded in the world; and, finally, established financial markets that are the deepest and most liquid in the world. The last means buyers and sellers can be brought together, confident that the prices they are quoted reflect the bids and offers of many participants, not just a few, and that transaction costs will be low. All 50 states use the dollar; but three European Union countries -- Britain, Denmark and Sweden -- opted not to adopt the euro. Those that did are France, Germany, Luxembourg, Belgium, the Netherlands, Austria, Italy, Ireland, Spain, Portugal, Greece and Finland.

Another factor hurting the euro has been uncertainty over how the European Central Bank would conduct monetary policy. ${ }^{30}$ There has been widespread criticism of the ECB from European politicians and many financial market participants for the new central bank's foot-dragging on cutting interest rates to encourage faster economic growth within Euroland. ECB officials regard themselves as having a single mandate, keeping inflation under control, rather than the dual mandate to keep both inflation and unemployment low.

## Future Prospects

Despite the present situation and condition of the euro's apparently gloomy position, the euro is expected to gradually regain parity levels with the dollar and the yen and play an increasingly important role as a major world currency. The pace of development of the use of the euro from now on is unpredictable, and will vary as between different uses. The entry of the three "out" countries, if and when they join, would mark a further step in the development of the euro, in view of the part the pound sterling still plays in international finance. There is still much uncertainty as to whether and over what time-scale the euro will challenge the

[^42]dollar for first place, and whether the yen will expand its present minimal role in the system. A bilateral world system revolving round the dollar and the euro is envisaged as often as the idea of a triangular dollar - euro - yen configuration. In effect, there appear to be two and a half key currencies at present. ${ }^{31}$

The introduction of the Euro will transform the EU into the largest financial market by unifying the individual stock and capital markets As a result of euro, bigger banks may emerge through mergers and acquisitions across; and these banks may offer a variety of investment instruments such as euro accounts, euro credits, euro credit cards, bonds dominated in euro and euro derivatives. ${ }^{32}$ A bigger, more efficient and more liquid market will lower the costs of funds and, therefore, the interest rate in general. Over a period, LIBOR (London Inter Bank Offer Rate), which is the benchmark interest rate for international lending may be replaced by the Euro rate for international lending.

At most times in history there has been a hierarchy of world currencies, with one dominant, one or two others subsidiary, and the rest nowhere. The case of sterling can be used to show how slowly the hierarchy changes. The dollar began to challenge the dominance of the pound only after the First World War, but it was not until about the end of the 1950s that the market share of the dollar overtook that of sterling. World currency and world power are also seen as going together, although Europe's world power role has lagged well behind its world currency role. Sterling's dominant world currency role in the 19 th century was linked with the global pre-eminence of Great Britain - a fact which still lingers in the British folk memory when it comes to giving up the pound for the euro. The advantages of a dominant world currency are well known. If the euro were to develop as the dollar has done, seignorage (financing debt with cash) would be worth 0.1 per cent a year of GDP, greater liquidity (smaller dealing spreads) another 0.1 per cent, and the

[^43]gain in efficiency a further 0.2 per cent. ${ }^{33}$ De Gaulle once called it an "exorbitant privilege" for the USA to have an international currency which allows near-painless financing of their external deficit. It is easier to finance a large balance of payments deficit, as the US but not Europe is now doing.

The impact of the euro on financial markets has been most rapid in the euro-11 money market, where national currencies were phased out from the outset, and a single interest rate is set by the ECB. However, the money market is not yet fully integrated because of different national financial instruments and procedures. ${ }^{34}$ The ECB pointed out that bank mergers had been mainly within countries rather than across borders, thus limiting the scope for Europe-wide money market operations. The dollar still accounts for 36 per cent of all international bank loans, compared with 20 per cent for the euro-11, and 24 per cent for the euro-15. The euro-11's share has fallen from about 24 per cent as international claims between euro countries in each other's currencies have become domestic claims in euro. Domestic bank loans in Europe are, however, greater than those in the US, where securities markets play a much bigger part in corporate financing.

The euro has made good progress in the futures market. The bond market itself has been a success for the euro so far. The euro Government bond market is 23 per cent larger than its US equivalent. There are still more dollar than euro bonds outstanding in total, including corporate issues, and the dollar has 45 per cent of the total international bond market, compared with 24 per cent for

[^44]the euro-12, or 36 per cent for the euro-15. There were $\$ 147$ billion gross new international bond and note issues in euros in the first quarter of 1999, compared with $\$ 200$ billion in US dollars. This was a net increase of $\$ 82$ billion, or 8 per cent, in outstandings. The comparable figures for dollar issues were a net increase of $\$ 131$ billion, or 7 per cent in outstandings. ${ }^{35}$

How important will the euro become, though, as an investment currency in the global money and capital markets? At present, the US dollar is the predominant international investment currency. In 1997 the share of dollar-denominated instruments of the bonds outstanding in the international bond markets amounted to 46 per cent, followed by Japanese yen-denominated debt (11\%) and debt denominated in Deutsche Mark (10 per cent). All the euro area currencies together accounted for approximately 24 per cent of the international bond market.

The structural changes in the international financial markets over the past 15 years, however, have been to the detriment of the US dollar, and have afforded the European currencies a rising market share. Theoretical considerations seem to suggest that this process might actually be reinforced by monetary union. A crucial factor determining the widespread international use of a currency is the degree of sophistication and openness of its financial markets. Financial markets that guarantee a wide range of products, a broad maturity range and a high level of market liquidity exercise a magnetic attraction internationally. If cross-border capital transactions are free of restrictions, funds are attracted, on the one hand, and, on the other, the currency concerned becomes available for borrowing by nonresidents, too. In short, the international use of that currency is fostered.

[^45]In that respect, the introduction of the euro is likely to have a further positive impact on capital markets within EMU. The currency-related segmentation of the markets will be eliminated, there will be a broader range of investment opportunities available, and the liquidity of the individual products will increase. ${ }^{36}$ Already, member states are gearing themselves to intensifying competition, and are "updating" both their financial markets and their financial instruments.

Several arguments seem to indicate that the euro may become a more attractive currency for bond issuers than all the currencies which it replaced taken together. In fact, the euro was the most popular currency for bonds issued in the international markets in the first month after its introduction, accounting for approximately 55 per cent of the volume of new bond issues, compared with 40 per cent for the US dollar ${ }^{37}$. However, the high figures for euro-denominated bond issuance in January 1999 may, to a certain extent, reflect a particularly high level of initial interest in euro-denominated instruments during the new currency's first month of existence. The euro area may therefore experience a drop in the euro's market share of new bond issues from the high level experienced in the last few years. A key element in determining the longer-term attractiveness of the euro as an investment currency will be the emergence of efficient, large and integrated financial markets in the euro area. The introduction of the euro will remove currency risk, increase cross-border competition and provide an incentive for the harmonisation of market practices, thereby generally reducing transaction costs. Nevertheless, the promising start of the euro on the international bond market clearly shows the confidence of international investors in the stability and strength of the euro and the monetary policy of the Eurosystem.

[^46]Statistics on international debt securities show that net issuance by non-residents denominated in euro doubled between 1998 and 1999. It was particularly strong in comparison with other currencies. Figures for the first half of 2000 indicate continued strong activity in euro-denominated securities issuance, although there was a moderate decline from the peak reached in 1999. This compares with fairly low issuance of Japanese yen-denominated paper. Interestingly, euro-denominated debt securities issuance had a variety of origins, with approximately 75 per cent of borrowing originating from non-euro area advanced economies such as the United States, the United Kingdom, Sweden and Japan. The remaining 25 per cent of issuance stemmed from emerging market economies. Moreover, both private and public sector issuers were active.

Developments have been more subdued in the banking sector, where eurodenominated liabilities in total cross-border liabilities witnessed a moderate increase, with a share of around 20 per cent. Here again, the euro comes second to the US dollar, in which more than 50 per cent of outstanding cross-border bank liabilities are denominated. ${ }^{38}$ The yen ranks third with a share somewhat below 10 per cent. Turning to the assets side, we come to the use of the euro as an investment currency. Unfortunately, statistical evidence is generally limited here. An analysis conducted by the ECB indicates that there was some growth in the use of the euro as an international investment currency over the course of 1999. In the banking sector, the volume of international assets denominated in euro increased only slightly, roughly in line with developments on the liabilities side.

One might try to examine the link between the role of the euro in international financial markets and recent trends in the euro area's balance of payments. Of course, there is no one-to-one correspondence between the two concepts.

[^47]Nevertheless, one can observe a correlation, or co-movement, between the international role of the euro in financial markets and the euro area financial account. In particular, the euro area capital outflows in 1999 are consistent with indications that the euro was used more as a financing than as an investment currency. Likewise, smaller net capital outflows in the first half of 2000 would also appear consistent with a more balanced use of the euro as a financing and an investment currency. These findings are still preliminary, but they confirm the relevance of developments reflecting the international use of the euro.

The role of the euro as a payment currency in the exchange of goods and services, as an invoicing currency in international trade, as a vehicle currency in foreign exchange markets and as a quotation currency in international commodities markets, is expected to rise. ${ }^{39}$ Despite the scarcity of reliable statistical evidence, a few observations can be made. First, the US dollar continues to play a leading role in these areas. Second, rapid changes cannot be expected, as these functions of an international currency are driven by scale and network effects and therefore tend to develop only slowly over time. Third, the euro has a prominent role in those transactions that directly involve euro area residents. For example, the euro tends to be used for invoicing or payments linked to trade flows to or from the euro area. Considering the foreign currency cash holdings in a number of Central and Eastern European countries, it is the Deutsche Mark which takes the lion's share. These cash holdings will be converted into euro as the banknotes and coins are introduced. The stability of the euro indeed makes it an attractive medium of exchange and store of value for the general public in countries that have a history of unstable prices. Nevertheless, as confidence grows in the domestic monetary

[^48]policies conducted in these countries, this specific international role of the euro should not develop further.

The euro may have seen a small increase in its share of the foreign exchange market. The euro is now used as a vehicle between non-euro European currencies, as the D. Mark was, but the use of the Swiss franc for this purpose has surprisingly increased. In view of the Asian financial crisis, trading among euro currencies has not been replaced by the expansion of dealings between the euro and emerging market currencies. Trades with the dollar on one side of the transaction still dominate at 47 per cent of the total, double the share of the euro, which is itself double the share of the yen. The inclusion of the pound could raise the euro share to 30 per cent, however. The dollar still makes up 70 per cent of world foreign exchange reserves, compared with 11 per cent for the euro-11, or 14 per cent for the euro-15. The dollar's share has risen, because ECU reserves within the euro area drop out of the calculation. The euro share is essentially that of the D-mark, but D-marks held by the euro-11 countries come out of the reckoning, because they are no longer foreign currency. Greater use of the euro as a reserve currency will depend how rapidly its use as an invoicing and a pegging currency spreads. ${ }^{40}$

The introduction of the euro immediately produced major changes in the functioning of foreign exchange markets. The disappearance of 12 national currencies and the introduction of the euro as a major international currency had an impact, in itself, on the turnover and focus of attention in the global foreign exchange markets. Euro/dollar trading has, from the start, established itself as the most active and liquid segment of the foreign exchange market. By contrast, the development of euro/yen trading has so far been surprisingly slow.

40 Christopher Johnson, "The Euro as an International Currency: Implications for Domestic and External Policies," Association for the Monetary Union of Europe (AMUE), Paris, December 2000.

The role of the euro in the foreign exchange markets must be seen against the background of the exchange rate policy of the Eurosystem. By contrast with most of the currencies which it replaced, the euro is a freely floating currency. In the absence of any policy co-ordination between the three main currency blocs, the euro exchange rate will reflect the outcome of all relevant economic policies rather than being an objective in itself. ${ }^{41}$ Of course, the ECB will monitor exchange rate developments as part of its overall assessment of a broad range of economic and financial indicators which are relevant for inflation developments.

As regards the international demand for euros, while the use of the euro inside EMU is supply dominated, its use as an international currency is demand driven and therefore more competitive. The role of the euro depends therefore on international market preferences as well as on its ability to challenge the dollar in terms of liquidity and transaction costs. If it is true that major stock market movements have become more highly correlated across countries, then currency movements, notably between the euro and the dollar, may become more important in determining global security.

The euro has not yet had time to demonstrate a virtuous circle. The speed with which it does so depends partly on how rapidly Europe's disparate financial markets become integrated. ${ }^{42}$ The internationalisation of the euro thus depends on its internal development, which has been delayed by conversion rates being known only on 31 December 1998, and by the time taken to agree on and implement official directives and private agreements to integrate European financial markets. It also depends to a significant extent, on whether the pound and other currencies join.

[^49]A further aspect of the internationalisation of the euro is its developing role as an invoicing currency for foreign trade. Today, the US dollar is by far the most important international transaction currency. It is estimated that approximately 50 per cent of world trade is currently priced in dollars, compared with less than onethird in the currencies which were replaced by the euro and 5 per cent in Japanese yen. Initially, the "market share" of the euro would have fallen compared with the previous combined "market shares" of the currencies which it replaced. This was a result of the elimination of intra-euro area trade from the statistics on foreign trade and exchange transactions. However, in the longer term, the euro may become an important currency for the invoicing of foreign trade. It should be emphasised, though, that at the global level, it will clearly take time for the euro to attain a stature comparable with that of the US dollar as the leading international transaction currency. The dollar is used as a standard for pricing in several areas, in particular in commodities trading. It usually takes a long time for changes in such conventions to take place.

The euro is not yet used much as an invoicing currency, even within Europe. Companies which were ready to use euros are often not finding a demand for it. Matters are expected to change suddenly when companies start operating their own accounts in euros. Invoicing in primary commodities, is to a large extent, priced in US dollars. Because the EU15 as a whole is a large importer in certain raw materials, the euro could replace the dollar for these goods. The US share of total raw materials in exports in 1995 was 17.6 per cent and that of imports 15.8 per cent. In Japan it was 1.8 per cent for exports and 41.7 per cent for imports and in the EU 9 per cent of exports against 16 per cent of imports. ${ }^{43}$ The process towards

[^50]the euro might be slow. For many countries commodity prices in dollars are currently less volatile than they would have been in D-Mark or Yen.

But the euro will gradually play a bigger role in the invoicing of trade than the current sum of its constituent parts. This is because the currencies of big exporters tend to be used disproportionately in invoicing. For example, almost 50 per cent of world trade is invoiced in dollars, far above America's 13 per cent of world exports. Based on after EMU calculations, 17 per cent of world exports will originate from the eight European core countries. If, as the bank assumes, the ratio of exports to invoicing is the same for the euro as for the German mark, then this implies that 25 per cent of world exports might be invoiced in euros, up from 16 per cent today. Adding together the three sources of increased demand for euros - European central banks' excess reserves of dollars, diversification by non european central banks and trade invoicing - estimates are that the demand for the new currency will increase (and hence that for dollars will fall) by $\$ 600$ billion over the next decade.

At the moment, the international use of the dollar still exceeds by more than three times the weight of its home country in world trade. That means that trade between two countries other than the USA is denominated in dollars. The use of the euro in international transactions is significantly smaller. The role of the euro is certainly greater than that of the euro countries in the world economy, which is similar to that of the United States. But it does not exceed the domestic role of the euro by as wide a margin. The rest of the world outside the US and Europe is a vast area in which competition between the two currencies should lead to greater efficiency in monetary and financial services, both internationally and within the two home territories. ${ }^{44}$

[^51]The euro does not yet have the liquidity of the dollar. Dealing spreads and transaction charges are higher, because the costs of maintaining national financial markets, even in the same currency as each other, are higher than those of a single market such as the US, centred as it is in New York, or the international dollar markets. The average size and trading turnover of euro instruments are smaller than for their dollar equivalents. Since the willingness of market participants to hold dollar or euro instruments depends partly on the degree of liquidity, the euro area needs to develop greater liquidity by means of integration of national markets, greater size of issues, and higher turnover. The single European financial market and the euro depend on each other. They are both still in their early stages.

At present the euro still needs further integration of domestic financial markets to compete with the dollar. However, the euro might evolve rather quickly in the medium term. While a broader international use of the euro would reduce transaction costs and simplify company balance sheets, its use in financial portfolios will compete with the dollar. As financial market preferences change, the more likely are shifts between the two investment alternatives which, in turn, could cause sudden exchange rate shifts. The larger the holdings of euro assets, the more a relatively small percentage movement of funds can disrupt the exchange rate. The international success of the euro, and the ability of the authorities to manage it, are two sides of the same coin.

Another aspect under consideration is how volatile will the dollar-euro exchange rate be? Even as much as 10 per cent of GDP being subject to exchange rate instability is undesirable, particularly if large movements between the euro and other currencies become the pattern. A 10 per cent movement of the euro affecting 10 per cent of the euro area's GDP can cause a 1 per cent change in prices, and have further effects on output. The emergence of currency blocs around the dollar,
the euro and eventually around the yen would imply an even larger exchange rate variability between those key currencies as this is the only instrument to adjust for fundamental disequilibria. ${ }^{45}$ Stabilising exchange rates and therefore market expectations requires greater visibility. Such visibility does not just require a policy commitment, but also sound underlying economic fundamentals and their adjustment. It is, however, impossible to achieve greater exchange rate certainty without better and systematic transatlantic cooperation. A successful exchange rate stabilisation requires an active co-operation between central banks: A credible stabilisation policy would be to set a target path for the exchange rate for the coming year according to its interest rate differential. No conflict with domestic objectives arises as long as interventions are "sterilised". A successful intervention also requires a credible stabilisation policy of the countries involved. The IMF might take on a supervisory role. This also requires that internationally accepted standards for prudential supervision are in place. High exchange rate volatility and possible misalignments between the dollar and the euro will be a permanent source of uncertainty for emerging countries. ${ }^{46}$ In the long run, a lack of stability and policy co-ordination between the USA, Japan and Europe could hamper economic and monetary integration in promising emerging economies in Asia as well as in Central and Eastern Europe.

It is unfortunate that the general public in the euro countries, notably Germany, has taken the fall in the euro to mean that it is a weak currency, while its inflation rate of 1 per cent and European wide low interest rates indicates exactly the

45 Susanne Mundschenk, "What Implications will Euro Exchange Rate Movements have for the Sustainability of EMU," Association for the Monetary Union of Europe (AMUE), Paris, December 2000.
opposite. The fall in the euro has made European exports more competitive in the world, and made an important contribution to recovery, along with low interest rates. It can be argued that the greater exchange rate stability within the euro area will be offset by greater instability between the euro and other currencies, notably the dollar, and the yen. International currencies such as the dollar against the D Mark or the yen seem to be more volatile than the D-Mark against the yen. The European currencies which preceded the euro were not all equally unstable against the dollar, but from now on they could become as unstable as the most unstable previous currency, usually the D-Mark.

Formerly, when the dollar fell against the D-mark, other European currencies tended to fall somewhat against the D-mark as well. This complementary movement tended to buffer the US dollar's effective exchange rate from the dollarmark change. On the other hand, the euro may vary by less than the D-Mark, because the European Central Bank will not use interest rate changes for purely German objectives, as the Bundesbank did in 1992, raising interest rates unilaterally to counteract the overheating following unification.

The euro exchange rate will both influence and be influenced by the ECB's monetary policy, and can thus be seen as an endogenous variable. The policy of the euro-12 governments with regard to exchange rate management will also condition market expectations, and play a part in determining the exchange rate. ${ }^{47}$ The fall in the euro rate so far, which has been associated with a cut in the ECB interest rate to 2.5 per cent, well below the US level, has, as it happens, been in Germany's interests.

[^52]The type of monetary policy adopted by the ECB will influence the exchange rate. If the Bank gives a lot of direct weight to inflation in setting its targets, then it will have to change interest rates more than if it targets only money or nominal income. This will stabilise the inflation rate at the expense of greater volatility in external exchange rates and in output. The common-sense argument that inflation should be directly targeted, as is done by the Bank of England and some other central banks, may thus need to be questioned. If euro-wide inflation is targeted, inflation is still likely to vary across countries and within countries. The smaller countries in EMU each have a vote on the Governing Council, irrespective of economic weight, and may combine to discourage inflation targeting if it has little impact on their own inflation rates. It may thus be better for the ECB to give some weight to output, in order to stabilise real variables as well as nominal ones.

The argument for exchange rate management is that the ECB should set interest rates primarily to achieve internal rather than external objectives, and will therefore need other ways of preventing exchange rate changes from undermining its internal objectives. There will always be a danger of inconsistency between domestic monetary policy and exchange rate policy. The wider the euro area is, the less it will be exposed to the rest of the world, and the more important domestic aims become in setting interest rates. This is evident from the example of the United States. If benign neglect means not using the exchange rate as a domestic policy weapon, then it could contribute to stabilising the euro rather than to aggravating volatility.

