Chapter 9: Foreign Exchange Markets in Different Countries

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Chapter 9: Foreign Exchange Markets in Different Countries

Introduction:

The United States dollar is the world's main currency – an universal measure to evaluate any other currency traded on Forex. All currencies are generally quoted in U.S. dollar terms. Under conditions of international economic and political unrest, the U.S. dollar is the main safe-haven currency, which was proven particularly well during the Southeast Asian crisis of 1997-1998.

As it was indicated, the U.S. dollar became the leading currency toward the end of the Second World War along the Breton Woods Accord, as the other currencies were virtually pegged against it. The introduction of the euro in 1999 reduced the dollar's importance only marginally.

The other major currencies traded against the U.S. dollar are the euro, Japanese yen, British pound, and Swiss franc.

The Euro: The euro was designed to become the premier currency in trading by simply being quoted in American terms. Like the U.S. dollar, the euro has a strong international presence stemming from members of the European Monetary Union. The currency remains plagued by unequal growth, high unemployment, and government resistance to structural changes. The pair was also weighed in 1999 and 2000 by outflows from foreign investors, particularly Japanese, who were forced to liquidate their losing investments in euro-denominated assets. Moreover, European money managers rebalanced their portfolios and reduced their euro exposure as their needs for hedging currency risk in Europe declined.
The Japanese Yen: The Japanese yen is the third most traded currency in the world; it has a much smaller international presence than the U.S. dollar or the euro. The yen is very liquid around the world, practically around the clock. The natural demand to trade the yen concentrated mostly among the Japanese keiretsu, the economic and financial conglomerates. The yen is much more sensitive to the fortunes of the Nikkei index, the Japanese stock market, and the real estate market.

The British Pound: Until the end of World War II, the pound was the currency of reference. The currency is heavily traded against the euro and the U.S. dollar, but has a spotty presence against other currencies. Prior to the introduction of the euro, both the pound benefited from any doubts about the currency convergence. After the introduction of the euro, Bank of England is attempting to bring the high U.K. rates closer to the lower rates in the euro zone. The pound could join the euro in the early 2000s, provided that the U.K. referendum is positive.

The Swiss Franc: The Swiss franc is the only currency of a major European country that belongs neither to the European Monetary Union nor to the G-7 countries. Although the Swiss economy is relatively small, the Swiss franc is one of the four major currencies, closely resembling the strength and quality of the Swiss economy and finance. Switzerland has a very close economic relationship with Germany, and thus to the euro zone. Therefore, in terms of political uncertainty in the East, the Swiss franc is favored generally over the euro.

Typically, it is believed that the Swiss franc is a stable currency. Actually, from a foreign exchange point of view, the Swiss franc closely resembles the patterns of the euro, but lacks its liquidity. As the demand for it exceeds supply, the Swiss franc can be more volatile than the euro.
9.1 Legal tender

9.1.1. Legal tender in different parts of the world

Legal tender or forced tender is payment that, by law, cannot be refused in settlement of a debt denominated in the same currency.

Legal tender is a status which may be conferred on certain examples of money, which may depend on circumstances including the amount of money. The term "legal tender" is also sometimes used to refer to the money or currency itself holding that status.

Legal tender is a concept that is frequently misunderstood: this is often a result of differing legal definitions in different jurisdictions. Cheques, credit cards, debit cards and similar non-cash methods of payment are not generally defined as legal tender. Only specific coin and note examples of cash money are usually defined as legal tender. Some jurisdictions may, by law, forbid or otherwise restrict payment made other than by legal tender. For example, such a law might outlaw the use of foreign coins and bank notes, or require a license to perform financial transactions in a foreign currency.

9.1.2 In the Eurozone

Euro coins and banknotes became legal tender in most countries of the Eurozone on January 1, 2002. Although one side of the coins is used for different national marks for each State, all coins and all banknotes are legal tender throughout the eurozone. Therefore, it is possible to find Irish euro coins in Greece and Finnish euro coins in Portugal, for instance. Although some eurozone countries do not put 1 cent and 2 cent coins into general circulation (prices in those countries are by general understanding always set in whole multiples of 5 cents), 1 cent and 2 cent coins from other eurozone countries remain legal tender in those countries.
European Regulation EC 974/98 limits the number of coins that can be offered for payment. National laws may also impose restrictions as to maximal amounts that can be settled by coins or notes.

9.1.3 In India

The Indian rupee is the only legal tender in India. The rupee is also legal tender in Nepal and Bhutan, but Nepali Rupee and Bhutanese Ngultrum are not legal tender in India. The Indian National Rupee is not accepted in Government institutions like Post Offices etc in Nepal and Bhutan.

