

For the Student

European Economic and Monetary Integration and the Euro

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1. Introduction

Have you ever travelled through Europe? If so, you surely will have some French francs, German marks, Italian liras or Dutch guilders left over in some drawer, because you will have noticed that every time you cross borders in Europe, you need a new currency. This can be quite expensive and the story goes that if you travel through the countries of the European Union (EU) and you change currencies, you will end up with about 30 per cent of the value that you started with. But, from 1 January 2002 this situation has come to an end because euro notes and coins came into circulation while Dutch guilders, Belgian and French francs, German marks, Italian liras, Spanish pesetas and so on were taken out of circulation. From 2002 you have to pay with a new currency, the euro (€), in all countries that are part of the European Monetary Union (EMU), the so-called euro area.

This EMU is a large and unprecedented experiment. Never in the history of economic development have countries agreed to use one single currency, while not being a political union first. Besides, the scale on which this new currency is being introduced is unprecedented: the 11 EMU countries account for about 22 per cent of world gross domestic product (GDP) (Commission of the European Communities 2001).

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Therefore, it is interesting to discuss the history, the relevance and the future of this monetary integration. Section 2 discusses for what countries this one currency will become the means of payment. Next I discuss the size of this new currency union (Section 3) and the economic relations with Australia (Section 4). The focus of Section 5 is on economic policy in the euro area and in Section 6 I elaborate on the future of the euro area by listing a number of problems that need to be solved in this new currency area.¹ The final section concludes. Because European economic cooperation has always been accompanied with a number of acronyms, I have provided a list of acronyms in Appendix 1.

2. European Economic Cooperation: The EU and the EMU

The EMU is the result of a long process of European economic cooperation that started with the European Coal and Steel Community (ECSC) in 1952, where six European countries coordinated the production in this industry. These countries were Germany, France, Italy, Belgium, the Netherlands and Luxembourg. Note that part of the argument for forming this ECSC was political: after World War II, it was clear that the two major rivals in Europe, Germany and France, should be brought together to prevent World War III. And of course, the coal and steel industry is a strategic industry in terms of warfare.

The Treaty of Rome (1958) followed this cooperation in the ECSC: the six countries agreed to a common market, an economic area where

goods and factors of production can move freely. Against the outside world, this area has common trade tariffs. Hence, the Treaty of Rome marks the start of the European Economic Community (EEC) which evolved in 1991 into the EU. From the Treaty of Rome onwards, three developments need special attention. First, after the fall of the system of Bretton Woods, the countries that signed the Treaty of Rome developed their own exchange rate system as part of the European Monetary System (EMS). This system was basically like the Bretton Woods system, but now for the members of the EEC. It was argued that such a system would help the transition to a common market. Besides, such an EMS linked up with already existing ideas about closer monetary cooperation in the common market. Second, obviously this common market was an attractive objective because more and more countries applied for membership. Thus in the 1970s the six countries that signed the Treaty of Rome were extended to 12 countries and finally in the 1990s another three countries joined the club. Note, however, that not all members opted for the same 'package': the United Kingdom has only now and then been a member of the EMS, while it has always been a member of the EEC. Spain and Portugal joined the EEC long before they joined the EMS. This feature is still characteristic of European cooperation, as we will see. Third, over the years it became clearer that economic cooperation in Europe was not only based on economic arguments: political unity in Europe was the final goal and close economic cooperation was seen as a prerequisite for such a political union (Delors 1996). Therefore, in the 1970s the Prime Minister of Luxembourg, Pierre Werner, launched the idea of one currency for Europe. As a result of these developments, 15 countries now form the EU. The main characteristics of the EU are the common market that formally started in 1992 and the desire for and commitment to the introduction of the single currency, the euro.² But again, not all of these countries opted for the same all-in package: 12 countries chose the one currency arrangement (EMU) and thus chose to join the euro area. Denmark, the United Kingdom and Sweden have decided not to partici-

pate at the start of the EMU. Appendix 2 shows which countries are members of the EU and the EMU and their respective populations and GDP in the year 2000.