The euro may also become an attractive currency for the investment of official reserves. In its latest Annual Report, the IMF estimated that at the end of 1997 total official assets, for which a currency breakdown was available, amounted to
almost 1000 billion SDRs. ${ }^{48}$ Currently the US dollar is by far the most important official reserve currency world-wide; at the end of 1996 the share of dollardenominated instruments in official reserves amounted to approximately 64 per cent, while the euro area currencies accounted for 25 per cent and the Japanese yen for 6 per cent. The euro's share of world-wide official reserves is likely to have fallen at the start of Stage Three since the Deutsche Mark reserves previously held by euro area national central banks have become domestic euro area assets. Despite these technical adjustments, the euro should remain the second international reserve currency, as a legacy of the former euro area national currencies. Apart from the weight of an economy and the size and liquidity of its financial markets, another major pre-requisite for the substantial use of a currency by foreign investors is confidence in the stability of its purchasing power in the long run. In this regard, internal price stability will provide a strong basis for supporting the euro's external value.

But will the prospect of countries shifting their official reserves out of dollars into euros materialize? Those countries that link their exchange rates to European currencies--by a currency board, a fixed or crawling peg, or a managed float-probably already hold deutsche marks or other European currencies in their reserves. That applies mainly to countries in Eastern Europe, most of which link their currencies to the deutsche mark since much of their trade is with Germany. They will very likely hold their reserves mainly in euros. How rapidly, if at all, will other countries switch their reserves to the euro? Of those that peg their exchange rates, most do so to the dollar or to a basket of currencies in which the dollar is dominant. They are unlikely to switch on a large scale. Furthermore, most Latin American and Asian countries have closer trade relations with the United States than with Europe. They are likely to stick to the dollar, but they could gradually

[^53]diversify their reserve holdings. ${ }^{49}$ What can be said with some assurance is that if switches of reserves from dollars to euros do occur, the process will be gradual. Central banks around the world would certainly avoid large sales of dollars and purchases of euros, since that would tend to lower the value of their remaining dollar holdings.

Again, is the euro likely to be acquired by countries with growing reserves? It is worth noting that a currency can take on an increasing role as a reserve currency only if its issuer incurs an overall balance of payments deficit. In other words, if holdings of a reserve currency are to increase, there must be a supply as well as a demand for it. The United States has demonstrated that principle over the years either by running a current-account deficit, as in recent times, or by having an excess of capital outflows over its current-account surplus, as in the 1950s and 1960s. At present, euroland has a sizable current-account surplus. It remains to be seen whether it becomes a substantial exporter of capital. Another condition for reserve currency status is the existence of financial markets in which monetary authorities are willing to invest their foreign exchange reserves.

However, the euro's share of the global official reserves may soon increase again. First, it may be expected that the central banks of non-euro area countries will reassess their reserve management strategy in the light of the improved global diversification opportunities offered by the new currency. For example, the euro may in future come to represent a more important part of the foreign currency reserves held also by Asian central banks. Second, the euro might also assume a greater role as an anchor currency for other European countries which, formally or informally, intend to peg their exchange rate to the euro or to a (trade-weighted) basket of currencies which includes the euro as a large component. Thus, the euro

[^54]may over time become part of the foreign currency reserves held by central banks for diversification or pegging purposes. ${ }^{50}$ However, whether and to what extent this will happen will depend crucially on the confidence in the economic policies across the euro area in general, and the monetary policy of the Eurosystem as well as the stability of the euro in particular. Reliable forecasts regarding the timing and quantitative dimension of such a process are hard to make at this stage.

The euro is likely to become an important anchor currency in other European countries which, formally or informally, might find it useful to peg their exchange rate to the euro or to a basket of currencies in which the euro is a large component. ${ }^{51}$ This is the case at present for the "pre-in countries" participating in ERM II as well as for several countries in central and eastern Europe which link their currencies to the euro, whether by a currency board, a fixed or crawling peg or a managed float. In addition, other countries will also have to reassess their reserve management strategies in the light of the improved diversification opportunities offered by the new currency. It is possible that countries in Asia and Latin America, which traditionally have predominantly held US dollar reserves, may find it useful to diversify their reserve holdings gradually by acquiring euro.A number of countries - mainly in Central and Eastern Europe and in Africa - have unilaterally decided to peg their currencies to either the euro or one of its national denominations. Other countries are pursuing managed float policies with the euro being the main reference currency, whereas a final group of countries are pegging their currency to baskets of currencies, such as the Special Drawing Right, containing the euro or its national denominations. Against this background, the

[^55]use of the euro is likely to increase both as an intervention currency and as a reserve currency, even though in this last respect the number of central banks that might be interested in holding euros is likely to be higher. As a matter of fact, just like private international investors, central banks may find it convenient to diversify their portfolios into a currency offering broader investment opportunities than its former constituent currencies.

In retrospect, there is little doubt that the euro has the potential to achieve over time a more important position in the international monetary system than would be suggested by the sum of the positions of its constituent currencies. With regard to the euro as both an international reserve and investment currency, confidence in the stability and strength of the euro will be crucial. It is reassuring to know that the euro area is today better placed than ever to cope with the challenges of international exposure, while at the same time reaping the benefits of globalisation. In order to do so three elements are needed. First, the dynamic effects of EMU will deepen the economic integration of the euro area. This in turn is likely to yield general economic benefits such as a more efficient allocation of resources within the euro area economy. Second, the ECB's stability-oriented single monetary policy provides stable framework conditions for economic agents. With regard to other macro-economic policy areas, policy-makers at the national and to some extent the European level, have the same responsibility. Third, structural reforms in goods, capital and labour markets have to proceed in order to allow the euro area to better exploit its growth potential in the future.

Even as the European Central Bank gains more credibility, analysts say there are structural issues that will keep the euro lagging behind the dollar. Federal Reserve Chairman Alan Greenspan recently attributed the dollar's relative strength against
the euro to the huge surge in the productivity of American workers. Higher American productivity brings greater returns to investors and thus explains "the steady flow of capital from Europe to the United States in recent years," he said. ${ }^{52}$ Analysts predict that if Europe deals with its structural problems, the euro and dollar will probably be on more equal footing in the future.

In conclusion, it is still too early to make any clear assessment of the possible role of the euro in the international monetary system. However, the mandate of the Euro system to maintain price stability in the euro area and its institutional framework, ensuring a high degree of independence, will be a good basis for developing the international role of the euro. In addition, the introduction of the euro will contribute to further development of the euro area financial markets with a view to achieving higher efficiency and international competitiveness. Against this background, one can safely assume that there is little doubt that the euro will play a major role as an international currency and will find its proper place in the international monetary system.

[^56]
## CHAPTER 4

## Impact on the World Economy

On January 1, 1999, the world financial system witnessed a major change never before seen: eleven nations ${ }^{1}$ of the European Union fixed their currencies to each other and established the world's first common currency, the euro. After years of negotiations and much scepticism from around the globe, the euro has become a reality. The way business is conducted, the way people travel, and the way countries and corporations invest their money are bound to change.

The introduction of the euro will have important implications not only for the Union and its Member States but also for their partners. While it will be a major event for international monetary relations and the international monetary system, there will be no abrupt change; nor is it likely to be destabilising. It is felt that the European Monetary Union (EMU) will have substantial ripple effects on the world economy as the euro could bring substantial changes to the system of international finance, trade and monetary policies. The euro will also lead to rapid growth of the bond market, create a new reserve currency, contribute to Europe's competitiveness and growth prospects, and have positive repercussions around the world.

Two years after its inauguration, the single currency remains on course, fueling talk of a global currency triangle based around the dollar, euro, and yen that will dominate the first half of the twenty-first century. ${ }^{2}$ The economic impact of the Euro is of strategic importance for the future of both the European Union and the international system. The launch of the euro offers the prospect of a new tri-polar

[^57]international economic order that could replace America's hegemony since World War II. The global trading system has already been jointly run since the early days of the European Common Market, which enabled Europe to integrate its commerce and exercise power equivalent to that of the United States in that domain. Now Euroland will equal or exceed the United States on every key measure of economic strength and will speak increasingly with a single voice on a wide array of economic issues. ${ }^{3}$ Many experts believe that it will not be long before it assumes the status of a major, even dominant currency in world trade and in international currency markets.

Individuals and institutions all over the world, in the private as well as the public sectors, would be well advised to fully assess the impact of the Euro on their core operational processes.

In the case of the public sector, the increasing importance of the Euro as an international currency introduces a different set of considerations with regard to reserve management, it presents a potentially larger market for accessing capital, and it also provides the prospect for more stable currency markets in a global sense. This encompasses the use of the euro for official reserve holdings and as a reference currency for exchange rate arrangements. Statistics related to official reserves were published in the most recent International Monetary Fund's Annual Report, and indicated that the share of the euro was around 13 per cent at the end of 1999. Similarly, owners, executives and managers of private companies and businesses, no matter how small, must prepare themselves to take full advantage of the opportunities that the Euro will present. At the same time, fears have been expressed that with such a large internal market, the European Union will become

[^58]inward looking and that historical ties with the countries of Western Europe and more importantly, current economic linkages may be at risk.

## A New Global Monetary Order

With the euro likely to challenge the international financial dominance of the dollar, the world's financial dimension could prove to be somewhat mildly disruptive, although not destabilizing, as the euro becomes a major global currency. ${ }^{4}$ The euro now represents an economy almost as large as the United States and will be even larger when all 15 EU countries become members. It enjoys considerably larger trade flows and monetary reserves and can boast a far stronger external financial position as a sizable creditor area; in contrast, America's net foreign debt now approaches $\$ 2$ trillion. As soon as the European Central Bank establishes its credibility, the euro will become a global financial asset and produce a portfolio diversification from dollars into euros by private investors and central banks that could ultimately reach $\$ 500$ billion to $\$ 1$ trillion.

The new monetary environment will also substantially affect the world economy. The dollar and the euro will probably account for roughly equal shares of the great bulk of international financial assets. Prolonged misalignment between them will generate similarly skewed results for other countries that peg their units to either currency. Indeed, the dollar's sharp rise against the yen from 1995 to 1997 partially caused the Asian crisis, since most of the Asian currencies were effectively tied to the dollar. Moreover, misalignments among the major currencies contribute to disruptive protectionist pressures, with particularly large costs for developing

[^59]and other heavily trade-dependent countries. ${ }^{5}$ In addition, considerable dollar-euro instability is likely even without prolonged misalignment because both superpowers will be continental economies with only a modest reliance on trade.

The birth of the euro has made its most immediate impact on money markets, which have become substantially integrated: the euro has helped to create deep, broad and liquid financial markets in the $E U$, and is having profound effects on financial systems. But the introduction of the euro stands, above all, as the culmination of a long period of intense economic preparation and has, as such, laid the basis for sustained low inflation, stable monetary conditions and improved public finances. ${ }^{6}$ Under this perspective, the introduction of the Euro is part of a global drive for a dynamic Europe which combines a stable macroeconomic climate with good functioning markets for good services. The introduction of the Euro will change the shape of the European Union and its role in international economic relations. The Euro area has a population of nearly 300 million people. It represents almost 20 per cent of world GDP and a similar proportion of world trade. The size of the EMU, the stability orientation of its policy framework and the integration of its financial markets imply that the Euro is likely to become a major world currency.

## Trade Creation, Trade Diversion and Trade Invoicing

First and foremost, the euro will be beneficial for international trade. This is good not only for Europe, but also for Europe's partners. The euro will fill three main voids in terms of international trade, namely: trade creation, trade diversion and trade invoicing.

[^60]Trade creation means creating additional trade by removing inefficiencies and currency risks involved in international trade. This role of trade creation, the most important role of a currency, will depend on the size of the Eurozone, the soundness of EU and member state's economic policies and on the completion of the Single Market. ${ }^{7}$ While the latter is progressing, albeit at a slow rate, and while at the moment the member states are pursuing sound policies, it is thought that the future nature of the Eurozone will be comprised of: the EU itself, the candidate countries, the Southern Mediterranean, and African countries in the CFA franc zone. Depending on the success of the Euro, its area of influence might extend to the Russia and the rest of Africa. At present, experts see no role for the Euro in Latin America and cannot yet forecast a role in Asia.

Another aspect, much less important than trade creation, implies the diversion of trade from extra-EU trade to intra-EU trade. Factors which will tend towards this are the increased competitiveness of the Euro area, the elimination of exchangerate uncertainty and a reduction in the financing cost of firms; a greater market transparency. As regards trade invoicing, there has, up to now, not been as much of an effect as had been expected, but nevertheless, may increase in the future. Many EU Member States, e.g. Belgium, still prefer to invoice in US dollars.

Intensified competition will also develop within the euro area. Amid mounting price pressures, competition among suppliers to the euro zone is bound to intensify, necessitating shorter response intervals to rapidly changing consumer preferences and shortened product life cycles. ${ }^{8}$ While restructuring is reducing the number of EU distributors and retailers, the size and strength of those that remain have increased. It is possible that some EU enterprises may become more "inward-

7 Robert Solomon, "Will the Euro Area Energize Europe and the World Economy," Global Interdependence Centre (London), 2000.
8 Williem F. Duisenberg, "The International Role of the Euro," Keynote address at the European Banking Congress, Frankfurt, 17 November 2000.
looking", i.e. inclined to buy from European suppliers, as the removal of exchange risks tends to encourage trade within the euro zone. But it would be more realistic to expect that increased competition will continue to exert pressures on EU enterprises to buy from the most competitive sources. Some companies are therefore likely to rely even more on imports from competitive sources, to maintain their own competitiveness. European companies are also looking seriously at Eastern Europe and the Mediterranean, which have emerged as alternative sources of the EU for competitive products.

Notably, the EU is both a major market and direct investor for most East European countries. Because of close economic relations, East European currencies against the euro are usually less volatile than those against the US dollar, making companies more willing to accept payment in euros in the region. Moreover, the EU is in accession negotiation with 13 candidate countries, including Bulgaria, Cyprus, Czech Republic, Estonia, Hungary, Latvia, Lithuania, Malta, Poland, Romania, Slovakia, Slovenia and Turkey. ${ }^{9}$ While the accession of new EU members is not expected to happen before 2004, various Europe Agreements have already been in place, under which EU's tariffs and quotas on most manufactured products imported from Eastern Europe are being removed.

Against this background, companies in Eastern Europe and the Mediterranean are increasingly marketing their products in the EU in euro terms with minimal foreign exchange risks, posing challenges to exports from other parts of the world, especially for textiles and clothing in the EU market. As a result, while the euro's arrival has pressured European companies to source competitively, exporters to the euro zone must ensure that they are competitive enough in comparison with other

[^61]suppliers in order to survive the increasingly competitive environment in the market.

In order to prepare for the euro, and once it is in place, Member States need to follow sound economic policies based on low inflation, healthy public finances and stable monetary conditions. These rules of good economic management are the recipe for low interest rates, strong investment growth, and therefore high growth and job creation. Firms across the world --and not just in Europe-- will benefit from these improved growth prospects. ${ }^{10}$ The strength of Europe as a trade partner will open new prospects for exporters in the rest of the world. Moreover, Economic and Monetary Union should be seen as Europe's final step in creating a truly single market, to the benefit of all firms. Foreign companies especially will benefit, because there will be only one market to penetrate rather than fifteen. Therefore, the costs of doing business in Europe will go down significantly, fostering competition and lowering prices across the Union. ${ }^{11}$

The benefits of the euro, underpinned by sound and stable economic fundamentals, will not be confined to Europe. By strengthening the EU as a trade partner, the euro has opened new prospects for exporters from the rest of the world. The reduced transaction costs associated with trading within the euro zone have increased the appeal of this area for global companies considering direct investments. Companies establishing subsidiaries or branches in the euro area are able to benefit from the reduction in exchange rate-related costs brought about by the EMU. This means that they are effectively be penetrating one single market rather than twelve different national markets in terms of financial transactions ${ }^{12}$.

[^62]
## Impact on World Trade and Global Transactions

There are many economic benefits. The euro will:

- Lower prices by making them transparent across Europe. Being able to easily tell if a price in one country is better than the price in another will also be a big benefit, both for consumers and businesses. Price equalization will begin to appear across borders of countries. Businesses will have to be more competitive. Pricing will still vary, but consumers will be able to spot a good deal or a bad one.
- Create a genuine single market by ending barriers to trade caused by transaction costs and fluctuating currencies. Any time either a consumer or a business made a commitment to buy something in a different country in the future (at future prices), they stood the chance of paying much more (or less) than they had planned. The euro will eliminate the fluctuations of currency values across certain borders.
- The price transparency, elimination of exchange-rate fluctuations, and the elimination of exchange-transaction costs will all contribute to an increase in trade across borders of all of the Euroland countries.
- Not only will business be conducted across borders more easily, but people will be more easily employable across borders. With a single currency, it will be less cumbersome for people to cross into the next country to work, because their salary will be paid in the same currency they use in their own country.
- Billing for services, products, or other types of payments will be simplified with the euro.
- Business will be able to expand more easily into neighboring countries. Rather than having to set up separate accounting systems, banks, etc. for
transactions in countries other than their native one, the euro will make it simple to operate from a single central accounting office and use a single bank.
- On a larger scale, the financial and stock exchanges can list every financial instrument in euros rather than in each nation's denomination. This will have further ramifications in that it will promote trade with less restriction internationally, as well as strengthen the European financial markets. Banks will be able to offer financial products (loans, CDs, etc.) to countries throughout Euroland. All these will ensure financial market stability.
- Enhance competition by forcing companies to concentrate on price, quality, and production instead of hiding behind weak currencies
- Benefit small and medium exporters and consumers by making it easier for the former to enter "foreign" markets, and allowing the latter, increasingly via the Internet, to shop in the lowest priced markets.
- Bring inflation and interest rate stability via the new European Central Bank. Because of the European Central Bank (ECB), introduction of the euro will also help lower (and control) inflation among the EU countries. Because of the decrease in exchange-rate risk, the euro will encourage lower interest rates. In the past, additional interest was charged to cover the risk of the exchange-rate fluctuation. This risk is gone with the introduction of the euro.
- Lower the costs of doing business through lower prices, lower interest rates, no transaction costs or loss through exchanging currencies, and the absence of exchange rate fluctuations. This will also be particularly helpful for tourists and others who cross several borders during the course of a trip. They had to exchange their money as they entered each new country. The
costs of all of these exchanges added up significantly. With the euro, no exchanges will be necessary within the Euroland countries. ${ }^{13}$

In short, the single currency will significantly increase competition, lower costs, and bring about greater stability. These new forces will bring about much-needed structural reforms in Europe. Almost every aspect of Europe's business and political environment will be affected. Perhaps, most importantly, marketing and pricing strategies need rethinking. Because the euro will allows easy pricecomparison across Europe (especially via the Internet), it will reveal the differences between higher and lower priced markets.

The euro area consisting of twelve Member States, will have nearly 300 million inhabitants, and will account for 19.4 per cent of world GDP. This compares with 19.6 per cent of world GDP for the United States and 7.7 per cent for Japan. Even if one excludes the international trade within the union, the EU is still the most important commercial power in the world, with a share of 18.6 per cent of world trade, against 16.6 per cent for the US and 8.2 per cent for Japan. ${ }^{14}$ One can therefore expect that the euro will, over time, play an increasingly important role in international trade. This will probably become evident first in the European zone of influence, i.e. in those countries which have close economic and trade ties with the European Union. In that zone, in areas such as the countries of Central and Eastern Europe, a gradual shift has already taken place out of dollars into DM, and it can be expected that this phenomenon will be reinforced by the introduction of the euro.

The use of the euro will probably also increase in the rest of the world, although at this level there are strong factors of inertia, certainly in the Americas, but also in Asia, where the dollar will continue to play a very important role, given the limited

[^63]internationalisation of the yen. In any case, the mere commercial weight of the euro zone will increase the use of the euro for international payments, even if the euro's role will only expand gradually. ${ }^{15}$

Benefits of the euro, according to its supporters, are cheaper mortgages and lower consumer prices. Dealing with alternate currencies is a risky business venture, because there is no way to adequately predict return on investments when those investments are enumerated in other countries' money. The exchange rates fluctuate to such enormous degrees that a business unit can be profitable in another currency, and still lose money when that is translated to the currency of the home state. The euro smooths out these walls and leaves behind an open road upon which the commerce can flow with ease and less apprehension. Therefore, the scope for increasing the role of the euro on the international capital markets is also expected to gradually build up. ${ }^{16}$

The introduction of the euro will induce portfolio shifts in favour of eurodenominated assets. These are likely to become more attractive for international investors for a combination of reasons: ${ }^{17}$

- The sheer size of the euro area will give rise to the development of deep and liquid markets in euro denominated instruments;
- The policy-mix in the euro area will be stability-oriented. Monetary policy will be stable, with an independent ECB committed to price stability, and fiscal policy will be stable, based on the Union's strong commitment to

[^64]budgetary discipline. The euro will thus be an attractive store of value. The combination of the European Central Bank aiming at price stability and the Union's strong commitment to budgetary discipline in Europe, re-enforced by the "Stability and Growth Pact", should result in a balanced policy mix. If the major partners also pursue sound policies, the result should be a stable euro.