9.1.4 In the United Kingdom

In the United Kingdom, only coins valued 1 pound Sterling, 2 pounds, and 5 pounds Sterling are legal tender in unlimited amounts throughout the territory of the United Kingdom. In accordance with the Coinage Act 1971, gold sovereigns are also legal tender for any amount. The face values of sovereigns are 50p, £1, £2 and £5; their actual value-being linked to the price of gold-is much higher. The United Kingdom legislation that introduced the 1 pound coin left no United Kingdom-wide legal tender banknote.

Currently, 20 pence pieces, 25 pence coins (although many retail outlets do not recognise or accept this) and 50 pence pieces are legal tender in amounts up to 10 pounds; 5 pence pieces and 10 pence pieces are legal tender in amounts up to 5 pounds; and 1 penny pieces and 2 pence pieces are legal tender in amounts up to 20 pence.

Coins and banknotes do not need to be "legal tender" in order to be used as money to buy and perform other transactions for which money is intended. For example, British banknotes issued by various institutions circulate in the United Kingdom without being legal tender in all the jurisdictions of the United Kingdom.

9.1.5 In the United States

In 1798, Vice President Thomas Jefferson wrote that the federal government has no power "of making paper money or anything else a legal tender," and he advocated a
constitutional amendment to enforce this principle by denying the federal government the power to borrow.

During the American Civil War, the federal government was unable to pay its debts with gold or silver coin, so began to issue paper notes to pay its debts; when people refused to accept them in payment, Congress adopted the Legal Tender Act of 1862, compelling them to do so. Thus forced to accept federal notes, the recipients wanted to be able to use them to pay their own debts, and this led to litigation. The United States Supreme Court, with the support of judges recently appointed by President Ulysses S Grant, held that paper money can be legal tender, in the Legal Tender Cases, ranging from 1871 to 1884.

This statute means that all United States money as identified above are a valid and legal offer of payment for debts when tendered to a creditor. There is, however, no Federal statute mandating that a private business, a person or an organization must accept currency or coins as for payment for goods and/or services. Private businesses are free to develop their own policies on whether or not to accept cash unless there is a State law which says otherwise. For example, a bus line may prohibit payment of fares in pennies or dollar bills. In addition, movie theaters, convenience stores and gas stations may refuse to accept large denomination currency (usually notes above $20) as a matter of policy.

United States dollar

ISO 4217 USD

Official user(s) http://en.wikipedia.org/wiki/Image:Flag_of_the_United_States.svg

9 countries and territories


Inflation 2.7% (United States only)

Source The World Factbook, 2007 est.
Pegged 21 currencies by Subunit

1/10 Dime
1/100 Cent
1/1000 Mill

Symbol $ or US$
Cent ¢ or c
Mill ¢

Nickname Buck, green, and greenback. Also, Washingtons, Jeffersons, Lincolns, Benjamins, and Hamiltons.

Coins
Freq. used 1¢, 5¢, 10¢, 25¢
Rarely 50¢, $1

Banknote
Freq. used $1, $5, $10, $20
Rarely $2, $50, $100

Central bank Federal Reserve Bank
Website www.federalreserve.gov

Printer Bureau of Engraving and Printing
Website www.moneyfactory.gov

Mint United States Mint
Website www.usmint.gov

(Source: Official website of Federal Reserve Bank of India)
The dollar (currency code USD) is the unit of currency of the United States. The U.S. dollar has also been adopted as the official and legal currency by the governments in a few other countries. The U.S. dollar is normally abbreviated as the dollar sign, $, or as USD or US$ to distinguish it from other dollar-denominated currencies and from others that use the $ symbol. It is divided into 100 cents.

**Banknotes**

The United States dollar is unique in the way that there have been more than 10 types of banknotes, such as Federal Reserve Bank Note, gold certificate, and United States Note. See Obsolete U.S. currency and coinage for complete listing. The Federal Reserve Note is the only type that remains in circulation since the 1970s.

Currently printed denominations are $1, $5, $10, $20, $50, and $100. Notes above the $100 denomination ceased being printed in 1946 and were officially withdrawn from circulation in 1969. These notes were used primarily in inter-bank transactions or by organized crime; it was the latter usage that prompted President Richard Nixon to issue an executive order in 1969 halting their use. With the advent of electronic banking, they became less necessary. Notes in denominations of $500, $1,000, $5,000, $10,000, and $100,000 were all produced at one time; see large denomination bills in U.S. currency for details.

The design of the notes has been accused of unfriendly to the visually-impaired. A U.S. District Judge ruled on November 28, 2006 that the American bills gave an undue burden to the blind and denied them "meaningful access" to the U.S. currency system. The judge has ordered the Treasury Department to begin working on a redesign within 30 days.

**International use**

The dollar is also used as the standard unit of currency in international markets for commodities such as gold and petroleum (the latter sometimes called petrocurrency). Even foreign companies with little direct presence in the United States, such as the
European company Airbus, list and sell their products in dollars, although some argue this is attributed to the aerospace market being dominated by American companies.