So what is the stand now? The European Commission (the EU government) has taken a period of three years to transform 12 different currencies into the single euro. First, as from 1 January 1999, exchange rates between the members of the EMU have been fixed in concrete. These members were selected out of the EU members in April 1998. This selection was based on whether the countries satisfied the so-called convergence criteria as laid down in the Treaty of Maastricht in 1991.³ Second, this fixed exchange rate arrangement is only viable when monetary policy between these countries is perfectly coordinated or, still better, when this monetary policy is in the hands of one central bank. The latter option was chosen, thus the European Central Bank (ECB) started its operations in 1999 and is the central bank for the euro area. The Dutch former central bank president, Wim Duisenberg, has been appointed as the first president of this ECB. Third, the virtual euro was launched in 1999. Although no coins and notes were in circulation, payments and investments in euros could be executed via opening euro accounts. Fourth, to get used to the value of the euro, from 1999 all rates on the stocks and options exchanges in Europe have been quoted in euros. Besides, shops were encouraged to list prices both in the domestic currency and in euros. From mid-2000, price listings in both currencies were required and banks were obliged to show in their statements both the values in domestic currencies and in euros. The final step was the start of the circulation of tangible euro notes and coins and this happened on 1 January 2002. Within a few weeks, 12 national currencies had disappeared from circulation and had been replaced by the euro. The introduction of the tangible euro also terminated the double price quotations in shops and on bank statements.

3. The Size of the EU and Euro Area

Although the introduction of the one single currency definitely marks the start of a new era

in European economic cooperation, the EU remains the relevant (common) market, in particular for outside countries. Sections 3 and 4 discuss the size of the common market and the relations with Australia. If, however, one wants to analyse economic policy in Europe, one must focus on the policy of the EMU and this is elaborated on in Section 5.

Is the EU a big player on the world market? Yes, and Table 1 provides data on an integrated Europe. Because Asia and the United States are the other major players in the world economy and are important partners for Australia, Table 1 lists data for the United States and Asia as well. Besides, because Japan, the United States and Europe are often seen as the big 3 of the world economy, figures for Japan have been listed separately. The figures for Europe are for the EU (the 15 countries that cooperate in a common market), while the figures in brackets are data for the euro area.

From Table 1 we can derive three conclusions. First, in terms of population, the European market is about 1.3 times the size of the US market and about 3 times as large as the Japanese market. Second, the GNP share as a percentage of world GNP is similar for the United States and the EU. Japan accounts for about half of the Asian GNP. GNP per capita is highest in Japan and the United States and GNP per capita in Asia is low (more than two-thirds of poor people live in Asia). Third, the share of world trade (imports plus exports per country/world imports plus world exports) between Europe and the United States is similar. Japan has

a lower share but still accounts for about 25 per cent of total Asian trade. Although the member states of the euro area are very open economies, it appears that most of their imports and exports are from or to fellow members of the EU. Hence, with respect to the outside world, the economy of the EU is as closed as the economy of the United States.

Thus with the occurrence of the common market in 1992 and with the forecast of more cooperation, a large economic entity has entered the global stage. Note that a number of aspirant countries are in the process of admittance, among them are large countries such as Turkey, Poland and Hungary. One point, however, that might raise questions is whether it can be expected that Sweden, Denmark and the United Kingdom will choose to join the EMU. Sweden claimed that it did not want to join the EMU at the start because of technical reasons. The Swedish government has made it clear that Sweden will join as soon as possible. Although the Danish government was in favour of joining the EMU, the Danish people rejected membership of the EMU in a referendum in October 2000. Until the result was published, it was unclear which side would win the referendum because public opinion in Denmark was (and still is) heavily divided on this point, and in the next referendum the result could easily be turned around. Note that Denmark keeps a fixed exchange rate to the euro. Obviously, a number of Danish people fear that their typical Scandinavian type of welfare state will not survive in the euro area. In this sense would the joining of