- The shift away from the dollar and into EU currency assets is happening already. From 1988 to 1995 the share of EU currencies in the total private wealth portfolio has risen from around a quarter to over a third, while the dollar's share has fallen from over 50 per cent to around 40 per cent;
- Any shift is likely to be gradual, as the credibility of the ECB builds up, and the overall stability orientation of the euro area is confirmed.
- There will be large portfolio shifts, but these are unlikely to be abrupt or disruptive. Euro-related portfolio shifts will be only one feature of international developments in future years.

The Euro is also expected to rebalance the international monetary system. The size of the EMU, the stability orientation of its policy framework and the integration of its financial markets make the euro a major world currency. The true benefit of the new currency is in helping to create a more stable financial environment for the global economy as a whole. ${ }^{18}$ We have already begun to see a more balanced system based on the co-existence of three major currencies, the US dollar, the euro and the yen. With the creation of unified, deep and liquid financial markets in the euro area, both private and public investors now have the opportunity to diversify their portfolios through denominating their assets in the new currency. The strong popularity enjoyed by euro-denominated products in some major economies

[^65]immediately after the launch of the new currency is a sign of this progressive shift in portfolios. This shift will be gradual and will not imply major disruptions to the international monetary system. International borrowers will also benefit from the advantages in terms of reduced fees and transaction costs of borrowing in the euro area's financial markets, as these become more liquid and efficient.

The use of the euro as an official reserve currency by third countries will develop. The trade flows between the European Union and the rest of the world are likely to increase in the coming years. As these trade flows will increasingly be denominated in euro, this may become an incentive for more and more countries to increase the share of euro in its international currency reserves. ${ }^{19}$ The euro area eventually may constitute an economic power that rivals the US. Already its share of global trade is approximately 20 per cent and the euro is the second largest currency in the world. In many respects, the US dollar continues to dominate, however. The share of the main European currencies now in euro in the foreign reserves of world's central banks was slightly over 20 per cent in mid-1990s, whereas the share of the US dollar was over 50 per cent. ${ }^{20}$ In 1992 the US dollar was still used in over half of the global trade as an invoicing currency.

At the moment the US dollar is clearly the most widely used currency both as a medium of exchange and store of value. ${ }^{21}$ It is still the most widely used as a reserve currency by the world's central banks. There are clear externalities in using a single currency for various transactions, so the shift towards the euro should be

[^66]quite slow at first. Eventually, companies inside the euro area, due to its size, will gain leverage over their customers on the invoicing currency used. Since the use of the euro will eliminate their currency risk, they will want to move to the euro. For companies operating in countries that have pegged their exchange rates to the euro, the use of the euro will be relatively risk-free as well.

These factors will help to increase the use of the euro as a medium of exchange. It is still an open question as to how many euro notes will be used and demanded outside the euro area. In some Eastern European countries, the German mark has been widely used as a store of value, so it is natural to expect that the euro will replace it in this regard. Potentially more important is the use of dollars in Russia and other more populous transition economies. The dollar is widely used as a store of value and as a medium of exchange for many big-ticket items. Estimates of the amount of dollar notes in circulation, for instance, inside Russia vary widely from $\$ 20$ billion to $\$ 30$ billion. If the euro displaces to some extent the US dollar in the heavily dollarised economies, the demand for cash euros will be higher than otherwise. Correspondingly, the seigniorage accruing to the ESCB would be higher. The deepening of financial markets inside the euro area will increase the attractiveness of the euro as a store of value. If euro-denominated securities markets grow and become more liquid, they will be increasingly attractive for investors outside the euro area. This applies both to private and official investors, and as was mentioned in the previous section, these markets have already received a sizeable boost from the introduction of the euro.

The euro area offers a viable alternative to investments in the US as the liquidity and diversity of euro markets grow. ${ }^{22}$ It is unlikely that other markets anywhere will match the US and euro markets in this regard. However, there may also be an opposite reaction. The disappearance of national currencies creates a need to

[^67]diversify portfolios. This means that some capital outflows from the euro area should also be expected. For example, there might be larger demand for securities from the more advanced EU accession countries. On the global scale, these capital flows remain small, although they may be quite large for the recipient countries themselves. During 1999, the euro area as a whole had a current account surplus and correspondingly a deficit in the capital account. ${ }^{23}$

Banks may give an additional boost to the use of the euro. Many central banks in regions geographically and/or politically close to the euro area have already pegged to the euro or to a basket where the euro plays a major role. ${ }^{24}$ If other central banks also start to use the euro as a reserve, and even an intervention, currency (a role currently reserved almost exclusively for the US dollar), the use of the euro will be enhanced in the private sector. The euro has already started to influence development outside the euro area. It is quite widely used as an anchor currency by many small economies. Euro denominated capital markets grew in the past year quite vigorously, and this growth is expected to continue. Therefore, the euro area will attract additional capital inflows. There will also be capital outflows from the euro area as investors inside the area seek to diversify their currency portfolios.

The euro will also be used as a reference currency for exchange rate regimes adopted by third countries. Today, over 50 countries are managing exchange rate arrangements that include a reference to the euro. This involves a variety of regimes, ranging from very tight pegs (i.e. currency boards) to managed floating policies. Geographically, these countries are located on the European and African continents. ${ }^{25}$ This is a difference with the US dollar, which is also used by a few countries outside the Western Hemisphere. The intensive trade and financial links

[^68]with the euro area are the main factor behind the choice of the euro in the definition of exchange rate policies. For some countries, the European Union accession process provides an additional impetus to select an exchange rate arrangement based on the euro. The choice of a euro-based exchange rate arrangement is a unilateral decision, and does not involve any commitment on the part of the ECB. However, this use of the euro as a reference currency may be seen as a sign of confidence in the stability-oriented macro-economic policies of the euro area.

The greatest impact of the single market is likely to be in trade and financial linkages. Increased activity and high import demand in the Euro zone will lead to increased exports from developing and transition economies. In the same way, exchange rate arrangements, financial market developments and capital flows will have implications for these economies and their policies. For instance, where there is a single trade regime for the EU and a different one for member countries, the EU regime supercedes. One of the benefits of this is in lower tariffs on items. Average weighted industrial tariffs for individual countries are currently higher than the 3.6 per cent average for the EU and so countries importing into the EU zone will enjoy reduced tariff at this rate. Increases in the cyclical strength of the Euro zone will lead directly to enhanced exports for Europe's trading partners.

## Impact on North Africa, The Mediterannean, Central and Eastern Europe

The economic performance and development of the euro's international role is likely, first, in the countries which have close economic, trade and financial links with the European Union, including countries that link their currencies to the euro, such as the countries of Central and Eastern Europe and some Mediterranean and African countries. ${ }^{26}$ For example the countries of Central and Eastern Europe which already tie their currencies to the German mark, will be

[^69]linked to it and the private sector will use it in its trade and financial relations with the European Union. Similarly, the euro will automatically become the currency of reference for the CFA area. Among emerging market economies, those likely to be most affected are the transition countries of central and Eastern Europe and the Baltics, the developing countries of the Mediterranean basin, and countries in Africa. At world level, these developments may be more gradual. Countries in Asia and the Western Hemisphere, as well as advanced economies outside Europe, will be affected as well, but to a lesser extent.

More robust activity and higher import demand in the euro area, stemming from the strengthening cyclical recovery and the beneficial effects of ongoing market integration and structural reforms, may be expected to generate increased demand for exports from developing and transition countries. Financial linkages-reflecting, for example, exchange rate pegs to the euro, financial market developments, and capital flows including foreign direct investment-will also carry implications for developing and transition countries and their policies. In 1996, trade with the euro area constituted 40-50 per cent of total trade in goods for Africa as a whole, and stood at the higher end of this range in North Africa and the countries of the CFA franc zone, as well as in a number of countries in Eastern Europe and the Mediterranean. ${ }^{27}$ It accounted for less than 15 percent of total trade in the developing countries of Asia and the Western Hemisphere.

However, EMU could lead to increased variability in these countries' terms of trade and competitiveness if it leads to larger fluctuations of the euro against the dollar and yen than have occurred with pre-EMU European currency pegs. Conversely, as countries move to a euro peg they may benefit from a currency link to the larger, more diversified euro area rather than to Germany or France, with the potential for reduced exposure to demand shocks transmitted through the exchange rate. The
extent to which changes in the value of the euro vis-à-vis the dollar and yen affect the competitiveness of developing and transition countries that peg to the euro will depend on how close an approximation the euro is to a country's effective exchange rate basket. ${ }^{28}$ Exchange rate movements could also have important effects on countries with substantial external debt. For example, when there is a mismatch between the currency denomination of the debt and the anchor of the exchange rate regime or the currency mix of trade partners, an appreciation of the euro would benefit countries that peg to the euro and export primarily to euro-area countries but service a substantial debt denominated in dollars, since this would decrease the domestic currency cost of debt service, probably without a fully offsetting decline in export revenue.

EMU may tend to increase capital flows to emerging market economies. First, deeper and more liquid capital markets in Europe will lower borrowing costs both for countries in the euro area and for countries raising funds through eurodenominated instruments. Second, EMU will allow euro-area institutions such as insurance companies and pension funds to shift some of their portfolios into emerging market investments as constraints imposed by currency matching requirements are eased. Third, emerging market economies could benefit from direct and portfolio capital inflows if the convergence of asset returns in Europe leads global investors to increase their emerging market holdings in order to diversify across countries with a wider range of risk and return characteristics or with different cyclical positions. Flows will depend on the degree of capital account convertibility.

[^70]
## Impact on Emergent Market Economies

EMU also carries financial market risks for emerging market countries, however. A successful EMU that raises productivity and growth could make Europe more attractive for investors and thus tend to increase the cost of capital for emerging market economies. Furthermore, increased competitiveness of European financial institutions and the greater depth of euro-area financial markets could lead firms in developing and transition countries to raise funds in euros rather than domestic currencies, which could pose a challenge to the continued development of local capital markets. ${ }^{29}$ EMU thus provides further incentive for these countries to strengthen financial intermediation and foster sound banking systems. Finally, cyclical movements in the euro area will have an important bearing on financial conditions facing developing and transition countries, both in terms of interest rates and in terms of the magnitude and stability of capital flows available to finance investment. To the extent that cyclical volatility in the euro area can be reduced through appropriate policies that reflect the commitment under EMU to preserve an environment with low and stable inflation, adverse spillovers on interest rates and capital flows for developing countries will be more limited.

It is also expected that emerging market countries with close ties to Europe whose currencies are linked to the Deutsche Mark or the French franc will shift these links to the Euro, as has been done by the Central Bank of West African states (BCEAO) on 1 January 1999. Changing values between the dollar or yen could affect such countries' external competitiveness when the currency or currency basket of the exchange rate target deviates from the trade-based effective exchange rate. Also, countries with dollar or yen denominated debt would be affected. An increase in the value of the Euro would benefit those countries that peg their

29 Alan Greenspan. "The Euro as an International Currency," speech before the Euro-50 Group roundtable, (Washington DC) 30 November 2001.
currencies to the Euro, as it would decrease the domestic currency cost of servicing such debt. ${ }^{30}$

Conversely, any depreciation of the Euro would increase the cost of such debt service. A depreciation of the euro against other major currencies would be of particular concern for countries with substantial external debt such as Bulgaria, and several countries of the CFA franc zone, but less so for other countries in Central and Eastern Europe that have generally small debt burdens. To avoid these effects of exchange rate movements, it may be desirable for countries to adjust their exchange rate regimes, for example to basket pegs that better reflect the composition of their trade and financial links, or change their debt management policies. ${ }^{31}$

To offset these effects, countries may decide to adjust their exchange rate regimes to better reflect the composition of their trade and financial links, or to change their debt-management policies. Adjustments to debt management will be facilitated as the Euro becomes more widely used in trade and financial markets and accounts for a larger share of debt securities. Countries that peg to the Euro will be able to lower their dollar exposure and reduce the fluctuations in their dollar-denominated debt payments.

The Euro will bring the continents even closer because by the consolidation of twelve different markets, it will create a more liquid market with a source of capital far bigger than the sum of its parts. Capital markets in the zone will come to represent a fresh source of funds for European and US companies. In essence, such companies will no longer need to look to the developing world for growth. Increasingly, Western companies are getting more capital, while flows of net credit into emerging countries are declining. It is obvious that investors in both zones are

[^71]moving towards low but less volatile returns from each other's capital markets rather than looking for short-term high returns from emerging countries especially in the light of the Asian crises which almost completely eroded confidence in emerging markets. Strong demand by advanced countries for exports from the Euro zone as well as depreciation of the currencies of countries in the zone in the last three years has stimulated recovery in these areas and helped to offset the effects of the Asian crises. ${ }^{32}$

Also, for this reason, the IMF as well as the World Bank have now shifted ground from their traditional positions and now agree that developing nations now imbibe financial controls since floating currencies and free inflows of 'hot money' may actually hurt countries with primitive financial systems. It is now agreed that European and US financial systems, where capital inflows account for only 2 per cent of economic output, are big and sophisticated enough to absorb hot money shocks as opposed to these developing nations. One way by which developing countries can help themselves in this regard is by greater transparency in its banking system to decrease the notion that they are inherently unstable. Since its 1994 crash, Mexico has tried to put this in place and so far, this has helped it escape the worst of the panic. There is a danger in this trend of increased capital flows into the West, however because as the economies of Europe and the US prosper while those of emerging countries become less relevant to this prosperity, many developing countries face many more future years of trauma. ${ }^{33}$

[^72]Another effect of the EMU will be felt in the export of goods from emerging countries. Developing countries who are primarily exporters of commodities are getting less for the commodities they produce. Since a lot of their currencies value has declined, purchasing power especially for things such as machinery and raw materials, which would improve production, has declined. They are therefore unable to increase their exports. Without inflow of funds from the developed or Western world, many developing nations are now clearly more disadvantaged than they were previously. ${ }^{34}$ Unlike in the early 90 s' when there was massive capital inflows into emerging markets from the western world, now these economies are left alone to struggle out of the recession with minimal, if any, western investment. We also see that direct investment by companies have also declined. The effect of this is that emerging countries now face years of slower growth, as the cost of capital has become astronomical. These countries have lost the ability they had in those years of increasing global growth. With this situation, it is likely that new Foreign Direct Investment (FDI) will be concentrated in a few countries such as China, Korea, Mexico or Poland, for strategic reasons.

There might, however, still be some investment by private institutions such as insurance companies and pension funds in the Euro zone that will shift some of their portfolios into emerging market investments. Because investments outside their home countries but within the Euro zone will be reclassified as domestic currency investments, investors may find that EMU effectively eases constraints imposed by currency exposure requirements. Emerging market economies could also benefit from direct and portfolio capital inflows if converging asset returns in

[^73]Europe lead global investors to increase their emerging market holdings in order to diversify across countries. ${ }^{35}$

There are however some financial risks that emerging market countries will now be exposed to: a successful EMU that raises productivity and growth could make Europe more attractive to investors and increase the cost of capital for emerging market economies. ${ }^{36}$ Furthermore, increased competitiveness of European financial institutions and the greater depth of financial markets in the Euro zone could lead companies in developing and transition countries to raise capital in Euro rather than in their domestic currencies, thus challenging local capital markets. This could however, provide an incentive for such countries to strengthen their financial intermediation and build sound banking systems.

If emerging countries choose to peg their currency solely to the euro or the dollar as a nominal anchor they keep volatility in exchange rate movements to the anchor as low as possible and accept at the same time exposure to the full impact of fluctuations of the floating dollar-euro exchange rate. If transatlantic exchange rate fluctuations persist, emerging countries might come under strain due to their diversified trade and foreign capital structure. A country's ability to service foreign debt, say in dollars, depends not only on the euro exchange rate of its own currency but also on the rate between the dollar and the currencies in which the country earns its export revenues, at least in the short run. Increasing volatility between key currencies could therefore significantly hamper the economic integration of emerging countries.

[^74]
## Implications for Developing and Transition Countries

For developing and transition countries, the main impact of the unified European market is likely to come through trade and financial linkages. More robust activity and higher import demand in the euro area stemming from the strengthening cyclical recovery and the beneficial effects of ongoing market integration and structural reforms may be expected to generate increased demand for exports from developing and transition countries. ${ }^{37}$ Financial linkages-reflecting, for example, exchange rate pegs to the euro, financial market developments, and capital flows including foreign direct investmentwill also carry implications for developing and transition countries and their policies

- An increase in the cyclical strength of the euro area will lead directly to increased exports for Europe's trading partners. In addition, the launch of the single currency is likely to lead to further progress in reforming labour markets and addressing other structural problems and, consequently, to medium-term output gains. Trade with the euro area makes up between 40 and 50 percent of total goods trade for Africa as a whole, with countries in North Africa and the CFA franc zone at the higher end of this range.
- A number of emerging market countries with close ties to Europe currently link their currencies to the deutsche mark or the French franc. These links are expected to be shifted to the euro. Changing values between the euro and the dollar or yen could affect these countries'

[^75]external competitiveness when the currency or currency basket of the exchange rate target deviates from the trade-based effective exchange rate. At the same time, countries with dollar- or yen-denominated debt would be affected: an increase in the value of the euro would benefit those countries that peg their currencies to the euro, because it would decrease the domestic currency cost of servicing their dollar-denominated debt. Conversely, any depreciation of the euro would increase the cost of such debt service.

- To offset these effects, countries may decide to adjust their exchange rate regimes to reflect better the composition of their trade and financial links or to change their debt-management policies. Adjustments to debt management will be facilitated as the euro becomes widely used in trade and financial markets and accounts for a larger share of debt securities. Countries that peg to the euro will be able to lower their dollar exposure and reduce the fluctuations in their dollar-denominated debt payments.

EMU may also lower borrowing costs:

- Deeper and more liquid capital markets in Europe will lower borrowing costs, both for countries in the euro area and for other countries that raise euro-denominated funds.
- EMU will allow private institutions, such as insurance companies and pension funds, in the euro area to shift some of their portfolios into emerging market investments. Because investments outside their home countries but within the euro area will be reclassified as domestic currency investments, investors will find that EMU effectively eases constraints imposed by currency exposure requirements.
- Emerging market economies could benefit from direct and portfolio capital inflows if converging asset returns in Europe lead global investors to increase their emerging market holdings in order to diversify across countries.

EMU may also create some financial risks for Developing countries:

- A successful EMU that raises productivity and growth could make Europe more attractive to investors and increase the cost of capital for emerging market economies.
- Increased competitiveness of European financial institutions and the greater depth of financial markets in the euro area could lead firms in developing and transition countries to raise capital in euros rather than in their domestic currencies, thus challenging local capital markets. This could, however, provide an incentive for developing and transition countries to strengthen their financial intermediation and build sound banking systems.


## Impact of the Euro on America

Although change is a certainty, it is unclear how the euro will affect the United States. There are two schools of thought regarding its long-term effects on the US. One group believes that American businesses will flourish in the new market, while others fear that the dollar will weaken as more business is conducted in euros and as countries begin to eliminate some of their reserves, which are typically held in dollars. ${ }^{38}$ Despite the unknowns, the support from the U.S. government and the preparations that American businesses have made will allow American firms to flourish in the new market.

[^76]The US administration had long been a supporter of global cooperation, believing that whatever is good for Europe is good for the US and declaring that a strong and stable Europe, with open markets and healthy growth, is good for America and for the world. A successful EMU that contributes to a dynamic Europe is clearly seen in American interest. ${ }^{39}$ For businesses especially, the establishment of the EU and the implementation of the euro is likely to have a positive impact. Although the common currency is a new phenomenon, American businesses are used to having a close relationship with Europe. The EU is one of America's largest and most important commercial partners and the establishment of a single market will likely help all involved. By eliminating currency conversion and the fees accrued during cross-border trade, costs will be lowered dramatically, thus allowing large corporations to save money and increase profits, and small and medium-sized companies to have greater opportunities for international trade. Furthermore, competition will increase due to the existence of price transparency throughout Euroland. 40 This transparency allows consumers to easily compare prices in different countries, making it difficult for companies to maintain high price differentials across borders.

For years, nations around the world have been expanding their economic reach, and companies who have resisted this global trend will find themselves at a great disadvantage once the euro is firmly entrenched. Fortunately, American firms have maintained an international approach for years, which will benefit both the individual companies, and the entire US economy. American firms, which have been quick to exploit the liberalization of the European industry and have always sought "pan-European" solutions, will find themselves with an advantage over many European firms who, apart from an elite group of multinationals, have until

[^77]recently sought refuge in their national markets. The establishment of the euro will reward businesses that have implemented an international approach and will likely hurt those that have remained national in their reach.