At the present time, the U.S. dollar remains the world's foremost reserve currency. In addition to holdings by central banks and other institutions there are many private holdings which are believed to be mostly in $100 denominations. The majority of U.S. notes are actually held outside the United States. All holdings of US dollar bank deposits held by non-residents of the US are known as eurodollars (not to be confused with the euro) regardless of the location of the bank holding the deposit (which may be inside or outside the U.S.) Economist Paul Samuelson and others maintain that the overseas demand for dollars allows the United States to maintain persistent trade deficits without causing the value of the currency to depreciate and the flow of trade to readjust. Milton Friedman at his death believed this to be the case but, more recently, Paul Samuelson has said he now believes that at some stage in the future these pressures will precipitate a run against the U.S. dollar with serious global financial consequences.

**Dollar versus euro**

<table>
<thead>
<tr>
<th>Year</th>
<th>Highest Date</th>
<th>Rate</th>
<th>Lowest Date</th>
<th>Rate</th>
</tr>
</thead>
<tbody>
<tr>
<td>1999</td>
<td>03 Dec</td>
<td>€0.9985</td>
<td>05 Jan</td>
<td>€0.8482</td>
</tr>
<tr>
<td>2000</td>
<td>26 Oct</td>
<td>€1.2118</td>
<td>06 Jan</td>
<td>€0.9626</td>
</tr>
<tr>
<td>Year</td>
<td>Date 1</td>
<td>Value 1</td>
<td>Date 2</td>
<td>Value 2</td>
</tr>
<tr>
<td>------</td>
<td>---------</td>
<td>---------</td>
<td>---------</td>
<td>---------</td>
</tr>
<tr>
<td>2001</td>
<td>06 Jul</td>
<td>€1.1927</td>
<td>05 Jan</td>
<td>€1.0477</td>
</tr>
<tr>
<td>2002</td>
<td>28 Jan</td>
<td>€1.1658</td>
<td>31 Dec</td>
<td>€0.9536</td>
</tr>
<tr>
<td>2003</td>
<td>08 Jan</td>
<td>€0.9637</td>
<td>31 Dec</td>
<td>€0.7918</td>
</tr>
<tr>
<td>2004</td>
<td>14 May</td>
<td>€0.8473</td>
<td>28 Dec</td>
<td>€0.7335</td>
</tr>
<tr>
<td>2005</td>
<td>15 Nov</td>
<td>€0.8571</td>
<td>03 Jan</td>
<td>€0.7404</td>
</tr>
<tr>
<td>2006</td>
<td>02 Jan</td>
<td>€0.8456</td>
<td>05 Dec</td>
<td>€0.7501</td>
</tr>
<tr>
<td>2007</td>
<td>12 Jan</td>
<td>€0.7756</td>
<td>27 Nov</td>
<td>€0.6723</td>
</tr>
<tr>
<td>2008</td>
<td>21 Jan</td>
<td>€0.6905</td>
<td>18 Mar</td>
<td>€0.6341</td>
</tr>
</tbody>
</table>

Source: Euro exchange rates in USD, ECB

**The dollar as the major international reserve currency**

Percentage of global currencies

The dollar is the most important international reserve currency, followed by the euro. The euro inherited this status from the German mark, and since its introduction, has increased its standing considerably, mostly at the expense of the dollar. Despite the dollar's recent losses to the euro, it is still by far the major international reserve currency, with an accumulation more than double that of the euro.
In August 2007, two scholars affiliated with the government of the People's Republic of China threatened to sell its substantial reserves in American dollars in response to pressure that they exercise fair trade.\textsuperscript{[23]} The Chinese government denied that selling dollar-denominated assets would be an official policy in the foreseeable future.

Former Federal Reserve Chairman Alan Greenspan said in September 2007 that the euro could replace the U.S. dollar as the world's primary reserve currency. It is "absolutely conceivable that the euro will replace the dollar as reserve currency, or will be traded as an equally important reserve currency."

\textbf{US Dollar Index}

The US Dollar Index (USDX) is the creation of the New York Board of Trade (NYBOT). It was established in 1973 for tracking the value of the USD against a basket of currencies, which, at that time, represented the largest trading partners of the United States. It began with 17 currencies from 17 nations, but the launch of the euro subsumed 12 of these into just one, so that now the USDX tracks only six currencies.

<table>
<thead>
<tr>
<th>Currency units per U.S. dollar</th>
<th>Weighting</th>
</tr>
</thead>
<tbody>
<tr>
<td>Euro</td>
<td>57.6%</td>
</tr>
<tr>
<td>Japanese yen</td>
<td>13.6%</td>
</tr>
<tr>
<td>Pound sterling</td>
<td>11.9%</td>
</tr>
</tbody>
</table>
Canadian dollar 9.1%
Swedish krona 4.2%
Swiss franc 3.6%
Source NYBOT, "US Dollar Index"

The Index is described by the NYBOT as "a trade weighted geometric average". The baseline of 100.00 on the USDX wa

s set at its launch in March, 1973. This event marks the watershed between the fixed-rate system of the Bretton Woods regime and the floating-rate system of the Smithsonian regime. Since then, the USDX has climbed as high as the 160's and drifted as low as the 70's.