Table 1 The Big 3 in 1999

	<i>EU-15</i> <i>(EU-12)</i>	<i>United States</i>	<i>Asia including Australasia</i> <i>(Japan)</i>
Population (million)	375 (302)	282	3.300 (127)
Gross national product (GNP) as a per cent of the world total	28 (22)	30	26 (14)
GNP per capita (US dollar)	21877 (21012)	31920	2224 (32230)
Share of world trade	14.4 [excluding internal trade of 23.3] ^a	15.2	25.3 (6.4)

Note: (a) No figures are available for the share of world trade for the EU-12.

Sources: EU-15 and Asia: Commission of the European Communities (2001); United States: World Bank (2001a).

Sweden be a clear signal for the other Scandinavian countries that this fear is possibly unfounded. Making predictions for the United Kingdom is more difficult. From various inquiries it is clear that the British business society is in favour of EMU membership. Besides, the current government is more Europe-minded than the previous one. So there is belief in Europe that the membership of the United Kingdom to the EMU is just a matter of time, although it is possible that this belief is based on wishful thinking.

4. The Euro Area and Australia⁴

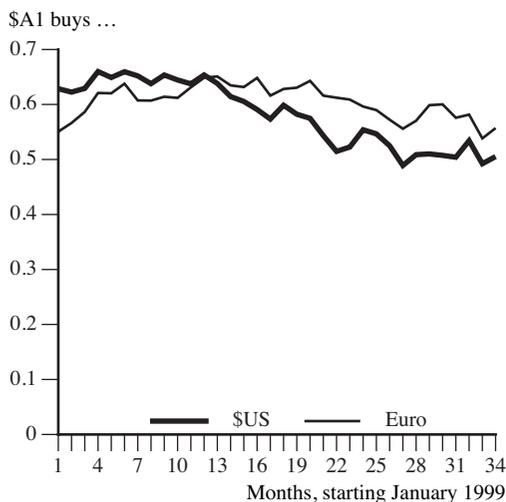
Is the EU-15 an important economic partner for Australia? Yes, it is. For several years, the EU-15 has been Australia's largest trading partner in goods and services. About 12 per cent of Australian exports in goods and about 20 per cent of exports of services find their way to the EU. Imports of goods (services) from the EU amount to 22 per cent (23 per cent) of total Australian imports of goods (services). Coal, wool and alcoholic beverages are amongst the most exported goods from Australia to the EU, while medicaments, passenger motor vehicles and telecommunications equipment are Australia's top three imported goods from the EU. Besides, the EU is the largest foreign investor

in Australia, both in terms of stocks (accumulated investments in the past) and flows (current capital flows). However, given the special relations between Australia and the United Kingdom, it is not surprising that trade between Australia and the United Kingdom accounts for a large share of EU–Australia trade. About 25 per cent of this merchandise trade (exports plus imports) and about 50 per cent of this trade in services is trade between Australia and the United Kingdom (Australian Department of Foreign Affairs and Trade 2001).

Given the importance of the trade relations between Australia and the EU one might ask whether the exchange rate between the Australian dollar and the euro has followed a similar or a different development in comparison to the US dollar and the Japanese yen.