The US and the businesses that call it home are at a further advantage because of the extensive preparations they have made. The US Department of Commerce, for example, has devoted an entire web site to aiding businesses, both large and small, in preparing for the transition to the euro. Furthermore, despite the widespread scepticism regarding the establishment of the euro in January 1999, American businesses have invested substantial amounts of money and time into preparations for the arrival of the euro. ${ }^{41}$ The fact that many American companies have long viewed Europe as a single market, or at least as a potential single market, also improves their prospects for the "age of the euro".

Although there is great potential for the euro to have a positive impact on American business, there is much uncertainty regarding the effect it will have on the dollar's role as the world's dominant currency. Some believe that it will take years for the euro to become an established currency on the world stage, while others think that it will dominate the world economy within a few years. The dollar, however, has a lead over the euro in several respects. It accounts for 56 percent of the world's foreign exchange reserves, 48 percent of export invoicing, and more than 80 percent of foreign exchange transactions. It is unlikely that this advantage will disappear immediately and is more likely that the euro's impact on the world monetary system will occur gradually.

Although historically there has only been one dominant currency at a time, we might be nearing a time when two currencies can dominate and compete with each other simultaneously. The competition between the euro and the dollar would have

[^78]an invigorating impact on the world economy, creating competition that would take place not as a matter of prestige, but with respect to the best fundamentals: balanced budgets, exchange rates which reflect the productivity of the countries, flexible markets, a sufficient stock of savings. ${ }^{42}$

The implementation of the euro is certainly not risk free for the United States. Among other things, the dollar could weaken as countries decrease their reserves and as businesses move their investments out of dollars and into euros. The creation of an integrated economy in Europe will enhance competition, lower costs, and increase investment. Furthermore, the possibility of competition between two dominant currencies could greatly benefit the world. ${ }^{43}$ While it is too early to know how the euro will affect world markets, there is great potential for the US to benefit from its implementation.

## Impact on India

As for the impact of the Euro on India, surely the common currency will provide more opportunities to Indian trade and industry though it could also intensify competition among trading partners in the region. ${ }^{44}$ The country had to evaluate broader effects of the new currency for medium and long-term prospects. Changes to be expected as a result of the launch of the Euro will have to be steady. In the financial markets, the emergence of the Euro is likely to herald the end of a strong dollar, which have been slowly appreciating for the last five years or so against major world currencies, including the Indian Rupee.

[^79]India's average exports with the present EMU block of 12 countries Stands at around $\$ 6.5$ billion and imports likewise stands at around $\$ 8$ billion. On an average, both exports to and imports from the EMU-12 ranged between 27 and 30 per cent of the total external trade respectively, making it the largest external partner. ${ }^{45}$ In the years ahead, India can ill afford to ignore the growing impact of the Euro on its trading practices and banking activities. In a likely scenario of the Euro offering tough challenges to the US dollar, EMU may insist on Euro invoicing instead of US dollars.

India, as also other countries, have been using the dollar as an intervention currency. Now it would be better for India to make better use of the Euro even though it is not backed by any gold reserves. India has been incurring most of its foreign currency debt from European countries by floating Global Depository Receipts (GDRs). The Indian corporate sector has hardly resorted to issue of American Depository Receipts (ADRs) to be floated in the United States. Hence it would be appropriate to imagine that the heralding of the Euro is likely to be more favourable for India in the matter of obtaining foreign currency funds. As for the government's foreign exchange reserves, these consisted of major currencies like the US dollar, the British pound, the German mark and the Japanese yen. It is hoped that after the Euro gets settled in international financial markets, India's reserves will be much more in Euro currency than any other.

A major advantage for Indian banks operating in India will be the simplification of the number of nostro accounts, where settlement risks and transaction cost involving more than a dozen countries will be limited to one. 46 The rationalization of nostro accounts will improve efficiency, easy reconciliation and better management of funds deployed. By encouraging Indian Investors to invest in EMU with

[^80]comparatively less risk and investment portfolios, the euro bonds and securities issues will swell. Likewise, Indian banks abroad, especially those functioning in euro zones, can get the benefit of less complex foreign debt, funds and a whole range of banking transactions instead of a dozen currencies.

The Euro is also likely to be a boon for Indian exporters frequently traveling to the Euro zone. For Indian businessmen the biggest advantage will be the reduction of transaction costs and elimination of exchange rate risks. ${ }^{47}$ The traveller will save on at least 3 per cent foreign exchange since there wouldn't be any need to change currencies while entering a different country as the exchange rates have been irrevocably fixed. ${ }^{48}$ Even though national currencies will be dealt with the Euro during the transition period, Indian businessmen ought to develop a measure of preparedness. Many big European firms are contemplating the switchover earlier than later. Price comparisons within Euroland has and will become transparent because of the common currency and its fixed equations. Indian companies can now enter one coherent market free from the impediments to internal trade with an impressive growth potential. But by the same token competition within the Euro area will increase. The demands of the new environment will be an appropriate time for Indian companies to reorient their European strategy. With the EU emerging as India's largest trading partner, a common currency for most of the EU countries has a tremendous potential for India. 49

The introduction of the euro also has implications for the international co-operation process. By reducing the number of key global players, the emergence of the euro area in principle simplifies international co-operation, as it facilitates the exchange of views and the formulation of common understandings on economic and financial

[^81]issues. ${ }^{50} \mathrm{~A}$ more balanced relationship between the three major players - the United States, the euro area and Japan - is helping to encourage each of them to take responsibility for contributing to a stable global environment. Policy co-ordination at the global level, however, is likely to continue to be of a non-binding nature in the future. Following the collapse of the Bretton Woods system, larger countries have always refrained from committing themselves to formal exchange rate arrangements or other pre-defined rules. In this respect, the introduction of the euro has not changed the current picture. Efficient and effective international cooperation means that the euro area needs to be able to take a single position when appropriate. In line with the present allocation of responsibilities among euro area Member States, the Eurosystem and European Community institutions, pragmatic arrangements for the external representation of the euro area in international organisations (IMF, OECD, etc.) and forums (G-7, G-20, etc.) have been already implemented.

The arrival of the euro has already begun to facilitate open borders and freer, more competitive trade within Europe itself. The euro is the currency of the world's most significant trading bloc so its effect on third countries is bound to be considerable. The new currency will serve to counterbalance the supremacy of the US dollar. The euro will increase competitiveness and cost effectiveness in business and trade relations. The costs of exchange transactions are set to diminish, while the low costs of financing purchases, debt and equity will also make it a viable financing currency. It is likely to take several years before the euro's full importance, strength and influence is fully understood. By then, however, entrepreneurs in the Euro

[^82]zone and in third countries will have experienced the impact of the new currency on their business. ${ }^{51}$

After a century of wars and division, Europe's promising economic outlook -- just when the US economy is headed into the doldrums - has fuelled predictions that the Old World may achieve greater influence in global affairs commensurate with its status as the world's largest commercial power. There is no doubt whatsoever that the final period of the last century was the American decade. But there is now a good possibility that the first decade of this century may turn out to be a European decade.

The Euro and the environment it will create bring with it many opportunities. At the same time there are many threats for the unprepared economies and countries. Governments and businesses have to come to grips with the fact that the introduction of the euro is a global phenomenon with global consequences and must be prepared to take advantage of the opportunities and to mitigate the threats the euro poses. ${ }^{52}$ Rather than calculating the gains to the Eurozone and the disadvantages to countries outside the zone - especially developing countries - the challenge is for all regions to take actions and launch initiatives to make them more competitive, as well as spur growth in their respective regions.

## Developments Since 1999

The major achievement since the introduction of the Euro in 1999 has been the significant progress in creating Euro-area financial markets. The weight of the Euro area in the international economy and in trade has guaranteed that the Euro is already one of the world's leading trade and investment currencies. However, issuance of Euro-denominated fixed-income securities since the beginning of 1999

[^83]has exceeded all expectations. The Euro has rapidly become an attractive alternative to the dollar for issuance, with international bond issuance split more or less evenly between the two currencies. Even more notable has been the extraordinary growth in the corporate bond sector. The origin of corporate issues is also significant : in the last three years for example, the US multinationals have raised as much money in the Euro bond markets as in the dollar market. The rapid process of restructuring currently underway in the corporate sector in Europe evidenced by unprecedented merger and acquisition activity as well as improved efficiency and competitiveness - has been underpinned by the introduction of the Euro and the development of the corporate bond market.

The retail banking sector, too, is very much affected by the introduction of the Euro. The Single Market and the Single Currency is expected to significantly improve the efficiency of the retail banking sector, not least leading to a lowering of the very high costs for cross-border payment transfers in the Euro area. This process is expected to accelerate when the Euro banknotes and coins are introduced in 2002. Clearly the introduction of the Euro has been a catalyst for all these ongoing developments in the financial markets which are widely contributing to a more dynamic functioning of the Euro area economies and the growth potential of the Euro area.

The economic prospects for Europe are the brightest in a decade. Real GDP growth has accelerated since the second half of 1999 and was at an annual rate of 3.2 per cent in the first quarter of 2000 . Based on sound fundamentals, an appropriate policy mix and a brightening external environment, the EU economy expanded by about 3.5 per cent in 2000 and by more than 3 per cent in 2001.53 While the

[^84]economy continues to benefit from positive net exports, the recovery is predominantly based in domestic sources. Domestic demand - and particularly private consumption - is expariding rapidly, reflecting historically high levels of consumer and investor confidence.

The good news on the economy extends also to the employment situation as there was a marked improvement in the relationship between growth of output and employment. Compared with the period 1974-89, real output growth now translates into higher employment growth. Between 1996 and 2000, about 7.6 million extra jobs were created in the eurozone, while unemployment fell from 11.5 per cent in 1996 to 8.3 per cent in 2001 - still too high, but an improvement on a dismal record. ${ }^{54}$ As the recovery increasingly takes hold, the unemployment rate is expected to decline by a full percentage point to about 8 per cent in 2002. This implies a rise of 1.25 per cent in employment - equivalent to the creation of no less than 4 million new jobs. This will leave the number of unemployed at its lowest level since 1991 as labor markets become less rigid and unions modified wage demands. While that is still more than twice the American unemployment rate, it represents a significant drop that has provided governments with enormous savings in welfare payments. Nevertheless, a further substantial reduction in the unacceptably high rate of unemployment remains a priority for Europe. ${ }^{55}$

Despite the strength of the economic recovery, inflation is likely to be subdued. Some inflation pressure is to be expected from domestic sources as excess capacity in the economy diminishes. There is also an external inflation risk linked to rising oil prices and a depreciated exchange rate. However, a timely response from

[^85]monetary policy and prospect of continued wage discipline ensured that the consumer price inflation rate remained below 2 per cent for both 2000 and 2001.56 A distinct achievement of Economic and Monetary Union (EMU) is the reduction by Member States of public sector deficits. For the Euro area as a whole the public sector deficit in 1999 was 1.2 per cent of GDP and is expected to fall to below 1 per cent of GDP in 2002. This is a clear achievement of the EMU policy framework, which requires that fiscal policy should be conducted in a way which supports and enhances monetary policy focused on maintaining price stability. The reduction of budget deficits, and the ultimate medium term goal of budget surpluses is one of the core elements of the Stability and Growth Pact, which was concluded between the Member States of the Euro area in 1998. The lead-up to the launch of notes and coins has also seen important gains, particularly in lower inflation and fiscal consolidation. A startling indication of this transformation is that Germany's fiscal deficit of about 2.5 per cent of gross domestic product is expected to be the biggest in the European Union, let alone the eurozone. ${ }^{57}$

In the last three years, the euro has clearly demonstrated that it can achieve its main objectives. These include ensuring price stability, enhancing market transparency across national borders, and facilitating commerce both inside and outside Europe. Moreover, the final barriers to a single continental market -- which would allow the free passage of goods, capital and people are being gradually removed

At the beginning of 1999 euro area exports (excluding intra-area trade) still suffered from the 1998 crisis in the Asian emerging market economies. In the first half they fell by 3.4 per cent year-on-year. During the second half of 1999, however, euro area exports witnessed positive rates of growth of 6.7 per cent in the third quarter

[^86]and 11.9 per cent in the fourth quarter which set the trend for 2000 and 2001 as well. ${ }^{58}$ No doubt, the weak euro was helpful but the main reason for the export recovery was the upturn in the world trade cycle.

Much of Europe's trade -- as much as 80 percent of total commercial exchanges -is done within the euro-zone that encompasses 12 countries. As a result, Europe seems relatively immune to the economic slowdown afflicting the United States and Asia. The European Commission estimates that the 12 countries now earn little more than 2 percent of their national incomes from exports to the United States. So while the United States struggles to regain its dynamism, Europe is basking in an unusual role as a haven of relative stability. For the first time in a decade, many analysts say, the growth rate in Europe for 2001 is likely to surpass that of the United States.

The euro's value has risen from a low of 82 cents to just over 95 cents today. While the euro remains significantly below the $\$ 1.18$ it commanded when it was launched two years ago, many experts think it has such strong momentum that it will soon reach parity with the dollar. ${ }^{59}$ The euro's ascendancy has much to do with doubts about the health of the U.S. economy, but it also demonstrates growing faith among investors in Europe's prospects. Several factors explain the brighter outlook: substantial tax cuts in Italy, Germany and France; a significant drop in oil prices from their recent peaks; a flurry of successful corporate restructurings; and the best employment figures in recent memory.

Economic strength in Europe has drawn much of its buoyancy from growing exports, which became much more competitive in foreign markets because of the weak euro. For instance, as leading U.S. automakers Ford and GM endure slumping sales, German car companies Volkswagen, Porsche and BMW have been

[^87]racking up record profits thanks to sales abroad. But now that the euro has jumped by 15 percent in value and threatens to move higher against the dollar, some European companies worry that their share of export markets could start to diminish. That, however, would be more than offset by the benefits of a strong euro -- which brings down the cost of oil and other imports. ${ }^{60}$ That, in turn, would help control inflation and provide greater flexibility to the European Central Bank to cut interest rates when it needs to spur the economy.

But the recent global slowdown and the consequent fall in European growth rates has implications for the world economy as a whole. It means that three major areas-the United States, Europe and Japan-are all experiencing significantly lower growth rates and even the prospect of recession. The global slowdown is reflected in forecasts issued by the World Trade Organisation this week. World trade, it predicted, would expand by only 7 percent this year compared to 12.5 percent last year. "The prospects for world trade in 2001 have become more clouded in recent months," the WTO said. "The deceleration of global trade growth which started in the final months of 2000 is expected to continue for most of 2002 ." For example, in February 2001 exports grew at 11.6 per cent for the eurozone countries, but in January 2002 it showed a negative growth of -5.7 per cent. ${ }^{61}$

The risk of recession in the euro-zone has increased in response to a stream of disappointing figures and a further drop in the leading indicators. ${ }^{62}$ Consumer and producer confidence already fell before September and deteriorated sharply in the aftermath of September 11, 2001. To make matters worse, Belgian business confidence - a predictor of European industrial confidence - recorded another sharp

[^88]drop. This suggests that business confidence is unlikely to stage a rapid recovery. The leading indicators for each of the three largest euro-zone economies are pointing towards a further economic downturn. The most recent survey of purchasing managers revealed a further deterioration. The latest data suggests that it is not just the manufacturing industry that is contracting but the service sector too, as a result of which fourth quarter (2001) GDP in the euro-zone is likely to shrink. There has, consequently, been a considerable increase in the risk of recession. The likely future developments after 1 January 2002, remains to be seen, although the prospects for both Euroland and the global economy does not look too bright in the short run.

In conclusion, summarising almost three years of experience with the euro, one might consider that it has started playing an international role in line with the economic and financial size of the euro area in a rather smooth manner. Developments in the international use of the euro are, of course, only gradual. Nevertheless, looking ahead, one can expect the international role of the euro to develop further. An established track record of the Eurosystem with reference to its primary objective of price stability and continuing integration of financial markets in the euro area will undoubtedly contribute to the further internationalisation of the euro. Globalisation is a key feature of today's world where interactions and interdependencies between countries have increased significantly and therefore, the role of the euro area in the global economy assumes tremendous importance. Primary and fundamental contribution that the Eurosystem can make to a stable international economic and financial environment is maintaining stable prices in the euro area. This will also provide the euro with clear potential to achieve a stronger external value, as well as being a further factor supporting the development of its role as an international currency and play its designated role in world trade and finance.

## Chapter 5

## Conclusion: Problems and Prospects

On 1 January 2002, the euro was fully adopted as legal tender in twelve of the fifteen nations in the EU: Belgium, Germany, Greece, Spain, France, Ireland, Italy, Luxembourg, The Netherlands, Austria, Portugal, and Finland. For two months there was a period of dual currency, during which both forms of cash (old and new) were to be spent, and all change was given in euros. On February 28, each of the above countries' sovereign currency was to be spent for the last time and from 1 July 2002, the euro will be the sole legal tender in Euroland with the completion of the change over to the euro in all the participating member states. ${ }^{1}$

However, by adopting the euro, the new currency is thrusting together twelve nations of Europe who have enormous legal, economic, generational, and cultural differences that aren't likely to disappear in the near future. ${ }^{2}$ Because of that, labour mobility could be a tremendous problem across the Euro zone, and thoughts about contributions to social security and private pensions probably aren't going to mix. Differences in employment rates in certain regions will make it difficult for all the nations to exist under a single interest rate and living wage. Countries within the zone will not have the power to make adjustments to their economy necessary to offset sharp up or down turns. This could turn out to be a tremendous shock to regional economic stability, with massive short and mediumterm crises.

[^89]When nations join together and seamlessly eliminate the economic barriers between them, the emergence of a super-state is the only logical consequence. If you are not part of the union, your former trading partners are no longer small rodents. They become a giant bear, a great economic bloc with muscle and ferocity. To protect this wealth, the government of it must conceivably strengthen and provide for a common defense. Leading European bankers and politicians do not believe that the euro will work in the long-term without a European central government.

The logical conclusion of complete European Economic and Monetary Union will be realized only when the other three 'out countries' - Denmark, Sweden and notably Britain - join the Eurozone. So far, Denmark is the only country of the fifteen whose citizens have had a direct referendum on euro adoption. The Danish have an enormous amount of welfare and very high taxes, and that's the way they like it. Accepting the euro would mean changing these comfortable economic conditions, and so they voted it down by a large margin. An average of only 55 percent of people in the new Euro zone support the new currency, based on results of a poll conducted by Eurobarometer, which is published by the EU. ${ }^{3}$

England and Sweden, the other EU states not joining the euro, are tiptoeing toward referendums, but aren't willing to take that risk. Britain's government has refrained from going in on the euro, taking a wait-and-see stance. It would cost Britain some 36 billion pounds to convert to euros, a hefty price tag considering that the economic benefits would probably not cover the costs for a very long time. Britain also has less unemployment than Euro zone, more reason to keep its economy to itself. So most of the reasons for not adopting the Euro are reasons of

[^90]self-interest. ${ }^{4}$ Governments are surprisingly reluctant to discuss any constitutional and political implications, dismissing them in favour of economic issues.

Euroland wants the euro to become an international currency as widely used as the US dollar, and as a domestic currency as respected as the German Deutschmark used to be ${ }^{5}$.

But a number of obstacles still could derail this goal. Among the most controversial are:

- Role of European Central Bank
- Coordination of economic policy
- Social Implications
- Tax harmonisation
- Use of euro as reserve currency
- Adoption of euro in Eastern Europe
- Bigger role for EU in international economic policy discussions

The further development of the international role of the euro will depend, in the first place, on the confidence which the financial markets place in the new currency. In the long run this trust in a currency can only be earned by pursuing credible policies.

## Role Of European Central Bank

For monetary policy this means safeguarding price stability. The Maastricht Treaty created the institutional framework for the European Central Bank (ECB) to pursue a credible, stability oriented policy. And with the transparent monetary policy

[^91]strategy and instruments the ECB Governing Council and the ECB have the means to fulfill their mandate of safeguarding the internal value of the euro.

There are questions, however, whether the structure or objective of the ECB are appropriate for dealing with Europe's biggest economic slowdown since the euro was launched. ${ }^{6}$ The European Central Bank was fashioned on the model of the German Bundesbank, giving it full independence from politicians and a single objective of maintaining price stability of the new currency. But there are questions whether the structure or objectives of the ECB are appropriate for dealing with Europe's biggest economic slowdown since the euro was launched. The ECB has been reluctant to cut interest rates as quickly as the US Federal Reserve bank in response. That is partly because of its bulky Federal structure, with the governors of all 12 Euro zone central banks being decision-making members of the ECB Council, while economic conditions often differ between regions. But it is also because price stability, not tackling high unemployment or stimulating economic growth, is its central objective. The ECB has made some improvements in the way it presents itself to the public, revealing some of its economic projections and targets and reducing its interest-rate setting meetings to a monthly basis. But it has not changed its basic approach.