The USDX has not been updated to reflect new trading realities in the global economy, where the bulk of trade has shifted strongly towards new partners like China and Mexico and oil suppliers while the United States homeland has itself de-industrialized.

**9.1.6 Euro sign**

The euro sign (€) is the currency sign used for the euro currency. The currency sign was presented to the public by the European Commission on 12 December 1996. The international three-letter code (according to ISO standard ISO 4217) for the euro is EUR.

**European Currency Unit**

ISO  4217
Code  XEU
**User(s)**
European
Community
and later the European Union

**Pegged with**
The ECU was a basket of currencies

**Symbol**
€ (rare), ECU or XEU

**Plural**
usually ECUs

None circulating freely, although there were mock-ups. In 1989 the Dutch government issued a series of:

**Coins**
Ecu coins from €2½ to €200, which could be spent in shops in The Hague ('s-Gravenhage), during the European Capital of Culture festival.

**Banknotes**
None, although there were mock-ups

**Central bank**
N/A

This infobox shows the latest status before this currency was rendered obsolete. Source: Website: EURO


Due to the ECU being used in some international financial transactions, there was a concern that foreign courts might not recognize the euro as the legal successor to the ECU. This was unlikely to be a problem, since it is a generally accepted principle of private international law that states determine their currencies, and that therefore states would accept the European Union legislation to that effect. However, for abundant caution, several foreign jurisdictions adopted legislation to ensure a smooth transition. Of particular importance here were the USA states of Illinois and New York, under whose laws a large proportion of international financial contracts are made. Both these states passed legislation to ensure that the euro was recognized as successor to the ECU.
### National currency weights to the ECU value

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>BEF</td>
<td>9.64%</td>
<td>8.57%</td>
<td>8.183%</td>
</tr>
<tr>
<td>DEM</td>
<td>32.98%</td>
<td>32.08%</td>
<td>31.955%</td>
</tr>
<tr>
<td>DKK</td>
<td>3.06%</td>
<td>2.69%</td>
<td>2.653%</td>
</tr>
<tr>
<td>ESP</td>
<td>-</td>
<td>-</td>
<td>4.138%</td>
</tr>
<tr>
<td>FRF</td>
<td>19.83%</td>
<td>19.06%</td>
<td>20.316%</td>
</tr>
<tr>
<td>GBP</td>
<td>13.34%</td>
<td>14.98%</td>
<td>12.452%</td>
</tr>
<tr>
<td>GRD</td>
<td>-</td>
<td>-</td>
<td>0.437%</td>
</tr>
<tr>
<td>IEP</td>
<td>1.15%</td>
<td>1.20%</td>
<td>1.086%</td>
</tr>
<tr>
<td>ITL</td>
<td>9.49%</td>
<td>9.98%</td>
<td>7.840%</td>
</tr>
<tr>
<td>LUF</td>
<td>-</td>
<td>-</td>
<td>0.322%</td>
</tr>
<tr>
<td></td>
<td>NLG 10.51%</td>
<td>10.13%</td>
<td>9.98%</td>
</tr>
<tr>
<td>--------</td>
<td>------------</td>
<td>--------</td>
<td>-------</td>
</tr>
<tr>
<td>PTE</td>
<td>-</td>
<td>-</td>
<td>0.695%</td>
</tr>
</tbody>
</table>

(Source: Official website of EURO)

**Euro**

**ISO 4217**

Code EUR (num. 978)


15 **Eurozone members**


4 **without formal agreement**


**Inflation** 3.1%

Source European Central Bank, January 2008

Method HICP

10 **currencies**

**Pegged by**

**Subunit**

1/100 cent

actual usage varies depending on language

**Symbol** €

**Plural** See Euro linguistic issues
The euro (currency sign: €; banking code: EUR) is the official currency of the European Union (EU), used in 15 member states, known collectively as the Eurozone (Austria, Belgium, Cyprus, Finland, France, Germany, Greece, Ireland, Italy, Luxembourg, Malta, the Netherlands, Portugal, Slovenia, Spain). It is also used in 9 other countries around the world, 7 of those being in Europe. Hence it is the single currency for over 320 million Europeans. Including areas using currencies pegged to the euro, the euro directly affects close to 500 million people worldwide. With more than €610 billion in circulation as of December 2006 (equivalent to US$802 billion at the exchange rates at the time), the euro is the currency with the highest combined value of cash in circulation in the world, having surpassed the U.S. dollar.
The euro was introduced to world financial markets as an accounting currency in 1999 and launched as physical coins and banknotes on 1 January 2002. It replaced the former European Currency Unit (ECU) at a ratio of 1:1.