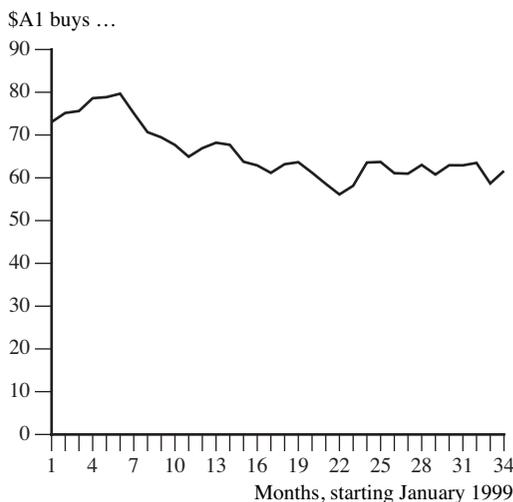
Figures 1 and 2 show the development of the nominal exchange rates between the Australian dollar, the US dollar, the euro and the yen. At the start of the euro, \$A1 bought 0.55 euro. Until August 2000, the Australian dollar appreciated against the euro (at the end of August 2000, \$A1 bought 0.64 euro). Thereafter the euro appreciated against the Australian dollar and at the end of October 2001, \$A1 again bought 0.55 euro. Over the period January 1999 to October 2001 the Australian dollar clearly depreciated against the US dollar. The

Figure 1 \$A, \$US and Euro Exchange Rates



Source: Reserve Bank of Australia.

Figure 2 \$A and Yen Exchange Rate



Source: Reserve Bank of Australia.

same holds for the value of the Australian dollar against the yen. Thus I conclude that over the last year, the Australian dollar depreciated against all of the big-3 currencies. No specific pattern in the \$A/€ exchange rate seems to prevail.

5. Economic Policy in the Euro Area

What type of economic policy can be expected in the EMU? I will shortly discuss monetary policy, labour market policy, competition policy and fiscal policy.⁵

The dominant economic view among the governments of the EMU member states and among the members of the European Commission is that a free market economy is the best guarantee for optimal welfare. In this view, government policy cannot to a large extent shape society. Therefore, economic policy must aim at creating an environment that guarantees a proper functioning of a free market economy. This implies for monetary policy that the idea of a negatively sloped Phillips curve is rejected. Government cannot lower the level of unemployment by increasing the money supply. The latter will only increase inflation. Thus, monetary policy aims at maintaining low inflation. For the EMU, the goal is to keep inflation at a level of 2 per cent, using the money supply and the short-term interest rate as instruments. In this view, to lower unemployment, the government must focus on policies that improve the proper functioning of the labour market. This comes down to deregulation and decreasing the influence of the trade unions and increasing labour mobility and wage flexibility. It needs to be said, however, that on this point there is much less consensus than on monetary policy. What holds for the labour market holds for the goods market as well. Increasing the flexibility of the goods market by increasing competition must make the euro area more competitive. Hence, various competition 'watchdogs' have been installed in Europe. On the other hand, the breakdown of economic borders coincides with a tendency for building large conglomerates in Europe. In particular the banking industry and the telecommunications industry have

showed increasing merger activity during the past few years. Increasing flexibility of the markets is necessary because governments are not allowed to use fiscal policy to let the economy adjust in case of adverse conditions. This fiscal policy has been the subject of many debates. Two decisions on this topic are of importance. First, it has been decided that fiscal policy will remain at the discretion of the national governments. There will be no fiscal federalism, no EMU fiscal policy. But, second, if this is the case, how can a tension between the national fiscal policies and the EMU monetary policy be prevented? This tension can easily occur when one country creates a huge budget deficit that will either increase the EMU interest rate or force the printing of money. This problem is solved in the Stability and Growth Pact. According to the rules of this agreement, budget deficits may not exceed 3 per cent of GDP.

6. The Future of the Euro Area

Two topics dominate the discussion of the future of the euro area. First, there are a number of problems that need to be solved before the euro area will operate as an optimum currency area; and second, a number of mainly middle European countries have applied for membership to the EU and the EMU. The question is under what conditions will new members be admitted. I focus on the first type of problems, because of the short-term character of most of these problems. The section finishes with a short discussion of the second topic.