What is in question is the European Central Bank's credibility. Can it maintain its independence and commitment to price stability, or will it, instead succumb to pressures to use monetary policy to achieve low unemployment? It was subject to such pressures in 2001 as economic growth in Euroland faltered and unemployment, after earlier declining somewhat in response to measured labour market reform, began to rise again. The matter of ECB credibility arises in a broader context that has been acknowledged since the start of EMU. The ECB's common monetary policy is inappropriate for some member countries

[^92]because on any given date not all members will be in the same phase of the business cycle or face the same structural problem. ${ }^{7}$ Those in a recessionary phase would be helped by expansionary monetary policy; those in a business upturn would not. The structural problem relates to the mixture of high and low unemployment levels among member countries. Countries with high unemployment need to reform their labour market rules. Some countries may argue in favour of monetary expansion rather than labour market reform as the way to reduce structural unemployment. ${ }^{8}$ How the ECB responds to dissension among the member countries about monetary policy remains to be seen.

## Co-ordination of Economic Policy

However, other policies, particularly fiscal and structural policies are equally important for the euro to earn credibility. Now that the instruments of exchange rate policy are no longer available within the euro area, negative effects of a lax budgetary policy can be passed on much more easily to other member countries and also impair monetary policy. ${ }^{9}$ The Treaty therefore contains a procedure designed to avoid excessive deficits. The Stability and Growth Pact has spelled out these requirements in greater detail and envisages the imposition of sanctions. Although monetary policy became centralised with the introduction of the euro, budgetary and other economic policies remain largely decentralised. Given the different economic structures and different adjustment problems of the individual regions, however, it is an advantage that these policies remain a national responsibility in keeping with the principle of subsidiarity. While coordination is necessary to ensure that economic policy measures do not adversely affect the

[^93]other countries, there is no need for extensive centralisation. Fiscal policies, which remain a national matter, must remain committed to the goal of stability and given the current favourable macro-economic situation- the consolidation efforts need to be stepped up even further. The other policy fields must steadfastly continue along the path of growth-promoting structural reforms upon which they have embarked.

## Social Implications

What implications does the single currency have for human resource strategies for the future? The single currency is likely to bring the advantages of financial stability, lower and more stable interest rates and potentially lower costs. All these present opportunities for more sustained economic growth and employment. Competition will intensify thus putting pressure on the individual enterprise to innovate, be even more responsive to customers, to adapt and change. ${ }^{10}$ Not all pressures on companies are going to come from the advent of the single currency. Information technology and the increasing globalisation of markets (which will be further facilitated by the single currency) will also play a part.

Development of internal capability will become even more important in the years ahead. In a major comparative international productivity study carried out by the IPC in 1995, it emerged that traditional measures of capital, and labour productivity only accounted for approximately $30 \%$ of the differences in productivity across countries. This is not surprising given that the traditional focus on labour productivity is a purely quantitative one reflecting a philosophy of considering labour as purely a cost. What this does not take into account is the capacity and potential of people, and the internal capability that companies can

[^94]develop in mobilising and even expanding human capability in unique ways. These unique ways include innovative capacity, and the capacity to get individuals, groups and the total organisation moving in the same direction. The human resource practices described in the case studies and the new approach to people and their management which emerges from many of the case studies will be a key determinant of company success in the future.

At the same time, concrete rehabilitation packages will have to be formulated and implemented to reduce the social impact of job cuts arising due to corporate restructuring brought about by the new currency. A package of Community initiatives to help companies and workers to adapt successfully to business change, which focuses especially on advance preparation and management of corporate restructuring operations, will have to involve Community legislation, action by social partners, promotion of best practice by companies and may also involve redirecting European Social Fund money towards regions or sectors hardest hit by job losses. ${ }^{11}$ Therefore, a comprehensive package on corporate restructuring which includes a proposal for effective legal guarantees to workers regarding advance information and consultation, a stimulus to businesses to plan company restructuring early and effectively and a first discussion on how to focus other Community policies, such as competition, state aid and structural funds, on the new needs of companies and workers in a rapidly-changing business environment.

## Tax Harmonisation

Euro zone governments are also limited in their response to recessions by the "stability pact" that accompanied the introduction of the euro, in which they pledged to keep budget deficits below 3 per cent of gross domestic product (GDP).

[^95]As the monetary union draws European economies closer together, there have been tentative moves for greater coordination of fiscal policy. ${ }^{12}$ As a first step, Euro zone economies are being urged to publish their deficits at the same time and in a consistent manner. But in the long run, more coordinated fiscal steps, such as harmonising taxes and budget deficits, could be on the cards - but would involve some painful choices. The launch of the euro should help to even cut prices between different European countries, increasing competition and benefiting consumers. It is also bound to highlight the differences in prices caused by the different rates of VAT and excise duty on different goods. That will increase pressure to harmonise even more closely these tax rates. Excise duties, in particular, will be a difficulty for countries like the UK, which derive far more government income from taxes on alcohol, petrol and tobacco than most European states.

While the EU's monetary policy will be managed by a central bank, member states will have to maintain a social welfare system through the budgetary process. This is exactly the point where political mechanisms will play a pivotal role in the success or failure of the EU. For example, European nations have typically not allowed big companies to fail. While economically inefficient, this type of public policy worked politically in national economies. It won't work in the global marketplace. Paying productive workers to retire in their prime makes no sense in economies and businesses driven by knowledge and human capital. EU political leaders will have to develop a coherent vision and related budget priorities if the European super-state is to compete with the US and Asia. First, the EU will have to recognize that language differences will be a significant barrier. Second, these political leaders will also have to constantly scan the business environment and pick economic winners and losers in both their countries and throughout the continent. Moreover, if a national industry is dying,

[^96]budgetary policies that allow workers to develop the language, social and organizational cultural skills necessary to enter a foreign labour market must be put in place. Finally, these political leaders will have to sell this vision to entrenched labour unions whose members have long benefited from subsidized buyouts and lucrative early retirements. The euro needs both innovative political leadership and free economic markets to be successful. ${ }^{13}$

## Use of euro as Reserve Currency

The euro also has some way to go to gain international credibility as a reserve currency. Most central banks outside Europe rely on US dollars to keep their foreign exchange reserves, and there is slow progress in fully accepting the euro as one. ${ }^{14}$ But 20 non-Euro zone central banks requested substantial cash transfers ahead of the euro cash launch, and 50 currencies are now linked one way or another to the euro. The advantage for the United States in today being an international reserve currency is that allows it to more easily run a trade deficit, as other countries are happy to hold dollars to finance its trade gap. But if central banks are to hold euros, they need to be sure that its value on international currency markets is stable. Despite its recent rise, the euro is worth 25 per cent less than when it was first launched as an electronic currency against the dollar in 1999. The credibility of the euro on foreign exchange markets is closely linked to progress on economic reform in Europe. ${ }^{15}$ In the long term the exchange rate will be dependent on how the Euro zone manages its economy.

The influence of the euro, however, already extends across the region beyond the 12 members of the eurozone. The 10 accession countries of Eastern Europe,

[^97]ranging from Poland to Malta, are eager to accept the euro to replace their unstable currencies when they join the European Union. Kosovo and Montenegro, which linked their currency to the Deutschmark as part of their move to separate from Yugoslavia, have already adopted the euro. EU officials, however, are worried that they need to wait until their economies are at a similar level to those of eurozone members.

## Adoption of euro in Eastern Europe

As far as the role of the euro in the countries of Central and Eastern Europe (CEE) and of the Community of Independent States (CIS) is concerned, it is - in its national denominations, in particular the D-Mark - already used as a parallel currency. The ongoing process of enlargement of the EU will have important repercussions for the international role of the euro. Now that accession talks and negotiations have started the question of the monetary policy relations between the euro area and the accession countries has become a major issue. ${ }^{16}$ A clear distinction is to be made between becoming a member in the EU and the joining of the euro-area. An extended transitional period is needed between a country's accession to the EU and its entry into the final stage of monetary union. Moreover, an immediate introduction of the euro would be impossible on legal grounds, too. Only after a country has joined the EU can it begin to participate in the deficit procedure.

## Bigger Role of EU in International Economic Policy Discussions

The Eurosystem as a new regime of global importance in the field of monetary and foreign exchange policy has to be represented externally in an appropriate manner and have commensurate representation in international bodies. Ultimately, the EU

[^98]wants its economic weight to be reflected both in the value of its currency and its role in international bodies like the International Monetary Fund, where US influence predominates. ${ }^{17}$ But that raises the question of who speaks for the EU on the international stage - the officials of the ECB and European Commission, or the elected politicians of the nations that make up the EU. Although EU officials attend many international summits, such as the G8 meeting, on an informal basis, nation-states such as Britain and France who have a long-standing role in bodies like the IMF are reluctant to give up their status. And the Euro zone finance ministers themselves - although they meet regularly - only constitute an informal group within the EU structure. The lack of a single voice to speak for all euro countries could cause problems and tension among participants. There will always be the potential risk that a member country could collapse financially and adversely affect the entire system. This is one of the key areas where the success of the euro will sharpen the political dilemmas of the Euro zone - and ultimately diminish the sovereignty of governments.

The new monetary environment will substantially affect the world economy. The dollar and the euro will probably account for roughly equal shares of the great bulk of international financial assets. Prolonged misalignment between them will generate similarly skewed results for other countries that peg their units to either currency. Indeed, the dollar's sharp rise against the yen from 1995 to 1997 partially caused the Asian crisis, since most of the Asian currencies were effectively tied to the dollar. Moreover, misalignments among the major currencies contribute to disruptive protectionist pressures with particularly large costs for developing and other heavily trade-dependent countries. In addition, considerable dollar-euro instability is likely even without prolonged

[^99]misalignment because both superpowers will be continental economies with only a modest reliance on trade. ${ }^{18}$ Europe may be tempted to emulate America's periodic "benign neglect" of the exchange rate, especially given the European Central Bank's mandate to focus on price stability but at the cost of hurting smaller countries more sensitive to instability.

## Future Implications for International Trade and Currency

As with trade, the euro area bears enormous responsibility for the global monetary system. Despite the high stakes, however, there is still no evidence of serious discussion and strategic preparation or contingency planning against the risks anticipated. There is plenty of blame to go around for this lack of preparation. Europe has been pre-occupied with regional initiatives, most notably with the euro but also with its enlargement of membership and reordering of regional finances. Its relentless expansion of trade association agreements now encompasses more than 80 countries and raises doubts about its commitment to non-discriminatory multilateralism despite its proposal for a new Round of trade negotiations. It has failed to design effective procedures to represent Euroland in international financial councils, with member states jealously defending their national prerogatives. This approach has frustrated other global economies who had anticipated more streamlined decision-making. The United States for instance still does not know whom to call in Europe when new crisis hit. However, the euro area has begun to address global agendas, such as proposing a new round to restart the trade momentum. ${ }^{19}$ They have also floated suggestions for improved exchange-rate management that could reduce the risks of misalignments and instability. Although

[^100]detailed blueprints for implementing these ideas have yet to be laid out and caution still prevails, the Europeans have nevertheless tried to launch the process.

Euroland will need to further integrate its money and capital markets to realize the full international potential of its new currency. The superiority of the American financial markets, and those of the United Kingdom during the period of sterling's dominance, were key elements in those monetary regimes. The negative case of Japan is also instructive: its failure to modernize its financial markets, despite repeated calls for such reform and even announcements of programmes to do so undercut any possibility that the yen might have come to play a major international role. The European financial markets, galvanized both directly and indirectly by the euro itself, have already made impressive strides. However, national rivalries have impeded cross-border mergers of both banks and equity markets. No single benchmark security, or yield curve, has developed to rival the US Treasury bill and other US government assets. The pace at which Euroland overcomes these shortcomings will play a major role in the timing of the euro's ascendance in international asset allocation. Early entry of the United Kingdom to Euroland would presumably accelerate the process.

Europe will need to get its act together institutionally. The European Union has been a fully equal partner to the United States in the management of the global trading system for many years. Cooperation between them was a necessary condition for the successful launch and completion of each of the major multilateral trade agreements of the postwar period, as seen again with the launch of the latest round at Doha in November 2001. Europe was able to successfully challenge the previous dominance of the United States in the trading system for two reasons. One, as with finance, was the rough equivalence of its trade volume with the United States. Second, and of crucial importance, was its early decision to centralize virtually all trade policy decisions and negotiations in a single entity, in
this case, the Commission in Brussels. Europe already equals the United States or, as in the case of integrating its financial markets, is on its way to doing so. But Europe still speaks with a multiplicity of voices on these issues. Hence it dissipates much of the potential for realizing a key international role for the euro. European institutional cohesiveness will not assure a rapid rise in the international position of the euro. But organisational reforms that enable Euroland to act together and speak with a single voice will probably be an essential pre-requisite of full European equivalence with the United States as is the case with trade. ${ }^{20}$

The international role of the euro would obviously be strengthened if Europe would improve its economic performance. Euroland has already achieved convincing price stability but achievement of dynamic growth may also be necessary for the euro to effectively challenge the dollar. International interest in the euro will surely rise and set in motion a self-reinforcing cycle of euro appreciation and increased portfolio diversification into euros, if Euroland countries are able to both overcome their continuing structural impediments and find a way to employ more expansionary macro-economic policies, e.g., by recognizing that the European Central Bank ought to attach at least secondary importance to output goals and relaxing the arbitrary ceilings for government budget deficits in the present Growth and Stability Pact.

The euro could present problems in the transitional stage, magnified by the likelihood of a massive diversification into euro-denominated deposits. The EU would need to take strong defensive action to ease the transition but it is unlikely that bilateral handling of the problem would be amicable. The next big problem

[^101]facing the international financial architecture may thus center on the countries and currencies at its core, the United States and the European Union, rather than the emerging market economies and their currencies, as in the last two decades. ${ }^{21}$ The euro is likely to rise substantially and this will cause shifts in global monetary balance of power. These shifts will probably occur without severe damage or dislocation to either the major currencies and countries involved or the world economy. Hence the global currency picture for the future is likely to be both active and relatively orderly, permitting needed adjustments in the world economy without generating much damage to prosperity or stability in the process.

The Euro is a crucial step in the process of the Economic and Monetary Union (EMU). From the very outset, the Monetary Union has been conceived as a complement to the Single Market. The birth of the euro has made its most immediate impact on money markets, which have become substantially integrated: the euro has helped to create deep, broad and liquid financial markets in the EU, and is having profound effects on financial systems. But the introduction of the euro stands, above all, as the culmination of a long period of intense economic preparation and has, as such, laid the basis for sustained low inflation, stable monetary conditions and improved public finances. ${ }^{22}$ Under this perspective, the introduction of the Euro is part of a global drive for a dynamic Europe which combines a stable macro-economic climate with good functioning markets for good services.

## Towards a Political Union

The introduction of the euro will change the shape of the European Union and its role in international relations. The size of the EMU, the stability orientation of its

[^102]policy framework and the integration of its financial markets imply that the euro is likely to become a major world currency. Furthermore, the EMU constitutes the most important and concrete part of the Maastricht Treaty on the European Union. The EMU is not an end in itself - the currency also is an instrument for the achievement of wider political objectives - and the euro will accelerate the political integration process of the European Union.

The future international role of the euro will depend not least on the extent to which European integration can be successfully deepened; only in this way can monetary union be credible in future, too. At first sight this view appears to contradict the view that there is no need for extensive centralisation. But this is not a contradiction as these are quite separate issues: on the one hand ensuring healthy competition in economic, tax and structural policies, and on the other, continuing the process of political integration. This is a logical implication of the step towards integration represented by a monetary union. ${ }^{23}$ A monetary union is more than a technical federation for the management of the single currency. A monetary union must be based on a joint political commitment on the part of the countries participating in it. This inevitably raises the question as to the outlook beyond monetary union and, in particular, as to the finality of the integration process. Against the backdrop of EU enlargement, it is important and necessary to present credible prospects leading towards a political union. The basis for extending the international role of the euro will be improved by making further advances in integration on the way towards a political union. The euro is not merely the result of a technical exchange rate arrangement but also is an expression of the willingness and determination to achieve further integration.

Such further progress is, therefore, the precondition for the credibility of the monetary union and an appropriate international role of the euro in future.

The euro area's cyclical weakness since early 2001, the external weakness of the euro, and the ongoing difficulties in harmonizing the framework for financial markets (inciting controversies about legislative control between European institutions) all provide proof that establishing pro-growth policies, while fighting inflation, is a difficult trick to pull off. Progress in all three areas can only be resolved through continuous coordination of the discretionary powers retained by EU members, which is not what the Maastricht Treaty envisioned. To remedy this, the next steps for the euro will demand greater political union, though in a narrow sense. ${ }^{24}$

The introduction of euro banknotes and coins is an unprecedented operation in terms of scope and complexity. The entire euro-system, comprising the ECB and the 12 national central banks of the euro area, have worked hard to pave the way for a smooth transition. The banking sector, public authorities and enterprises, in particular retailers and small and medium-sized enterprises, have made tremendous efforts to ensure that the changeover goes as smoothly as possible. Now that the euro has become the legal tender of the 12 euro zone members, companies there are rushing to switch over from their national currencies into euro. As euro banknotes and coins have been introduced, the changeover has gone smoothly, and the euro is now the dominant currency for domestic trade in the euro zone. On the whole, the changeover from national currencies to euro banknotes and coins has so far avoided the expected outbreaks of possible chaos, and the macroeconomic consequences associated with the switchover have been insignificant. It is estimated by the European Commission that most national

[^103]banknotes and coins will effectively disappear from circulation well before the end of February 2002.

Of course, some problems are bound to occur here and there. It could not be otherwise in such a vast undertaking. But Euro supporters feel that they will be limited in scale and tackling them will not be too hard. Uncertainties about its future performance account for the cautious reception of the euro internationally. The euro will need a credible track record of some duration before it will win acceptance in world financial markets. How well it will succeed in Euroland as a medium of exchange, once the public conducts transactions in euro bills and coins, will also play a significant part in determining the euro's reputation.

How important and popular would the Euro be, and how rapidly its impact would be felt on the world economy will depend on how it overcomes a variety of hurdles and obstacles to truly achieve its potential and emerge as a world currency.

## ANNEXURES

## ANNEXURE 1

The Average Inflation for the Euro Area, and the Maximum and
Minimum National Inflation Rates


Source OECD Economic Outlook November 1999.