The euro is managed and administered by the Frankfurt-based European Central Bank (ECB) and the Eurosystem (composed of the central banks of the euro zone countries). As an independent central bank, the ECB has sole authority to set monetary policy. The Eurosystem participates in the printing, minting and distribution of notes and coins in all member states, and the operation of the Eurozone payment systems.

While all European Union (EU) member states are eligible to join if they comply with certain monetary requirements, not all EU members have chosen to adopt the currency. All nations that have joined the EU since the 1993 implementation of the Maastricht Treaty have pledged to adopt the euro in due course. Maastricht obliged current members to join the euro; however, the United Kingdom and Denmark negotiated exemptions from that requirement for themselves. Sweden turned down the euro in a 2003 referendum, and has circumvented the requirement to join the euro area by not meeting the membership criteria. In addition, three European microstates (Vatican City, Monaco, and San Marino), although not EU members, have adopted the euro due to currency unions with member states. Andorra, Montenegro, and Kosovo have adopted the euro unilaterally, while not being EU members.

The euro is divided into 100 cents (sometimes referred to as eurocents, especially when distinguishing them from U.S. cents or the former currency in a particular country). All circulating euro coins (including the €2 commemorative coins) have a common side showing the denomination (value) with the old 15 EU-countries in the background. From 2007 or 2008 on (depending on the country where the coin is issued) that "old" map is replaced by a map of Europe, thus also showing non-EU-members like Norway. The coins also have a national side showing an image specifically chosen by the country that issued the coin. Euro coins from any country may be freely used in any nation which has adopted the euro.
Commemorative coins with €2 face value have been issued with changes to the design of the national side of the coin — as Greece did for the 2004 Summer Olympics. These two-euro coins are legal tender throughout the Eurozone. Coins with various other denominations have been issued as well, but these are not intended for general circulation. These later coins are only legal tender in the nation which issued them.

9.2 Economic and monetary union

9.2.1 History

For earlier monetary history in Europe, see European Monetary System.
For transition to the euro, see Introduction of the euro.

(Source: Official website of EURO)

The euro was established by the provisions in the 1992 Maastricht Treaty on European Union that was used to establish an economic and monetary union. In order to participate in the new currency, member states had to meet strict criteria such as a budget deficit of less than three per cent of their GDP, a debt ratio of less than sixty per cent of GDP, low inflation, and interest rates close to the EU average. In the Maastricht Treaty, the United Kingdom and Denmark were granted exemptions from moving to the stage of monetary union which would result in the introduction of the euro.

Economists that helped create or contributed to the euro include Robert Mundell, Wim Duisenberg, Robert Tollison, Neil Dowling, Fred Arditti and Tommaso Padoa-Schioppa.

Due to differences in national conventions for rounding and significant digits, all conversion between the national currencies had to be carried out using the process of triangulation via the euro. The definitive values in euro of these subdivisions (which represent the exchange rates at which the currency entered the euro) are shown at right.
The rates were determined by the Council of the European Union, based on a recommendation from the European Commission based on the market rates on 31 December 1998, so that one ECU (European Currency Unit) would equal one euro. (The European Currency Unit was an accounting unit used by the EU, based on the currencies of the member states; it was not a currency in its own right.) Council Regulation 2866/98 (EC), of 31 December 1998, set these rates. They couldn’t be set earlier, because the ECU depended on the closing exchange rate of the non-euro currencies (principally the pound sterling) that day.

The procedure used to fix the irrevocable conversion rate between the drachma and the euro was different, since the euro by then was already two years old. While the conversion rates for the initial eleven currencies were determined only hours before the euro was introduced, the conversion rate for the Greek drachma was fixed several months beforehand, in Council Regulation 1478/2000 (EC), of 19 June 2000.

The currency was introduced in non-physical form (travellers' cheques, electronic transfers, banking, etc.) at midnight on 1 January 1999, when the national currencies of participating countries (the Eurozone) ceased to exist independently in that their exchange rates were locked at fixed rates against each other, effectively making them mere non-decimal subdivisions of the euro. The euro thus became the successor to the European Currency Unit (ECU). The notes and coins for the old currencies, however, continued to be used as legal tender until new notes and coins were introduced on 1 January 2002.

The Changeover period during which the former currencies' notes and coins were exchanged for those of the euro lasted about two months, until 28 February 2002. The official date on which the national currencies ceased to be legal tender varied from member state to member state. The earliest date was in Germany; the Mark officially ceased to be legal tender on 31 December 2001, though the exchange period lasted two months. The final date was 28 February 2002, by which all national currencies ceased to be legal tender in their respective member states. However, even after the official date, they continued to be accepted by national central banks for periods ranging from several
years to forever in Austria, Germany, Ireland, and Spain. The earliest coins to become non-convertible were the Portuguese escudos, which ceased to have monetary value after 31 December 2002, although banknotes remain exchangeable until 2022.