A first point of concern relates to the fact that despite the EMU adopting one currency, the euro area is not an optimum currency area. The main argument is that labour mobility is too low to solve problems that may result from asymmetric shocks—that is, shocks that hit some member countries more than other member countries. Apart from cultural barriers and a number of technical barriers (like language, mutual recognition of grades and so on), labour mobility is hampered by the lack of harmonisation of social policy and of taxes in the EMU. This is, however, a very difficult point. Although social policy in Europe has received

less attention than monetary and fiscal policy, from the few discussions it is clear that major differences in opinion exist and that not all countries are in favour of more harmonisation. For instance, Denmark and the United Kingdom opted out because they strongly hesitate to join a common social policy in Europe. Another point related to harmonisation is the fear of social dumping. This occurs if countries in the EMU try to attract businesses by offering all kinds of tax benefits. This sort of tax competition can easily lead to a stripping of the welfare state. Ireland has been accused of social dumping in the past. Hence, minimum arrangements are required according to the advocates of harmonisation.

Fiscal policy might be an alternative for labour market policy, especially because fiscal policy remains decentralised and thus in the hands of the separate governments. But, given the strong anti-inflationary stance of the ECB, the Growth and Stability Pact (see Section 5) aims at minimising the risk that fiscal policy causes inflationary pressures. Some economists have argued that given the inflexibility of the European labour markets and the strong constraints on fiscal policy, the EMU lacks instruments that can relieve the consequences for badly hurt regions in the case of asymmetric shocks. The famous American economist Martin Feldstein (1997) has claimed that this might even cause a new war in Europe, instead of preventing a war. Although Feldstein exaggerates, it is clear that large tensions within the EMU will occur if severe asymmetric shocks hit this currency area.

The continuous depreciation of the euro, the future of the euro and the exchange rate policy of the ECB are a second topic of concern. Since the euro was launched in January 1999, it has depreciated against the US dollar. It has lost more than 25 per cent of its value against the US dollar. Note that over the past year the Australian dollar has depreciated by 10 per cent against the euro (the Australian dollar has depreciated against the US dollar, while the euro has appreciated slightly against the US dollar). The depreciation of the euro against the US dollar was not expected for two reasons. First, it was expected that investors would use the

euro to adjust their portfolios and incorporate euro-denominated financial assets in them. This did not happen. Second, because of the strong anti-inflation commitment of the ECB, it is desirable that the euro is considered a strong and reliable currency. Besides, the European economy was booming and the so-called fundamentals for Europe looked better than for the United States. So why did the euro depreciate? Among the large number of arguments, the credibility argument seems to be the most appropriate. Appointing a well-known Dutch banker with a great reputation in the international financial community as the first chairman of the ECB has not been a sufficient condition for credibility of the policy of the ECB. Alternatively, obviously the ECB has to gain credibility in the financial markets. Therefore investors are hesitating to invest in euro assets. There is evidence that supports this reluctance on the side of investors. The way Wim Duisenberg was appointed (with strong opposition from the French who wanted their own candidate and who were backed by the Germans), the German government that publicly asked the ECB to decrease the interest rate in 1999–2000, and the mixed economic conditions in Europe did not contribute much to the building of credibility. Second, following an interesting article by Portes and Rey (1998), transaction costs in trades involving dollar assets are much lower than transaction costs in trades involving euros and this explains the reluctance of investors to shift to euros on a large scale.

Closely related to the previous point is the question of what type of exchange rate policy will the ECB follow. The policies vis-à-vis the dollar and the yen are especially of relevance and until now the planned policy is unclear. Anyhow, for the near future no specific exchange rate arrangement is expected.

Finally, 13 European countries have applied for membership. Most of these countries are formerly communist countries like Poland, Hungary and the Czech Republic. These countries will add another 168 million people to the EU and the share of EU-28 GNP will increase to 30 per cent of world GNP. This relatively large increase in population and the

accompanying moderate increase in the share of GNP immediately reveal one of the major problems that will occur if these countries join. These relatively poor, highly agricultural countries will put a heavy burden on the EU budget and will change the direction of the large agricultural subsidies in Europe from France and Spain to these new members. Therefore these memberships are heavily debated, but it is expected that by 2010 almost all of these countries will be members of the EU. Again, political arguments form part of the decision-making process. In a formal sense, the Copenhagen criteria list the entrance requirements. Basically a two-step procedure is proposed. First, the countries will enter the EU and thereafter they can apply for membership of the EMU.