## ANNEXURE 2

Table 4 GDP growth (\%) in euro countries, 1997-2000

|  | 1997 | 1998 | 1999 | 2000 |
| :--- | :---: | :---: | :---: | :---: |
| Austria | 2.5 | 3.3 | 2.2 | 2.9 |
| Belgium | 3.2 | 2.9 | 1.8 | 2.8 |
| Finland | 5.6 | 5.6 | 3.7 | 4.2 |
| France | 2.0 | 3.4 | 2.4 | 3.0 |
| Germany | 1.5 | 1.3 | 1.0 | 2.7 |
| Ireland | 10.7 | 8.9 | 8.6 | 7.5 |
| Italy | 1.5 | 1.3 | 1.0 | 2.4 |
| Luxembourg | 7.3 | 5.0 | 5.1 | 4.3 |
| Netherlands | 3.8 | 3.7 | 3.0 | 2.7 |
| Portugal | 3.7 | 3.9 | 3.1 | 3.4 |
| Spain | 3.8 | 4.0 | 3.7 | 3.7 |
| Standard deviation | 2.7 | 2.0 | 2.1 | 1.4 |
| Euro area | 2.2 | 2.8 | 2.1 | 2.8 |

[^104]
## ANNEXURE 3

Table 7 European countries pegged to euro or a basket with euro participation

| Country | Exchange rate regime | Peg against | Features of the arranyement |
| :---: | :---: | :---: | :---: |
| Bosnia and Herzegovina | Currency board | EUR |  |
| Bulgaria | Currency boand | EUR |  |
| Croatia | Managed floating (EUR used informally as reference currency |  |  |
| Cyprus | Peg | EUR | $\pm 2.25 \%$ fluctuation band |
| Czech Republic | Managed floating (EUR used informally as reference currency) |  |  |
| Denmark | Peg within co-operative arrangement | EUR | $\pm 2.25 \%$ fluctuation band |
| Estonia | Currency board | EUR |  |
| Greece | Peg within co-operative arrangement | EUR | $\pm 15 \%$ fluctuation band |
| Hungary | Crawling fluctuation band | Basket: EUR $(70 \%)$ USD $(30 \%)$ | $\pm 2.25 \%$ pre-announced fluctuntion band with a $0.5 \%$ monthly depreciation rate |
| Iceland | Peg | Trade-weighted currency basket including EUR | $\pm 6 \%$ fluctuation band |
| Latvia | Peg | SDR |  |
| Macedonia | Defacto peg |  |  |
| Malta | Peg | Basket: EUR $(56.89 \%)$ USD $(21.6 \%)$ GBP $(21.6 \%)$ | 50.25\% fluctuation band |
| Poland | Crawling fluctuation band | Basket: EUR $(55 \%)$ USD $(45 \%)$ | $\pm 15 \%$ pre-announced tluctuation band with a $0.5 \%$ mouthly depreciation rate |
| Slovakia Slovenia | Managed floating (EUR used informally as reference currency) Managed floating (EUR used informally as reference currency) |  |  |
| Turkey | Managed floating with a de facto crawling peg | Basket including USD and EUR |  |

Souree: European Central Bank Monthly Bulletin August 1999

## ANNEXURE 4

How large will the international demand for euros be? Some guesses can be made based on the growth of demand for reserves as a whole. World GDP figures are notoriously subject to error due to factors arising from imperfect measurement and the variability of exchange rates. Nevertheless, in round numbers let us assume that nominal GDP grows over the next dozen years at a 6 per cent per annum. In this case, world GDP will double in the twelve years between 1998 and 2010, proportioned among the U.S., the EU and the rest of the world as follows:

US, EU, and World GDPs, 1998 and 2010, Trillions of US dollars

|  | 1998 | 2010 |
| :--- | :--- | :--- | :--- |
| United States | 9 | 18 |
| European Union | 9 | 18 |
| Rest of the World | 12 | 24 |
| TOTAL | 30 | 60 |

Source: IATA EMU Interest Group March 2001

## ANNEXURE 5

Holdings of international reserves, including foreign exchange, gold valued at market prices, and IMF Drawing Rights, totaled about $\$ 2.0$ trillion in 1998, about $1 / 15$ of GDP. The situation for 1998 and that assumed for 2010 is shown in Table below:

| Reserves and GDP, 1998 and 2010, Trillions of US Dollars |  |  |
| :--- | :--- | :--- |
|  | 1998 | 2010 |
| GDP | 30.0 | 60.0 |
| Reserves | 2.0 | 4.0 |
| Foreign Exchange | 1.6 | 3.2 |
| Gold . | 0.3 (@) \$300/oz.) | $0.6(@) \$ 600 / \mathrm{oz})$. |
| IMF Money | 0.1 | 0.2 |
| Ratio | $1 / 15$ | $1 / 15$ |

Taking foreign exchange holdings at $\$ 1.6$ trillion in 1998, of which perhaps three-quarters are in dollars, world reserves in 2010 will be $\$ 3.2$ trillion. Assumptions can be made that by this date the world community will want to divide its foreign exchange reserves equally between dollars and euros.

As a consequence, demand for dollar reserves will stagnate, while the demand for euro reserves will increase by as much as $\$ 1.2$ trillion, an annual average of $\$ 100$ billion a year. Unless this massive shift were offset by increasing lending by Europe and increased borrowing by the United States, it would mean a massive shift in current account balances, with that of Europe's turning strongly negative and that of the United States moving in a positive direction. The 'exorbitant privilege' effect represents in the short run a tremendous increase in power but in the long run it presents the temptation, if it is not
accompanied by fiscal discipline, that it will be used as a way of building up in the long run a substantial increase in indebtedness.

## ANNEXURE 6

| Foreign Exchange Holdings, 1998-2010. Trillions of US Dollars |  |  |  |
| :--- | :--- | :--- | :--- |
|  | 1998 | 2010 | CHANGE |
| Dollar Balances | 1.2 | 1.2 | -- |
| Euros | -- | 1.2 | 1.2 |
| Other | 0.4 | 0.8 | 0.4 |
| TOTAL | 1.6 | 3.2 | 1.6 |

Source: IATA EMU Interest Group, March 2001.

## ANNEXURE 7

## Table 1: Financial Market Indicators Euro-Dollar-Yen

| $5$ | EUIle | EU15 | US\$ | JapanT |
| :---: | :---: | :---: | :---: | :---: |
| GDP eum bn 1998 (1990 PPPs) | 4800 | 6050 | 6300 | 2350 |
| \% of world total GDP | 14 |  | 19 | 7 |
| World trade share\% 1997 | 17 | 22 | 14 | 4 |
| Forex reserves by currency 1 Jan 1999 euro bn | 160 | 180 | 1000 | 70 |
| \% of total world forex reserves | 17 | 14 | 70 | 5. |
| International bank loans 1 Jan 1999 euro bn | 1650 | 1990 | 2970 | 840 |
| \% of total international bomk loons | 20 | 24 | 36 | 10 |
| International bond and note issues I Jan 1999 もon | 850 | 1150 | 1590 | 410 |
| \%of total intemational bond and note issues | 24 | 33 | 45 | 12 |
| Domestic bond issues 1 Jan 1999 euro bn | 6110 | 7610 | 13750 | 5180 |
| \% of total domestic bond and nate issues | 21 | 26 | 48 | 18 |
| Foreign exchange market daly tumover Apr 1998 ¢bn | 710 | 890 | 1470 | 350 |
| \%of total world forex maker timover | 25 | 30 . | 47 | 11 |
|  |  |  |  |  |

Sources: BIS Amual Report June 1999, Quarterly Review June 1999, IMF World Economic Outlook May 1999, ECB Monthly Bulletin, authors' estimates.

Notes: 1 January 1999 fizures are those for 31 December 1998 converted from $\$$ to $€$ at $€ 1=\$ 1.1668$, and omiting intra-euro-ll items. It has been assumed that $15 \%$ of euro international bonds disappeay from the statistics because they have become domestic claims within the euro-11 area. Estimates foreuro-15 intemational items add sterling to the euro-ll figures, but not the other "out" currencies, for which no figures are arailable; they do not omit claims between the UK and the euro-11. It is assumed that these two enors mughly cancel each other out. Domestic bond issues are as rumed to be in the domestic currency.

## ANNEXURE 8

Table 2: Regional Primary Commodity Imports 1996

| Imports from | Gulf | dsia | US\$ bloc | ¢bloc | Ofiner |
| :---: | :---: | :---: | :---: | :---: | :---: |
| USA | 10.\% | 4.1\% | 63\% | 7.\% | 15\% |
| JAPAN | 31.3\% | 23.\% | 35.6\% | $3.3 \%$ | 6\% |
| EU 15 | 10.\% | 2.8\% | 14.\% | 55.\% | 16.5\% |


|  | of which enery products |  |  |  |  |  |  |  |
| :--- | ---: | ---: | ---: | ---: | :---: | :---: | :---: | :---: |
| USA | $13.3 \%$ | $2.1 \%$ | $56.5 \%$ | $9.3 \%$ |  |  |  |  |
| JAPAN | $52 . \% \%$ | $27.2 \%$ | $5.1 \%$ | $0.7 \%$ |  |  |  |  |
| EU15 | $17 . \%$ | $0.5 \%$ | $4.2 \%$ | $58.8 \%$ |  |  |  |  |



## ANNEXURE 9

Table 3: Currencies in International Trade

|  |  | 1980 |  | 1992 |  | 999 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Share of invoicing in \% | Intemationabisation ratio ${ }^{\circ}$ | Share of invoixing in \% | Intemationalisation ratio" | Share of invoixing in \% | Intemationalisation ratio ${ }^{\text {a }}$ |
| USD | 56.4 | 4.5 | 47.6 | 3.6 | 45 | 3 |
| Yen | 21 | 03 | 4.8 | 06 | 7.2 | 0.9 |
| Euro |  |  |  |  | 23.1-33 | 1.4-2 |
| D-Mark | 13.6 | 1.4 | 15.5 | 14 |  |  |
| * illustrative Scenario <br> ${ }^{\text {a }}$ Intemationalisationratio. A coefficient greater than I indicates that the currency use for inroicing surpasses the courrin's trade |  |  |  |  |  |  |

## ANNEXURE 10



## ANNEXURE 11

## Table 5: Exchange Rate Management and Trade Orientation of Asian

 countries - 1991


ANNEXURE 12
Euro area and selected countries: trade linkages
(exports to and imports from trading partners in 1996; percent of total
trade and output)
TRADE
OUTPUT

|  | Euro <br> area | Other <br> advanced | Developing <br> and <br> transition | Euro <br> area | Other <br> advanced | Developing <br> and <br> transition | Total |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| Euro area | 51.0 | 30.8 | 18.2 | 11.7 | 7.1 | 4.2 | 22.9 |
| Denmark | 47.1 | 40.2 | 12.7 | 11.1 | 9.5 | 3.0 | 23.6 |
| Greece | 57.5 | 21.4 | 21.1 | 8.4 | 3.1 | 3.1 | 14.6 |
| Sweden | 44.5 | 43.1 | 12.3 | 13.0 | 12.6 | 3.6 | 29.1 |
| United <br> Kingdom | 49.4 | 34.9 | 15.7 | 11.0 | 7.8 | 3.5 | 22.3 |
| Japan | 11.3 | 54.7 | 34.1 | 0.9 | 4.5 | 2.8 | 8.2 |
| United <br> States | 13.8 | 53.6 | 32.6 | 1.3 | 5.0 | 3.1 | 9.4 |
| Asia | 12.5 | 67.7 | 19.8 | 2.5 | 13.3 | 3.9 | 19.7 |
| Africa <br> of which | 39.8 | 34.4 | 25.8 | 7.7 | 6.7 | 5.0 | 19.5 |
| CFA franc <br> zone | 48.1 | 23.7 | 28.2 | 12.3 | 6.1 | 7.2 | 25.5 |
| Middle East <br> and Europe <br> of which | 26.9 | 42.8 | 30.2 | 6.9 | 11.0 | 7.8 | 25.6 |
| Central and <br> Eastern <br> Europe | 51.0 | 16.1 | 32.8 | 16.8 | 5.3 | 10.8 | 32.9 |
| Western <br> Hemisphere | 13.3 | 61.4 | 25.3 | 2.0 | 9.1 | 3.7 | 14.8 |

Source: International Monetary Fund, World Economic Outlook (Washington, October 1998).
${ }^{1}$ Imports plus exports of goods from and to partner countries as percent of total imports plus exports.
${ }^{2}$ The average of imports plus exports of goods from and to the partner countries as a percent of GDP.

## ANNEXURE 13

|  |  | 1995 | 1996 | 1997 | 1998 |
| :---: | :---: | :---: | :---: | :---: | :---: |
| $\begin{aligned} & \text { CZECH } \\ & \text { REP } \end{aligned}$ | EXPORT <br> IMPORT | $\begin{array}{r} 60.9 \\ \\ 61.1 \end{array}$ | $\begin{aligned} & 58.2 \\ & 62.4 \end{aligned}$ | $\begin{aligned} & 59.9 \\ & 61.7 \end{aligned}$ | $\begin{aligned} & 64.2 \\ & 63.3 \end{aligned}$ |
| SLOVAKIA | EXPORT <br> IMPORT | $37.4$ $34.8$ | $\begin{aligned} & 41.3 \\ & 37.3 \end{aligned}$ | $\begin{aligned} & 45.0 \\ & 39.5 \end{aligned}$ | $\begin{gathered} 55.8 \\ 50.4 \end{gathered}$ |
| HUNGARY | EXPORT <br> IMPORT | $\begin{aligned} & 62.7 \\ & 61.5 \end{aligned}$ | $62.7$ $59.8$ | $\begin{aligned} & 71.2 \\ & 62.8 \end{aligned}$ | $73.0$ <br> 64.1 |
| POLAND | EXPORT <br> IMPORT | $\begin{gathered} 70.0 \\ 64.6 \end{gathered}$ | 66.2 $63.9$ | $\begin{aligned} & 64.0 \\ & 63.8 \end{aligned}$ | 68.3 $65.6$ |
| SLOVENIA | EXPORT <br> IMPORT | $\begin{gathered} 67.0 \\ 68.8 \end{gathered}$ | $64.6$ $67.5$ | 63.6 <br> 67.4 | $\begin{aligned} & 65.5 \\ & 69.4 \end{aligned}$ |
| LATVIA | EXPORT <br> IMPORT | 44.1 $49.8$ | 44.7 $49.3$ | $\begin{aligned} & 48.9 \\ & 53.2 \end{aligned}$ | $\begin{gathered} 56.6 \\ 55.3 \end{gathered}$ |


| LITHUANIA | EXPORT |  |  |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- |
|  | IMPORT |  | 36.4 | 32.5 | 38.0 |
| ESTONIA | EXPORT | 57.1 | 42.4 | 44.3 | 47.2 |
|  |  | 54.2 | 56.9 | 56.6 | 61.7 |
|  | IMPORT | 66.0 | 72.6 | 75.3 | 75.6 |

Source: WIIW Handbook of Statistics: Countries in Transition 1999 and National Authorities.

## ANNEXURE 14

## Figure 6: Importance of Currency Blocs



## ANNEXURE 15

History of the EMU and Euro

| Date | Event |
| :---: | :---: |
| 1 January 1999 | The euro became THE currency of the EMU Member Countries. |
| 1 January 1999 to 31 December 2001 | The euro transition period. The legacy currencies of the participating countries exist only as expressions of the euro via fixed conversion rates. However, the euro only exists in electronic form, all notes and coins remain in legacy currency. |
| 1 January 2002 | Euro notes and coins become legal tender and legacy currencies cease to exist in anything but cash form. |
| 1 January to 28 February 2002 | Dual circulation of legacy and euro banknotes and coins will last between four weeks and two months (see below table for specific country details). |


| 1 March 2002 | Euro notes and coins become the ONLY legal tender accepted in the <br> 12 countries of the eurozone. |
| :--- | :--- |

ANNEXURE 16
EMU Member Countries

| Austria | Belgium | Finland | France |
| :--- | :--- | :--- | :--- |
| Germany | Greece |  |  |
| Joined in January |  | Ireland | Italy |
| Luxembourg | Netherlands | Portugal | Spain |
|  |  |  |  |

## EMU 'OUT' Countries

|  |  |  |
| :--- | :--- | :--- |
| Great Britain | Sweden | Denmark |

ANNEXURE 17
The Introduction of Euro Coins and Notes

|  | End of Legal <br> Tender for <br> Legacy <br> Currencies | Last Date for <br> Exchanging Legacy <br> Currencies at <br> Commercial Banks | Last Date for Exchanging <br> Legacy Currencies at National <br> Central Banks |
| :--- | :--- | :--- | :--- |
| Belgium | $28 / 02 / 2002$ | Until 31/12/2002 | Coins: up to end-2004 <br> Banknotes: Unlimited |
| Germany | $31 / 12 / 2001^{*}$ | At least until 28/02/2002 | Coins: Unlimited <br> Banknotes: Unlimited |
| Greece | $28 / 02 / 2002$ | To be decided <br> individually by banks | Coins: two years <br> Banknotes: ten years |
| Spain | $28 / 02 / 2002$ | $30 / 06 / 2002$ | Coins: Unlimited <br> Banknotes: Unlimited |
| France | $17 / 02 / 2002$ | $30 / 06 / 2002$ | Coins: three years at least <br> Banknotes: ten years |
| Ireland | $09 / 02 / 2002$ | To be decided <br> individually by banks | Coins: Unlimited <br> Banknotes: Unlimited |
| Italy | $28 / 02 / 2002$ | Under consideration | Coins: ten years <br> Banknotes: ten years |
| Luxembourg | $28 / 02 / 2002$ | $30 / 06 / 2002$ | Coins: end-2004 <br> Banknotes: unlimited |
| The <br> Netherlands | $28 / 01 / 2002$ | $38 / 02 / 2002$ | To be decided <br> individually by banks |
| Austria |  | Coins: until 01/01/2007 <br> Banknotes: until 01/01/2032 <br> Banknotes: unlimited |  |


| Portugal | $28 / 02 / 2002$ | $30 / 06 / 2002$ | Coins: $31 / 12 / 2002$ <br> Banknotes: 20 years |
| :--- | :--- | :--- | :--- |
| Finland | $28 / 02 / 2002$ | To be decided <br> individually by banks | Coins: ten years <br> Banknotes: ten years |

* In line with the "Joint declaration" the use of DM banknotes and coins is allowed at least until 28 February 2002.

ANNEXURE 18 Total Euro Redenominated Bonds

| Country | Par Amount (\$000s) | \% Total Redenominated <br> Bonds |
| :--- | :---: | :---: |
| France | $177,943,436$ | $45.4 \%$ |
| Italy | $87,680,170$ | $22.4 \%$ |
| Germany | $41,096,650$ | $10.5 \%$ |
| Spain | $20,879,756$ | $5.3 \%$ |
| Belgium | $13,910,702$ | $3.6 \%$ |
| Luxembourg | $11,055,340$ | $2.8 \%$ |
| Switzerland | $9,148,167$ | $2.3 \%$ |
| USA* | $8,814,316$ | $2.3 \%$ |
| Austria | $8,624,182$ | $2.2 \%$ |
| Netherlands | $7,023,490$ | $1.8 \%$ |
| Great Britain* | $4,975,074$ | $1.3 \%$ |
| Denmark* | 114,862 | $0.02 \%$ |
| Canada* | 87,694 | $0.02 \%$ |
| Sweden* | 80,955 | $0.02 \%$ |
| Ireland | 75,303 | $0.02 \%$ |
| Finland | 32,375 | $0.008 \%$ |
| Norway* | 22,135 | $0.006 \%$ |
| Scotland* | 374 | $0.0 \%$ |
| Total |  |  |
| * 4\% in non-Euro Countries |  |  |
|  |  |  |

© Copyright 2001-2002 - Capital Access International

## Cutting the currency ple

## International private assets (\%)



Official reserves (\%)


## How assets are held

## EU $11(\%)$



USA (\%)


Source: Association for the Monetary Union of Europe

## ANNEXURE 21

## Exports of goods - Tota/ in Mrd ECU - growth rate M/M-12

The percentage growth in the value of exports/imports in the current month as compared with the same month of the previous year.


[^105]
## ANNEXURE 22

## Imports of goods - Total; in Mrd ECU- growth rate M/M-12

The percentage growth in the value of exports/imports in the current month as compared with the same month of the previous year.



Source: www.eurostat.com

## BIBLIOGRAPHY

## PRIMARY SOURCES

ABN AMRO Bank Document, "Economic Perspectives," December 2001.
AMUE Working Paper Series. "The Euro and Dollar as Global Currencies." Paris, Association for the Monetary Union of Europe, May 2000.

AMUE Working Paper Series. "What Implications will the euro Exchange rate Movements have for the Sustainability of EMU," Paris, Association for the Monetary Union of Europe, May 2000.

Angelo, I and Dedola, L. "From the ERM to the Euro: New Evidence on Economic and Policy Convergence Among EU Countries." ECB Working Paper No 4, May 1999.

Bandt, O de and.Mongelli, F P, "Convergence of Fiscal Policies in the Euro Area," ECB Working Paper No. 20, May 2000.

Bekx, Peter, "The International Implications of EMU." Speech by the Chairman of the European Delegation to Japan, Tokyo 2000.

Bergsten, Fred C, "The Coming Rise of the Euro," Speech given before the World Economic Forum Davos, Switzerland 28 January 2000.

Bergsten, Fred C, "The Euro Versus the Dollar: Will there be a Struggle for Dominance?" speech presented to a Roundtable at the Annual Meeting of the American Economic Association Atlanta January 4, 2002.

Bosman, H W J, "Exchange Rate Policies in European Economic Integration and Monetary Unification," European Communities Commission DirectorateGeneral for Economic and Financial Affairs, Brussels, October 1973.

Chinn, Menzie, "The Empirical Determinants of the Euro: Short and Long Term Perspectives," paper presented at the Deutsche Bundesbank conference on Equilibrium Exchange Rates of the euro, Frankfurt, 27 March, 2000.

Clostermann, Jörg, and Bernd Schnatz, "The Determinants of the euro-dollar Exchange Rate: Synthetic Fundamentals and a Non-existent Currency," Paper presented at the Deutsche Bundesbank conference on Equilibrium Exchange Rates of the euro, Franfurt, March 27, 2000.

Detken, Carsten, and Hartmann, Phillip, "The Euro and International Capital Markets," ECB working Paper, No. 19, April 2000.

Dezseri, Kalman, "The European Monetary System and the ECU in the Light of 1992." at the Hungarian Scientific Council for World Economy, Budapest, 1993.

Diamantopoulou, Anna, "Collective Redundancies : Commission Announces Package to Reduce Social Impact of Major Job Cuts," EU Official Document, Brussels, 10 May 2001.

Dookeran, Winston, "Central Bank of Trinidad and Tobago," address delivered at the Conference on Caribbean Public and Private Financial Sector Collaboration on the Impact of the Euro on Regional Trade and Monetary Policy Trinidad Hilton and Conference Centre Port of Spain, Trinidad, 8 October 1999.