Slovenia joined the Eurozone on 1 January 2007, followed by Malta and Cyprus on 1 January 2008.

**Eurozone**

The euro is the sole currency in Austria, Belgium, Cyprus, Finland, France, Germany, Greece, Ireland, Italy, Luxembourg, Malta, the Netherlands, Portugal, Slovenia and Spain. These 15 countries together are frequently referred to as the Eurozone or the euro area. More informally, "euroland" or the "eurogroup". Outside of the area covered by the map, the euro is the legal currency of the French overseas possessions of French Guiana, Réunion, Saint-Pierre et Miquelon, Guadeloupe, Martinique, Saint-Barthélemy, Saint Martin, Mayotte, and the uninhabited Clipperton Island and the French Southern and Antarctic Lands; the Portuguese autonomous regions of the Azores and Madeira; and the Spanish Canary Islands.

By virtue of some bilateral agreements,[15] the European microstates of Monaco, San Marino, and Vatican City mint their own euro coins on behalf of the European Central Bank. They are, however, severely limited in the total value of coins they may issue.

Andorra, Montenegro, Kosovo, and Akrotiri and Dhekelia adopted the foreign euro as their legal currency for movement of capital and payments without participation in the ESCB or the right to mint coins. Andorra is in the process of entering a monetary agreement similar to that of the microstates above.

Several possessions and former colonies of EU states have currencies pegged to the euro. These are French Polynesia, New Caledonia, Wallis and Futuna (the CFP franc); Cape Verde; the Comoros; and fourteen nations of Central and West Africa (the CFA franc).
Although not legal tender in Denmark and the United Kingdom, the euro is accepted in some stores throughout both countries, particularly international stores in large cities, and shops in Northern Ireland near the border with the Republic of Ireland, where the euro is the official currency. Similarly, the euro is widely accepted in Switzerland, even by official boards, such as the Swiss Railways.

Future prospects

Pre-2004 EU members

From Greece's participation in 2001 until the EU enlargement in 2004, Denmark, Sweden and the United Kingdom were the only EU member states outside the monetary union. The situation for the three older member states also looks different from that of the newer EU members; the three countries have no clear roadmap for adopting the euro:

Denmark negotiated a number of opt-out clauses from the Maastricht treaty after it had been rejected in a first referendum. On 28 September 2000, another referendum was held in Denmark regarding the euro resulting in a 53.2% vote against joining. However, Danish politicians have suggested that debate on abolishing the four opt-out clauses may possibly be re-opened in the near future. In addition, Denmark has pegged its krone to the euro (€1 = DKK 7.46038 ± 2.25%) as the krone remains in the ERM. Although not part of the European Union, both Greenland and the Faroe Islands use the Danish krone (the Faroese krona), and so also fall within the ERM.

Sweden: Sweden is obliged to join the euro by the 1994 Act of Accession, when they meet the economic conditions. Although the other conditions are met, the krona has never been part of ERM II, rendering Sweden ineligible. In 2003, a public referendum rejected euro membership, and Sweden has no plans to adopt the euro as of yet. The EU has made it clear that it will tolerate this with respect to Sweden, thereby giving Sweden a de facto opt-out, but not those member states that joined in 2004 or 2007.

The United Kingdom has an opt-out from eurozone membership under the Maastricht treaty and is not obliged to join the euro. While the government is in favour of
membership provided the economic conditions are right (requiring that "five economic tests" be met), the question has never been put to referendum. The United Kingdom was forced to withdraw the pound sterling from the ERM (the precursor to ERM II) on Black Wednesday (16 September 1992) due a mismatch between its benchmark currency parity and its economic performance, and the pound is not part of ERM II.

9.2.2 Transaction costs and risks

The most obvious benefit of adopting a single currency is removing from trade the cost of exchanging currency, theoretically allowing businesses and individuals to consummate previously unprofitable trades. On the consumer side, banks in the Eurozone must charge the same for intra-member cross-border transactions as purely domestic transactions for electronic payments (e.g. credit cards, debit cards and cash machine withdrawals).

The absence of distinct currencies also removes exchange rate risks. The risk of unanticipated exchange rate movement has always added an additional risk or uncertainty for companies or individuals looking to invest or trade outside their own currency zones. Companies that hedge against this risk will no longer need to shoulder this additional cost. The reduction in risk is particularly important for countries whose currencies have traditionally fluctuated a great deal, particularly the Mediterranean nations.

Financial markets on the continent are expected to be far more liquid and flexible than they were in the past. The reduction in cross-border transaction costs will allow larger banking firms to provide a wider array of banking services that can compete across and beyond the Eurozone.