7. Conclusion

Although economic cooperation in Europe started some 50 years ago, 1 January 2002 added a new landmark to this process when the euro was launched. The euro has become the single currency for about 300 million people in 12 countries in Europe. European citizens, but also tourists and businesses, will immediately reap the benefits because of the disappearance of transaction costs in cross-border visits and in cross-border payments. The costs of the EMU will, however, not immediately be clear despite the fact that they may be high because evidence shows that the EMU area is not an optimum currency area.

Economic cooperation in Europe is of relevance for Australia because the economic relations between Australia and the EU are important: the EU is Australia's largest trade and investment partner. The launch of the euro as such will not change much in these relations, but it is to be expected that next to monetary and fiscal policy, labour market policies and competition policies will be much more coordinated in Europe than before. Besides, the introduction of the euro and the increased economic cooperation that was necessary for this introduction have attracted an increasing number of European countries to the common market. On the other hand, despite the severity of

the entry criteria, the euro area is not an optimum currency area and therefore the stability of this area is not guaranteed beforehand.

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Appendix 1: List of Acronyms in European Economic Cooperation

ECB	European Central Bank (started in 1999)
ECSC	European Coal and Steel Community (1952–1958)
EEC	European Economic Community (1958–1990, thereafter EU)
EMS	European Monetary System (1979–1998)
EMU	European Monetary Union (EU-12, started in 1999)
EU	European Union (EU-15, started in 1991)
Euro	The single currency of the EMU (in full operation as from January 2002)
Euro area	The geographic area that uses the euro (this area is covered by all EMU members)

Appendix 2: EMU and EU Countries

Table A1 presents data on population and GDP for the EMU and EU countries.

Endnotes

1. This article is inspired by and is related to Crosby's article on monetary arrangements in this same journal (Crosby 2001). This article focuses on one of the monetary arrangements, a currency union, in greater detail.

2. Although having a common market sounds positive, note that 15 (very) different countries basically started this market. There still are large differences in such basics as language, education systems, grades, health and safety standards and so on. At a higher level, there are large differences in culture. Thus keep in mind that especially labour mobility is not yet very well developed in the EU.

Table A1 EMU and EU Countries, 2000

Country	Population (millions)	GDP (\$US billion)
The 12 countries of the EMU		
Belgium	10.3	231
Germany	82.2	1900
France	58.9	1300
Italy	57.7	1100
Luxembourg	0.44	19
Netherlands	15.9	365
Ireland	3.8	94
Portugal	10.0	104
Spain	39.4	555
Finland	5.3	120
Austria	8.1	191
Greece	10.6	112
If we add three countries we have the 15 countries of the EU		
Denmark	5.3	161
United Kingdom	58.9	1400
Sweden	8.9	227

Note: Countries that to date have applied for membership of the EU and/or EMU are Bulgaria, Cyprus, Czech Republic, Estonia, Hungary, Latvia, Lithuania, Malta, Poland, Romania, Slovakia, Slovenia and Turkey.

Source: World Bank (2001b).

3. Note that in 1998 Greece did not fulfill the convergence criteria. However, because of major improvements in the Greek economy, Greece has been participating in the EMU from 2001 onwards.

4. The European Commission's Delegation to Australia and New Zealand is in Canberra. The web site (http://europa.eu.int/comm/external_relations/australia) provides lots of information about the economic and political relations between the EU and Australia. The relations with Asia are extensively discussed in Commission of the European Communities (2001).

5. I can only touch upon these issues. Excellent textbooks for students in this respect are De

Grauwe (2000) and Eijffinger and de Haan (2000). The Organisation for Economic Co-operation and Development (1999) is a good overview of the policy agenda for the EMU for the coming years while the weekly journal *The Economist* provides ample information about the developments in the EU and in the EMU.

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