Duisenberg, W F, "Prospects, Challenges and Opportunities for the euro Area," speech at the conference "Resilience and Resurgence in Latin America", held in New York on 1 October 1999.

Duisenberg, W F, "The International Role of the Euro," Keynote address at the European Banking Congress, Frankfurt, 17 November 2000.

Duisenberg, W F, "Development in Financial Markets," Innaugural Speech at Swedish Pension Fund,Gothenburg, 26 September, 2001.

EC Commission, "The Community Economic and Social Area, Economic and Monetary Policy, Priority Activities and Objectives," EU General Report, Chapter III, 2000.

EC Commission, "Introducing the Single Currency, Commission calls for Discussion and Action - Road to EMU", EU Official Document, December, 1998.

ECB Officail Document, "Monetary Development in the Euro Area," 27 February 2002.

European Central Bank. "Possible Effects of EMU of the EU Banking Systems in the Medium to Long term." (Frankfurt) ECB Document, 1999.

European Monetary Institute, "Background and Time Table of Events". European Monetary Institute Document May 1997.

Fabiani, Silvia and Nestre, Ricardo, "A System Approach for Measuring the Euro Area," ECB working paper No.65, May 2001.

Frost, Ellen L, "Trans Atlantic Trade: Towards a North Atlantic Economic Community," Testimony before the Subcommittee on Trade Committee on Ways and Means, United States House of Representatives, 23 July 1998.

George, Edward, "The Progress of the Euro." Speech by The Rt Hon Sir Edward George GBE, Governor of the Bank of England, at the Cercle de L'Union Interalliée in Paris on 24 October 2000.

Greenspan, Alan, "The euro as an International Currency." Before the Euro 50 Group Roundtable (Washington, DC) 20 November 2001.

Greenspan, Alan, "The History of Money," speech at the Opening of an American Numismatic Society Exhibition, Federal Reserve Bank of New York, New York. 16 January 2002.

Gros, Daniel, and Wiener, Joann, "The Importance of the Euro/US Dollar Exchange Rate to the ECB," Working Group on the Euro-US Dollar Relation, Centre of European Studies, Brussels, 25 January 2000.

Hallett, Andrew Hughes and Piscitelli, Laura, "EMU in Reality: The Effect of a Common Monetary Policy on Economies with Different Transmission Mechanisms." CEPR Discussion Paper No.2068, 1999.

Hamalainen, Sirkka, "Experience To Date and Future Prospects," speech at Nordic Forex 99, 2 August 1999.

Hamalainen, Sirkka, "Euro, European Integration and the World Economy," speech at the Turku School of Economics and Business Administration, 50th Anniversary, Turku, 17 March 2000.

Hayo, Bernd, "Addendum to Estimating a European Demand for Money," Paper presented at ASSA meetings, Boston, January 2000.

Horsefield, J K, "The IMF, 1945-1965: Twenty years of International Monetary ICC World Congress Report. "Despite Slide, Euro's Prospects are Good." (Budapest) 3-5 May 2000.

International Chamber of Commerce Working Paper. "The Impact Of the European Single Currency." (Paris) ICC Copyright 2000.

International Monetary Fund, "Monetary Policy in Dollarized Economies," IMF Occasional Paper 171, Washington DC, 1999.

Issing, Otmar, "The future Role of the Euro in the International Financial System," speech at the conference of the Royal Institute of International Affairs in London. 24 October 1997.

Köhler, Horst, and Wes, Marina, "Implications of the Euro for the Integration Process of the Transition Economies in Central and Fastern Europe," EBRD Working Paper No. 38, 1999.

Officer, L H, "The Purchasing Power-Parity Theory of Exchange Rates: A Review Article," IMF Staff Papers, No.1, March 1976.

Lamy, Pascal, "Strengthening the Multilateral Trade System: How can EU and India Co-operate." Speech at the Confederation of Indian Industries (CII), New Delhi, 6 March 2000.

Mason, Paul R, Krueger, Thomas H and Turtelboom, Bart G, "EMU and the International Monetary System," Washington DC, IMF 1997.

Meyer, Lawrence H, "Challenges to the European Millennium," At the European Institute's Conference, Washington DC, 26 April, 1999.

Mundell, R A, "The European Monetary System 50 Years after Bretton Woods". Paper presented at Project Europe 1985-95, the tenth edition of the "Incontri di Rocca Salimbeni" meetings in Siena, 25 November 1994.

Mundschenk, Susanne, "What Implications will Euro Exchange Rate Movements have for the Sustainability of EMU." Paris, Association for the Monetary Union of Europe (AMUE) December 2000.
Noyer, Christian, "The Euro: Six Months After its Introduction," speech at the Institute for International Monetary Affairs' (IIMA) seventh symposium on "The euro: its promise and challenge to the world economy", Tokyo, 6 July 1999.

Review Article," IMF Staff Papers, Washington DC, 23March 1976.
Rugman, Alan M, and Kudina, Alina, "Britain, the Euro and North America," Paper for G8 Pre-Summit Conference, Rome, Italy, July 172001.

Solbes, Pedro, "A Bigger Role for the ECB." (Frankfurt) ECB Official Document, January 2002.

Stark, Jurgen, "Role and Prospects of the Euro in an International Context." Speech to the European Institute in Washington on 26 April 1999.

Trichet, Jean Claude, "The Euro after two years: present situation and prospects." Speech by Mr Jean-Claude Trichet, Governor of the Banque de France, at a conference organised by "The Economist", held in Madrid, on 7 February 2001.

Zeitler, Franz-Christoph, "Prospects of Monetary Policy in Europe- the Role of the Euro in the Global Economy," speech at the American Institute of Contemporary German Studies: Baltimore. 14 October 1998.

## SECONDARY SOURCES

## BOOKS

Bordo, M and Eichengreen., B eds. Retrospective on the Bretton Woods System. (Cambridge, MA: National Bureau of Economic Research), 1991.

Cecco, M De, and Giovannini, A, Perspectives on Monetary Unification after ten years of EMS, (Cambridge: Cambridge University Press), 1989.

Cecco, M De, and Giovannini, A., (eds.). A European Central Bank? Perspectives on Monetary Unification after Ten Years of the EMS, (Cambridge: Cambridge University Press) 1989.

Cecco,Marcello De., Money and Empire: The International Gold Standard, 1890 1914. (London and New York: Longman), 1974.

Cohen, B J, The European Monetary System: An Outsider's View, Essays in David A. Dyker, (ed). "The European Economy." (London and New York: Longman), 1992.
Corsetti, Giancarlo, Financial Crises: Causes, Contagion, and Consequences, (Cambridge: Cambridge University Press), 1999.

Davies, Glyn., A History of Money from Ancient Times to the Present Day, (Cardiff: University of Wales Press), 2002.

Dent, Christopher M., The European Economy: The Global Context, (London and New York: Routledge), 1999.

Eichengreen, Barry and Wyplosz, Charles, The Stability Pact: More than a Minor Nuisance? (Oxford UK: Blackwell), 1998.

Eichengreen, Barry, European Monetary Unification: Theory, Practice, Analysis, (MA: MIT Press), 1997.

Ellesworth, P T and Leeith, J Clark., The International Economy, (London and New York: Macmillian), 1999.

Frank McDonald and Stephen Dearden, (ed.). European Economic Integration, (London and New York: Longman), 1992.

Fricken, Jerry, Forging an Integrated Europe, (Lansing: University of Michigan Press), 1998.

Gunnigle, P, Morley, M, Clifford, N, and Turner, T, (ed), Human Resource Management in Irish Organisations, (Dublin: Oaktree Press), 1997.

Harrison, D M, The organization of Europe: Developing a Continental Market Order, (London and New York: Routledge), 1988.

Howell, David., The Edge of Now. (New York: Macmillans), March 15, 2001.
Johnson, Christopher, In With The euro, Out With The Pound, (London: Penguin), 1996.

Lindert, Peter H, Kindleberger's International Economics, (Irwin, Illinois: University of California Press), 1989.

Lindert, Peter H., The Bretton Woods Agreement and The International Monetary System. (Illinois: University of California Press), 1989.

McDonald, Frank and Dearden, Stephen, (ed.). European Economic Integration, (London and New York: Longman), 1992.

McKinnon, R I., Money in International Exchange: The Convertible Currency System, (New York: Oxford University Press), 1979.

Moore, Carl H., Money: Its Origin, Development and Modern Use. (London: Penguin Books), 1987.

Mundell, Robert.,The Euro and the International Monetary System, (Washington DC: Columbia University Press), January 1999.

Stephen, George, Politics and Policy in European Community, (New York: Oxford University Press), 1994.
Stone, Ian, EMU Patrol, (London: Individual Books), 2000.
Tew, B., The evolution of the International Monetary System, 1945-77. (Hutchinson Publishing Group, Ltd: London), 1977.

ARTICLES<br>"Analysis: Downdraft for the Euro," www.FT.com, September 2001.<br>Andrews, Edmund L, "Europeans Report Breakthrough in Monetary Union Effort," New York Times,14 December, 1996.<br>Arunachalam, P and Sankaranarayanan, K C, "European Union and Indian Trade strategies for the $21^{\text {st }}$ Century," Yojana (New Delhi), Vol. 43, No. 10, October 1999.<br>Baker, Gerard, "US Treasury: EMU could have Positive effects," Financial Times (London), 22 October 1997.<br>Barber, Lionel, "The Euro's Progress," Europe Magazine (Brussels), Issue No. 395, April 2000.<br>Barnard, Bruce, "Euro, Dollar, Yen: what role will Europe's single currency play in world markets," Europe Magazine (Brussels), No. 387, June 1999.<br>Baumohl, Bernard, "Recovery at Risk," Time Asia (Hongkong), Vol. 158 No.5, 6 August 2001.<br>"Euro falls to a Six-month Low," www.bbc.com, 25 January, 2002,<br>"The Costs and Benefits of the Euro," www.BBC.com , 2 January 2002.

Beams, Nick, "Surprise Interest Rate Cut by European Central Bank," World Socialist Web Site, 11 May 2001.

Behrmann, Niel, "Prospects of the Euro," Business Times (London), 25 October 2000

Bergsten, Fred C, "The Dollar and the Euro," Foreign Affairs (New York), Vol. 76, No. 4, July 1997.

Bergsten, Fred C, "The Euro in 2002," Op-ed in Frankfurter Allgemeine Zeitung, (Frankfurt)14 February 2002.

Bergsten, Fred C, "America And Europe: Clash of the Titans?", Foreign Affairs (New York), Vol 78, No 2 March/April 1999.

Berry, John.M, "Euro Still Struggling As Debut of Cash Nears," Washington Post, 26 December, 2001.

Bhagwati, Jagdish, "After Seattle: Free trade and the WTO," International Affairs (London), Vol.77, No. 1, 2001.

Blanden, Michael, "The Euro Roots take Hold," www.FT.com, 2001.
Blocker, Joel, Slaba, Dora and Georgieff, Anthony, "Assessing the Euro's Prospects" Western Press Review (Prague), January 1999.

Breitfelder, Matthew. "The Euro Currency Age: Challenges and Opportunities for U.S. Businesses," Business America (New York), July 1998.

Brinnel, Heinner, "The International Monetary System Beyond 2003," Global Market Outlook (Paris), November 1999.

Bruce Barnard, Bruce, "Euro, Dollar, Yen: What Role will Europe's Single Currency Play in World Markets," Europe Magazine (Brussels), No. 387, June 1999.

Calleo, David P, "The Strategic Implications of the Euro," Survival (London), Vol.41, Spring 1999.

Chandrashekar, C P, "An Uncertain World After Euro," Frontline, (Chennai), 15 January 1999.

Chopra, H S, "Euro and the EU," World Focus, (New Delhi), Vol. 21, No. 5, May 2000.

Collignon, Stefan, "The Euro's Place in the Sun," Association for the Monetary Union of Europe (AMUE), Paris, June 2000.

Crutsinger, Martin, "Euro Unlikely to Oust Dollar as Top Currency," Daily Herald (London), 28 December 2001.

D Chinn, Menzie and Alquist, Ron, "Tracking the Euro's Progress," International Finance (Washington DC), November 2000.

Dornbush, Rudiger, Favero, C A and Giavazzi, F, "The Immediate Challenges for the ECB," Economic Policy (London) Vol 26, 1998.

Drozdiak, William, "Euro Inspires Little Confidence," Washington Post, 7 May, 2001.

Elliot, Larry and Denny, Charlotte, "Euro tumbles into Free Fall," The Guardian (London), May 2000.

EMU: Series of Articles, Journal of Economic Perspectives, (London), Vol. 11, No. 4, Fall 1997.
"European Monetary Union and Euro Currency," www.Compaq.com, 30 March 2002.

European Commission Report on Progress toward EMU Convergence. "1 January 1999: Creation of the Euro Area ," The Morgue (London), 25 March 1998.

Fairlamb, David and Edmonson, Gail, "Europe: Work in Progress, Signs Abound of a Nascent New Economy," Business Week Online, January 2000.

Farstel, Marc and Sophister, Junior, "The Euro - Challenger to the Global Currency Tide," Students Economic Review, University of Dublin, 1999.

Faux, Jeff, "The euro, the Dollar and their Impact on Global Manufacturing," Viewpoints, (New York), August 2000.

Federal Reserve Bank of Minneapolis. "The History of Money," FRBM (Minneapolis) March 2002.

Frankel, Jeffery A, and Rose, Andrew K, "The Endogenity of the Optimum Currency Area Criteria," The Economic Journal (Oxford), Vol 108, July 1998.

Gerthner, "Comment on EMU and Euro," USIA Articles and Press Release, (New York), 7 May, 1998.

Green, John, and Swagel, Philip.L, "The Euro Area and the World Economy," World Economic Outlook (Washington DC), December 1999.

Greener, Michael, "European Monetary System," The Penguin Business Dictionary, (London) April 1994.
Hansen, Fay, "Preparing for E-Day," Business Finance (New York), August 2001.

Hansen, Fay, "Recovering From The Hard Soft Landing," Business Finance, September 2001.

Hopkin, Brian and Reddaway, Brian, "Debate: EMU Heading for a breakdown," Political Quarterly (New York), Vol.67, No.3, July-September, 1996.

IMF World Economic Outlook, "Chronic Unemployment in the euro Areas: Causes and Cures," World Economic and Financial Surveys (Washington DC), May 1999.
"India - EU Summit to be a Blockbuster," The Economic Times (New Delhi) 25 January 2001.

Jacquet, Pierre, "EMU: A Worthwhile Gamble," International Affairs (London), Vol. 74, No. 1, January 1998.

Johnson, Christopher, "The Euro as an International Currency: Implications for Domestic and External Policies," Association for the Monetary Union of Europe (AMUE) (Paris), December 2000.

Johnson, H G, and Swoboda, A K., "Uncommon Arguments for Common Currencies," The Economics of Common Currencies (London), 1973.

Katyal, K K, "India - EU Dialogue," www.indiaserver.com, 13 December 1999.
Keenan, Brendan, "Euro Slumps to a New Low Against the Dollar," Group Business Editorial (London), October 2000.

Levine, Marc, Kim, Francis and Siegel, Joel, "Background on the Euro," The CPA Journal (New York), April 1999

Lewis, Paul, "The Pounded Euro. Success in Europe - But Not Outside," Moneywise (London), March 2000.

Luongo Jr., Phillip J, "Speakers Examine Euro's Impact," The Trusted Professional (New York), July 1999.

Lyle,Robert, "Eastern Europe: Euro Impact could be Minor," Radio Free Europe (Hongkong), 17 September 1998.

Margolis, Eric, "The way of the Future," Foreign Affairs (New York), 7 January 1999.

Martin, Mitchel, "Euro Below the Dollar Again, But Recovery is Expected," International Herald Tribune, (Paris), June 2000.

Meyer, Lawerence H, "The Euro in the International Monetary System," The Region (Minneapolis), June 1999.

Mitchell, Martin, "From Rome to Maastricht: Abrief History of EMU," Survival, (London), March, 1997.

Mundell, R A, "A Theory of Optimum Currency Areas," American Economic Review (New York), September 1961.

Perin, Monica, "A Look Back - The Path to the Euro," Houston Business Journal (Houston), April 1999.

Queiroz, Mario de, "India Earns Place at EU Table," www.atimes.com 30 June 2000.

Ram, A N, "India and the European Union," World Focus (New Delhi), Vol.25, No.5, May 2000.

Serfarty, Simon, "Euro's Maturing Hour," Euro Focus (London), Vol. 6 No.4, 15 June 2000.
$\qquad$ "The Euro: Getting Started. London," Euro-Focus, vol. 4, 20
June 1999.
Shirkin, Phillip, "Euro Cash Launch: A Question of Psychology," Wall Street Journal (New York), 24 September, 2001.

Solomon, Robert, "International Effects of the Euro," The Brookings Institution (New York), Policy Brief \#42, January 1999.
"Statistics for Economic and Monetary Union (euro-zone) and European Union (EU-15)," www.eurostat.com, 4 April 2002.

Summers, Larry, "American Eyes on EMU," Financial Times (London), 22 October 1998.

Summers, Lawerence H, "Transatlantic Implications of the Euro and Global Financial Stability," The Brown Journal of World Affairs (Washington DC), vol. 6 issue.2, summer/fall 1999.

The Wall Street Journal Review \& Outlook, "The Euro, Another Look," The Wall Street Journal Interactive Edition, (Washington DC), September 30, 1997.

Thygesen, Niels, "After Euro, What Comes Next For Euroland," The Taipei Times (Taipei), 1 December 2001.

Tooher, Paul, "Implications of European Economic and Monetary Union," Global Beat (Washington D.C), Issue 47, 16 December 1988.

Trichet, Jean Claude, " The Euro after two years," Journal of common market studies (London), vol 31 no 9 March 2001.

Willy Helin, Willy, and O'Beirne, Maeve, "European Commission Presents Spring 2001 Forecasts," www.europa.eu.int/comm/economy.htm, 25 April 2001.

Wolf, Martin, "A Catalyst for Further Change," www.FT.com 1 January 2002.
"Analysis: Downdraft for the euro." www.FT.com, September 2001.


[^0]:    1 Marcello De Cecco, "Money and Empire: The International Gold Standard, 1890-1914," (London and New York, Longman, 1974)
    2 Federal Reserve Bank of Minneapolis, "The History of Money," (Minneapolis, March 2002).

[^1]:    Carl H Moore, Money: Its Origin, Development and Modern Use, (London, Penguin Books, 1987).

[^2]:    4 M. Bordo and B. Eichengreen, eds, Retrospective on the Bretton Woods System, (Cambridge, MA, National Bureau of Economic Research, 1991).
    5 R A. Mundell, "The European Monetary System 50 Years after Bretton Woods". paper presented at Project Europe 1985-95, the tenth edition of the "Incontri di Rocca Salimbeni" meetings in (Siena), 25 November 1994.

[^3]:    6 J.K. Horsefield, The IMF, 1945-1965: Twenty years of International Monetary Cooperation," (Washington DC, IMF 1969).

[^4]:    7 Alan Greenspan. "The History of Money;" at the Opening of an American Numismatic Society Exhibition, Federal Reserve Bank of New York, New York. 16 January 2002. Wales Press 2002).
    ${ }^{9}$
    Martin Mitchell, "From Rome to Maastricht: Abrief History of EMU," Survival, (London) March, 1997.

[^5]:    11 B. Tew. The evolution of the International Monetary System, 1945-77. (London,

[^6]:    12 Peter H. Lindert. The Bretton Woods Agreement and The International Monetary System. (University of California Press, Illinois, 1989).
    R.I. McKinnon, Money in International Exchange: The Convertible Currency System, (New York, Oxford University Press, 1979).

[^7]:    14 Marc Levine, Francis Kim, and Joel Siegel, "Background on the euro,". The CPA Journal (New York), April 1999.

[^8]:    15 P T Elsworth, The International Economy, (New York, Macmillian Publishing Co. Inc 1988).
    16 P T Ellesworth. and J Clark Leeith, The International Economy. ( New York, Macmillian Publishing Co. Inc, 1982).

[^9]:    17 B J Cohen, The European Monetary System: An Outsider's View, Essays in International Finance No.142, (Princeton University Press, New Jersey, 1981).

[^10]:    18 European Monetary Institute, Background and Time Table of Events, European Monetary Institute Document May 1997.

[^11]:    19 M. De Cecco and A. Giovannini (eds.). A European Central Bank? Perspectives on Monetary
    Unification after Ten Years of the EMS, (Cambridge, Cambridge University Press, 1989).

[^12]:    21
    European Parliament Fact Sheets, The Historical Development of Monetary Integration, decisions of the European Summits of The Hague (1969) and Paris (1972).

[^13]:    1 Frank McDonald and Stephen Dearden (ed.), European Economic Integration, (London and New York, Longman, 1992).