Price parity

Another effect of the common European currency is that differences in prices—in particular in price levels—should decrease because of the 'law of one price'. Differences in prices can trigger arbitrage, i.e. speculative trade in a commodity across borders purely to exploit the price differential. Therefore, prices on commonly traded goods are likely to
converge, causing inflation in some regions and deflation in others during the transition. Some evidence of this has been observed in specific markets.

**Macroeconomic stability**

Low levels of inflation are the hallmark of stable and modern economies. Because a high level of inflation acts as a highly regressive tax (seigniorage) and theoretically discourages investment, it is generally viewed as undesirable. In spite of the downside, many countries have been unable or unwilling to deal with serious inflationary pressures. Some countries have successfully contained them by establishing largely independent central banks. One such bank was the Bundesbank in Germany; as the European Central Bank is modelled on the Bundesbank, it is independent of the pressures of national governments and has a mandate to keep inflationary pressures low. Member countries join the bank to credibly commit to lower inflation, hoping to enjoy the macroeconomic stability associated with low levels of expected inflation. The ECB (unlike the Federal Reserve in the United States of America) does not have a second objective to sustain growth and employment.

National and corporate bonds denominated in euro are significantly more liquid and have lower interest rates than was historically the case when denominated in legacy currencies. While increased liquidity may lower the nominal interest rate on the bond, denoting the bond in a currency with low levels of inflation arguably plays a much larger role. A credible commitment to low levels of inflation and a stable debt reduces the risk that the value of the debt will be eroded by higher levels of inflation or default in the future, allowing debt to be issued at a lower nominal interest rate.

**9.2.3 A new reserve currency**

The euro is perceived to be a major global reserve currency, sharing that status with the U.S. dollar (USD). The U.S. dollar still continues to enjoy its status as the primary reserve of most commercial and central banks worldwide.
Since its introduction, the euro has been the second most widely-held international reserve currency after the U.S. dollar. The euro inherited this status from the German mark, and since its introduction, has increased its standing somewhat, mostly at the expense of the dollar. The steep increase of 4.4% in 2002 is due to the introduction of euro banknotes and coins in January 2002.

A currency is attractive for international transactions when it demonstrates a proven track record of stability, a well-developed financial market to trade the currency, and proven acceptability to others. While the euro has made substantial progress toward achieving these features, there are a few challenges that undermine the ascension of the euro as a major reserve currency. Persistent excessive budget deficits of some member nations, economically weak new members, conservatism of financial markets, and inertia or path dependence are all important factors keeping the euro as a junior international currency to the U.S. dollar. However, at the same time, the USD has increasingly suffered from a double deficit and consequently has its own concerns.

As the euro becomes a new reserve currency, Eurozone governments will enjoy substantial benefits. Since money is effectively an interest-free loan to the issuing government by the holder of the currency—foreign reserves act as a subsidy to the country minting the currency (see Seigniorage). However, reserve status also holds risks, as the currency may become overvalued, hurting European exporters, and potentially exposing the European economy to influence by external factors who hold large quantities of euro.

**Criticism**

Some European nationalist parties oppose the euro as part of a more general opposition to the European Union. A significant group of these include the members of the Independence and Democracy bloc in the European Parliament. Additionally the Green Party of England and Wales is opposed for anti-globalisation reasons but the rest of the European Green Party bloc in the European Parliament do not share their stances.
In their view, the countries that participate in the EMU have surrendered their sovereign abilities to conduct monetary policy. The European Central Bank is required to pursue a policy that might be at odds with national interests and there is no guarantee of extra-national assistance from their more fortunate neighbours should local conditions necessitate some sort of economic stimulus package. Many critics of the EMU believe the benefits to joining the organisation are outweighed by the loss of sovereignty over local policy that accompanies membership.

The euro is underpinned by the Stability and Growth Pact, which is designed to ensure even fiscal policy across the Eurozone. The SGP has been criticised for removing the ability of national governments to stimulate their own economies to a certain extent, in the only way left to them now that monetary policy is determined supranationally. The failure of some member states to observe the SGP, and its inherent problems have led to minor reforms, and further reforms are likely.\(^1\)

### 9.3 World currency

#### 9.3.1 United States dollar and the euro

The US dollar and the euro are by far the most used currencies in terms of global reserves.

In the foreign exchange market and international finance, a world currency or global currency refers to a currency in which the vast majority of international transactions take place and which serves as the world's primary reserve currency.

Since the mid-20th century, the de facto world currency has been the United States dollar. According to Robert Gilpin in Global Political Economy: Understanding the International Economic Order (2001): "Somewhere between 40 and 60 percent of international financial transactions are denominated in dollars. For decades the dollar has also been the world's principle reserve currency; in 1996, the dollar accounted for approximately two-thirds of the world's foreign exchange reserves".\(^2\)
Many of the world's currencies are pegged against the dollar. Some countries, such as Ecuador, El Salvador, and Panama, have gone even further and eliminated their own currency in favor of the United States dollar.