[^14]:    ${ }^{2}$ H.G. Johnson and A.K. Swoboda. "Uncommon Arguments for Common Currencies." The Economics of Common Currencies, (London) 1973.
    3 Robert Mundell, The Euro and the International Monetary System," (Washington DC, Columbia University Press, 1999).

[^15]:    4 Marc Levine, Francis Kim, and Joel Siegel, "Background of the euro," The CPA Journal, (New York), April 1999.

[^16]:    5 H.W.J. Bosman, Exchange Rate Policies in European Economic Integration and Monetary Unification, European Communities Commission Directorate-General for Economic and Financial Affairs, (Brussels), October 1973.
    6 George Stephen, Politics and Policy in European Community, (New York, Oxford University Press 1994).

[^17]:    7. R .A. Mundell. "The European Monetary System 50 Years after Bretton Woods." Paper presented at Project Europe 1985-95, the tenth edition of the "Incontri di Rocca Salimbeni" meetings; Misiena, 25 November 1994.
[^18]:    8 Christopher M. Dent, The European Economy: The Global Context, (London and New York, Routledge, 1999).

[^19]:    9 Christopher M. Dent, Ibid.

[^20]:    10 H.G. Mannur, International Economics, (New Delhi, Vikas Publishing House, 1999).
    11 R. A. Mundell. "A Theory of Optimum Currency Areas." American Economic Review, (New York) September 1961.

[^21]:    12 Peter. H. Lindert, Kindleberger 's International Economics, (Irwin, Illinois, University of California Press , 1989).

    13 David A. Dyker, (ed), The European Economy, (London and New York, Longman, 1992).

[^22]:    14 Frank McDonald and Stephen Dearden, (ed.), European Economic Integration, (London and New York, Longman, 1992).

[^23]:    ${ }^{16}$ I Angelo and L Dedola. "From the ERM to the Euro: New Evidence on Economic and Policy Convergence Among EU Countries." ECB Working Paper No 4, May 1999.

[^24]:    17 D M Harrison. The organization of Europe: Developing a Continental Market Order, (London and New York, Routledge, 1988).
    18 Kalman Dezseri, The European Monetary System and the ECU in the Light of 1992, (Budapest, Hungarian Scientific Council for World Economy, 1993).

[^25]:    Michael Greener. "European Monetary System." The Penguin Business Dictionary, (London, Penquin 1994).

    Jerry Fricken, Forging an Integrated Europe, (Lansing, University of Michigan Press, 1998).

[^26]:    26 Brain Hopkin and Brain Reddaway, "Debate: EMU Heading for a Breakdown," Political Quarterly, (New York) Vol.67, No.3, July-September, 1996.

[^27]:    27 Fay Hansen, "Preparing for E-Day," Business Finance, (New York) August 2001.

[^28]:    28 Barry Eichengreen and Charles Wyplosz, The Stability Pact: More than a Minor Nuisance?, (Oxford UK, Blackwell, 1998).

[^29]:    29 Joel Blocker, Dora Slaba, and Anthony Georgieff. "Assessing the Euro's Prospects" Western Press Review, (Prague), January 1999.

[^30]:    1 European Commission Report on Progress Toward EMU Convergence, "1 January 1999: Creation of the Euro Area ," The Morgue,(London), 25 March 1998.

[^31]:    3
    4
    Simon Serfarty.,"Euro’s Maturing Hour." Euro Focus, (London) Vol. 6 No.4, 15 June 2000.
    Sir Edward George, "The Progress of the euro," speech by The Rt Hon Sir Edward George GBE, Governor of the Bank of England, at the Cercle de L'Union Interalliée in Paris on 24 October 2000. Menzie D Chinn and Ron Alquist, "Tracking the Euro's Progress," International Finance, (Washington DC) November 2000.

[^32]:    6 David P. Calleo, "The Strategic Implications of the euro," Survival (London), Vol.41, Spring 1999.
    7 EC Commission, "Introducing the Single Currency, Commission calls for Discussion and Action Road to EMU", EU Official Document, December, 1998.

[^33]:    8 European Central Bank. "Possible Effects of EMU of the EU Banking Systems in the Medium to Long term," ECB Document, Frankfurt 1999.
    Peter Bekx, "The International Implications of EMU," speech by the Chairman of the European Delegation to Japan. (Tokyo) 2000.

[^34]:    10 Eric Margolis, "The way of the Future," Foreign Affairs, (New York), 7 January 1999.
    11 Lawerence H. Meyer, "The Euro in the international Monetary system." The Region, (Minneapolis) June 1999.

[^35]:    12 Sirkka Hamalainen, "Euro, European Integration and the World Economy." Turku School of Economics and Business Administration, $50^{\text {th }}$ Anniversary (Turku) 17 March 2000.

[^36]:    13 Ibid.
    14 Lionel Barber, "The Euro's Progress," Europe Magazine, (Brussels) Issue No. 395, April 2000.

[^37]:    16 Jean-Claude Trichet, "The Euro After Two Years: Present Situation and Prospects," Speech by Mr Jean-Claude Trichet, Governor of the Banque de France, at a conference organised by "The Economist", held in Madrid, on 7 February 2001.

[^38]:    17 Jean Claude Trichet. "The Euro After Two Years." Journal of common market studies, (London) vol 31 no 9 March 2001.

[^39]:    18 Bruce Barnard. "Euro, Dollar, Yen: what role will Europe's Single Currency Play in World Markets," Europe Magazine, (Brussels) No. 387, June 1999.

    19 David Fairlamb and Gail Edmonson, "Europe: Work in Progress (int'l edition) Signs abound of a Nascent New Economy." Business Week Online, January 2000.

[^40]:    ${ }^{24}$ William Drozdiak, "Euro Inspires Little Confidence," Washington Post, Monday, 7 May, 2001.
    25 Martin Crutsinger, "Euro Unlikely to Oust Dollar as Top Currency," Daily Herald, (London) 28 December 2001.
    David Howell, The Edge of Now. (New York, Macmillans 2001).

[^41]:    28
    29
    John M. Berry, "Euro Still Struggling As Debut of Cash Nears," Washington Post, 26 December 2001. The Wall Street Journal Review \& Outlook, "The Euro, Another Look," The Wall Street Journal Interactive Edition, (New York), 30 September, 1997.

[^42]:    ${ }^{30}$ Brendan Keenan, "Euro Slumps to a New Low Against the Dollar," Group Business Editorial, (London) October 2000.

[^43]:    31 Niel Behrmann, "Prospects of the euro," Business Times, (London) 25 October 2000.
    32 Pedro Solbes, "A Bigger Role for the ECB," ECB Official Document, (Frankfurt) January 2002.

[^44]:    33 AMUE Working Paper Series, "What Implications will the euro Exchange rate Movements have for the Sustainability of EMU," Association for the Monetary Union of Europe, (Paris) May 2000.

    Stefan Collignon, "The Euro's Place in the Sun," Association for the Monetary Union of Europe (AMUE), (Paris) June 2000.

[^45]:    ${ }^{35}$ AMUE Working Paper Series, "The Euro and Dollar as Global Currencies," Association for the Monetary Union of Europe, (Paris), May 2000.

[^46]:    36 Niel Behrmann, "Prospects of the euro," Business Times, (London) 25 October 2000.
    37 Alan Greenspan, "The Euro as an International Currency," Before the Euro 50 Group Roundtable (Washington, DC) 20 November 2001.

[^47]:    38 David Howell.. The Edge of Now, n. 26.

[^48]:    39 Otmar Issing, "The future Role of the Euro in the International Financial System," speech at the Royal Institute of International Affairs, London, on 24 October 1997.

[^49]:    41 "Despite Slide, "Euro's Prospects are Good," ICC World Congress Report, (Budapest) 3-5 May 2000. David Howell, The Edge of Now, n. 26.

[^50]:    43 International Chamber of Commerce Working Paper, "The Impact Of the European Single Currency," ICC (Paris) 2000.

[^51]:    ${ }^{44}$ John Green and Phillip L. Swagel, "The Euro Area and the World Economy. International Monetary Fund," World Economic Outlook, (New York), December 1999.

[^52]:    47 Robert Solomon, "International Effects of the euro," The Brookings Institution Policy Brief, (New York), No. 42 January 1999.

[^53]:    ${ }^{48}$ BBC Online, "The Costs and Benefits of the Euro," www.BBC.com, (London) 2 January 2002.

[^54]:    49 W F Duisenberg, "Prospects, Challenges and Opportunities for the euro Area," Speech at the Conference on "Resilience and Resurgence in Latin America", held in New York on 1 October 1999.

[^55]:    ${ }^{50}$ Lawerence H.Summers, "Transatlantic Implications of the Euro and Global Financial Stability," The Brown Journal of World Affairs (Washington DC), vol. 6 issue.2, summer/fall 1999.

    51 Heinner Brinnel, "The International Monetary System Beyond 2003," Global Market Outlook (Paris) November 1999.

[^56]:    52 FT.com, "Analysis: Downdraft for the euro," Financial Times, (London), September 2001.

[^57]:    1 Greece Joined the Eurozone in January 2001
    2 Jurgen Stark, "Role and Prospects of the Euro in an International Context." Speech by the Deputy Governor of the Deutsche Bundesbank to the European Institute in Washington on 26 April 1999.

[^58]:    ${ }^{3}$ Dr. Ellen L. Frost, "Trans Atlantic Trade: Towards a North Atlantic Economic Community." Testimony before the Subcommittee on Trade Committee on Ways and Means, United States House of Representatives, 23 July 1998.

[^59]:    ${ }^{4}$ Heinner Brinnel, "The International Monetary System Beyond 2003," Global Market Outlook (Paris) November 1999.

[^60]:    s C. Fred Bergsten, "The Coming Rise of the Euro," speech given before the World Economic Forum, Davos Switzerland, 28 January 2000.
    6 Bruce Barnard. "What Role will Europe's Single Currency Play in the World Markets," Europe Magazine (Brussels), issue 387, June 1999.

[^61]:    9 Horst Köhler and Marina Wes, "Implications of the Euro for the Integration Process of the Transition Economies in Central and Eastern Europe," EBRD Working Paper No. 38, 1999.

[^62]:    10 Lionel Barber, "The Euro's Progress," Europe Magazine (Brussels), Issue 395, April 2000.
    C. Fred Bergsten. "The Euro in 2002," Frankfurter Allgemeine Zeitung, (Frankfurt), 14 February 2002.

    Paul Tooher. "Implications of European Economic and Monetary Union," Global Beat (Washingtón DC), Issue 47, 16 December 1988.

[^63]:    13
    Carlo F. Cattani and Farid Nawas, "Trade in Euro," The Arab Bank Review (Dubai), Vol. 3, No. 2, October 2001. 14 Ian Rowley, "The Euro: One Currency, Many Problems," www.cfoeurope.com, 1 October 2001.

[^64]:    15 Christian Noyer, "The International Implications of the Introduction of the Euro," Speech at the Japan Center for International Finance and Sumitomo Life Research Institute, Tokyo/Osaka, 25 \& 26 February 1999.
    Christian Noyer, "The Euro Area in the Global Economy," Lecture delivered at the London Business School (London) 19 July 1999.
    17 David Talvast, "Europe's Euro Future," Global Commerce (Tennessee), Vol.4, No.1, Summer 1998.

[^65]:    18 C. Fred Bersten, "The Coming Rise of the Euro," Speech given before the World Economic Forum, Davos, Switzerland, 28 January 2000.

[^66]:    19 Jeff Faux, "The Euro, the Dollar and their Impact on Global Manufacturing," Viewpoints (New York), August 2000. Ibid.

    Joel Blocker, Dora Slaba, and Anthony Georgieff, "Assessing The Euro's Prospects," Western Press Review (Prague), January 1999.

[^67]:    22 David P. Calleo. "The Strategic Implications of the euro," Survival (London), Vol.41, Spring 1999.

[^68]:    23 Ibid.
    24 Sirkka Hamalainen, "The Euro: Experience to Date and Future Prospects," speech at Nordic Forex 99, Helsinki, 21 August 1999.
    David Howell. The Edge of Now (New York: Macmillans, 2000), Extract No. 8.

[^69]:    26 Robert Lyle, "Eastern Europe: Euro's Impact Could be Minor," Radio Free Europe (Hongkong), 17 September 1998.

[^70]:    28 "The Euro's Implication on Local Businesses," The Malta Business and Financial Times (Malta) 19 September 2001.

[^71]:    ${ }^{30}$ Joel Blocker, Dora Slaba, and Anthony Georgieff, "Assessing The Euro's Prospects," Western Press Review (Prague), 4 January 1999.
    Fay Hansen, "Preparing for E Day," Business Finance (New York), August 2001.

[^72]:    32 Christopher Johnson, "Possible Exchange Rate Arrangements with Central and Eastern Europe and Asian Countries," (Paris, Association for the Monetary Union of Europe (AMUE) 2000).
    ${ }^{33}$ Winston Dookeran. "Impact of the Euro on Regional Trade and Monetary Policy," Conference on Caribbean Public and Private Financial Sector Collaboration, Trinidad Hilton and Conference Centre, Port of Spain, Trinidad, 8 October 1999.

[^73]:    ${ }^{34}$ John Green and Phillip L Swagel, "The Euro Area and the World Economy," IMF Quarterly (Washington DC) Vol. 35, No. 4, December 1998.

[^74]:    35
    Sophie Meunier and Kalypso Nicolaidis, "Who Speaks for Europe? The delegation of Trade Authority in the EU," Journal of Common Market Studies (Oxford), September 1999.
    Peter Bekx. "The International Implications of EMU." Head of Unit for International Aspects of Monetary union, Directorate for Monetary matters, European Commission. 2000 Delegation of the European Commission in Japan.

[^75]:    37 Williem Diusenberg, "Prospects, Challenges and Opportunities for the Euro Area," Speech by the President of the European Central Bank, at the Conference "Resilience and Resurgence in Latin America", held in New York on 1 October 1999.

[^76]:    38 Gerard Baker, "US Treasury: EMU Could have Positive Effects," Financial Times (London), 22 October 1997.

[^77]:    39 Larry Summers, "American Eyes on EMU," Financial Times (London), 22 October 1998.
    40 Robert B Zoellick, "Europe and the World Trading System," The Kangaroo Group (Strasbourg, France), 15 May 2001.

[^78]:    41 C. Fred Bergsten, "The Euro Versus The Dollar: Will There Be a Struggle For Dominance," Presented to a Roundtable at the Annual Meeting of the American Economic Association Atlanta, 4 January, 2002.

[^79]:    42
    Alan M. Rugman and Alina Kudina, "Britain, the Euro and North America," Paper for G8 Pre-Summit Conference, Rome, Italy, July 172001.

    Lawerence H.Summers, "Transatlantic Implications of the Euro and Global Financial Stability," The Brown Journal of World Affairs (Washington DC), vol.6 issue.2, summer/fall 1999.
    A.N. Ram. "India and the European Union," World Focus (New Delhi), Vol.25, No.5, May 2000.

[^80]:    45 Mario de Queiroz, "India Earns Place at EU Table," www.atimes.com, 30 June 2000.
    "India - EU Summit to be a Blockbuster," The Economic Times (New Delhi), 25 January 2001.

[^81]:    47 K.K Katyal, "India - EU Dialogue," www. indiaserver.com, 13 December 1999.
    48 P. Arunachalam and K.C. Sankaranarayanan, "European Union and Indian Trade strategies for the $21^{\text {st }}$ Century," Yojana (New Delhi), Vol. 43, No. 10, October 1999.
    49 Pascal Lamy, "Strengthening the Multilateral Trade System: How can EU and India Co-operate." Speech at the Confederation of Indian Industries (CII), New Delhi, 6 March 2000.

[^82]:    $50 \quad$ David Howell, The Edge of Now (New York: Macmillans, 2000), Extract No. 8.

[^83]:    51 International Monetary Fund, "Monetary Policy in Dollarized Economies," IMF Occasional Paper 171, Washington DC, 1999.

    52
    Niel Behrmann.,"Prospects of the Euro," Business Times (London), 25 October 2000.

[^84]:    ${ }^{53}$ Willy Helin and Maeve O'Beirne, "European Commission Presents Spring 2001 Forecasts," www.europa.eu.int/comm/economy.htm, 25 April 2001.

[^85]:    ${ }_{54}^{54}$ Michael Blanden, "The Euro Roots take Hold," www.FT.com, 2001.
    55 Ibid.

[^86]:    56 ECB Officail Document, "Monetary Development in the Euro Area," 27 February 2002.
    57 Martin Wolf, "A Catalyst for Further Change," www.FT.com, 1 January 2002.

[^87]:    58 ABN AMRO Bank Document, "Economic Perspectives," December 2001.
    59 "European Monetary Union and Euro Currency," www.Compaq.com, 30 March 2002.

[^88]:    60
    C.Fred Bergsten, "The Euro Versus the Dollar: Will There be a Struggle For Dominance?", Speech to a Roundtable at the Annual Meeting of the American Economic Association, Atlanta, 4 January, 2002
    "Statistics for Economic and Monetary Union (euro-zone) and European Union (EU-15)," www.eurostat.com, 4 April 2002.
    ABN AMRO Bank Document, "Economic Perspectives," December 2001.

[^89]:    1 Fay Hansen, "Recovering from the Soft Hard Landing," Business Finance (New York), September 2001.

    2 Niel Behrmann., "Prospects of the Euro," Business Times (London), 25 October 2000.

[^90]:    3 Robert Solomon, "The International Effects of the euro," Policy Brief (New York) No. 42, January 1999.

[^91]:    4 Alan M. Rugman and Alina Kudina, "Britain, The euro and North America," www.rugman@indiana.edu, 17 July 2001.

    5 Christopher Johnson, The Euro as an International Currency: Implications for Domestic and External Policies, Association for the Monetary Union of Europe (AMUE), Paris, 2000.

[^92]:    ${ }^{6}$ Pedro Solbes, "A Bigger Role for the ECB," ECB Working Paper No.85, 3 January 2002.

[^93]:    7 O.de Bandt and F.P.Mongelli, "Convergence of Fiscal Policies in the Euro Area," ECB Working Paper $8 \quad$ No. 20, May 2000.

    Nick Beams, "Surprise Interest Rate Cut by European Central Bank," World Socialist Web Site, 11 May 2001.
    ${ }^{9}$ Niel Behrmann, "Prospects of the Euro," Business Times (London), 25 October 2000.

[^94]:    10 Anna Diamantopoulou, "Collective redundancies : Commission announces package to reduce social impact of major job cuts," EU Official Document, Brussels, 10 May 2001.

[^95]:    11 M. Morley and M. Gunnigle: "Compensation and Benefits", in Gunnigle, P, Morley, M, Clifford, N, and Turner, T, (eds), (Dublin: Oaktree Press, 1997).

[^96]:    12 Bernard Baumohl, "Recovery at Risk," Time Asia (Hongkong), Vol. 158 No.5, 6 August 2001.

[^97]:    13 Ibid.
    ${ }^{14}$ Lawerence H.Summers, " Transatlantic Implications of the Euro and Global Financial Stability," The Brown Journal of World Affairs (Washington DC), vol. 6 issue.2, summer/fall 1999.

    15 Daniel Gros and Joann Wiener, "The Importance of the Euro/US Dollar Exchange Rate to the ECB," Working Group on the Euro-US Dollar Relation, Centre of European Studies, Brussels, 25 January 2000.

[^98]:    16
    Robert Lyle, "Eastern Europe: Euro Impact could be Minor," Radio Free Europe (Hongkong), 17 September 1998.

[^99]:    17 Robert Solomon, "Will the euro Area Energize Europe and the World Economy," Global Interdependence Centre (London), May 2000.

[^100]:    ${ }^{18}$ Robert B. Zoellick, "The United States, Europe and the World Trading System," The Kangaroo Group (Strasbourg, France) 15 May 2001.
    19 Jagdish Bhagwati, "After Seattle: Free trade and the WTO," International Affairs (London) Vol.77, No. 1, 2001.

[^101]:    20 Lawerence H Summers, "Transatlantic Implications of the Euro and Global Financial Stability," The Brown Journal of World Affairs (Washington DC), vol. 6 issue.2, summer/fall 1999.

[^102]:    21 Carsten Detken and Phillip Hartmann, "The Euro and International Capital Markets," ECB working Paper, No. 19, April 2000.
    22 EC Commission, "The Community Economic and Social Area, Economic and Monetary Policy, Priority Activities and Objectives," EU General Report, Chapter III, 2000.

[^103]:    24
    Niels Thygesen, "After Euro, What Comes Next For Euroland," The Taipei Times (Taipei), December 2001.

[^104]:    Source: OECD Economic Outlook November 1999, Preliminary

[^105]:    - euro-zone - Economic and monetary union

    EU-15 - European Union (15 countries)
    Source: www.Eurostat.com