Since 1999, the dollar's dominance has begun to be undermined by the euro, that represents a larger size economy, with the prospect of more countries adopting the euro as their national currency. The euro inherited the status of a major reserve currency from the German Mark (DM), and since then its contribution to official reserves has risen continually as banks seek to diversify their reserves and trade in the eurozone continues to expand.

Similar to the dollar, quite a few of the world's currencies are pegged against the euro. They are usually Eastern European currencies like the Estonian kroon and the Bulgarian lev, plus several west African currencies like the Cape Verdean escudo and the CFA franc. Other European countries, while not being EU members, have adopted the euro due to currency unions with member states, or by unilaterally superseding their own currencies: Andorra, Kosovo, Monaco, Montenegro, San Marino, and the Vatican City.

As of December 2006, the euro surpassed the dollar in the combined value of cash in circulation. The value of euro notes in circulation has risen to more than €610 billion, equivalent to US$800 billion at the exchange rates at the time. This results in the Euro being the currency with the highest combined value of cash in circulation in the world.

**Hypothetical single "true" global currency**

An alternative definition of a world or global currency refers to a hypothetical single global currency, as the proposed Terra, produced and supported by a central bank which is used for all transactions around the world, regardless of the nationality of the entities (individuals, corporations, governments, or other organisations) involved in the transaction. No such official currency currently exists for a variety of reasons, political, economic, and cultural.
There are many different variations of the idea, including a possibility that it would be administered by a global central bank or that it would be on the gold standard [http://www.gold-eagle.com/editorials_05/wallenwein070805.html]. Supporters often point to the euro as an example of a supranational currency successfully implemented by a union of nations with disparate languages, cultures, and economies. Alternatively, digital gold currency can be viewed as an example of how global currency can be implemented without achieving national government consensus.

A limited alternative would be a world reserve currency issued by the International Monetary Fund, as an evolution of the existing Special Drawing Rights and used as reserve assets by all national and regional central banks.

9.3.2 Arguments for a global currency

Some of the benefits cited by advocates of a global currency are that it would:

- Eliminate speculation in Forex since there is a need for a currency pair to speculate.
- Eliminate the direct and indirect transaction costs of trading from one currency to another.
- Eliminate the balance of payments/current account problems of all countries.
- Eliminate the risk of currency failure and currency risk.
- Eliminate the uncertainty of changes in value due to exchange-caused fluctuations in currency value and the costs of hedging to protect against such fluctuations.
- Cause an increase in the value of assets for those countries currently afflicted with significant country risk.
- Eliminate the misalignment of currencies.
- Utilize the seigniorage benefit and control of printing money for the operations of the global central bank and for public benefit.
- Eliminate the need for countries or monetary unions to maintain international reserves of other currencies.
9.3.3 Arguments against a single global currency

Some economists argue that a single global currency is unworkable given the vastly different national political and economic systems in existence.

Loss of national monetary policy

With one currency, there can only be one interest rate. This results in rendering each present currency area unable to choose the interest rate which suits its economy best. If, for example, the European Union were to have an economic boom while the United States slumped into a depression, this period would be eased if each could choose the interest rate which best fitted its needs (in this case, a relatively high interest rate in the former, and a relatively low one in the latter).

Political difficulties

In the present world, nations are not yet able to work together closely enough to be able to produce and support a common currency. There has to be a high level of trust between different countries before a true world currency could be created. A world currency might even undermine national sovereignty of smaller states.

A currency needs an interest rate, while one of the largest religions in the world, Islam, is against the idea of interest rate. This might prove to be an unsolvable problem for a world currency, if religious views concerning interest do not moderate.

Having an interest rate is one of the fundamental laws of a market economy. Depositing of money is important because it lets the money be lent out where it is needed most, for instance when establishing a new company or buying a house for a family. In order to get strangers to lend each other money the creditors needs to get compensated for their risk taken and their good will. If not they would just spend the money, or keep it or invest it somewhere else. If you want to be without interest rate you need other ways to compensate depositors, and the compensation would have to be in the form of money, in other words an interest-look-alike.
Economical difficulties

Some economists argue that a single world currency is unnecessary, because the U.S. dollar already provides many of the benefits of a world currency while avoiding some of the costs http://www.oracle.com/oramag/profit/02-aug/p32forward.html.

If the world does not form an optimum currency area, then it would be economically inefficient for the world to share one currency.

A world currency would not allow for adjustments by national central banks to accommodate local economic problems. A single currency can only have a single interest rate. However, different regions in the world, with varying rates of economic growth, may require different interest rates.

As an example, consider a hypothetical Country A that is a petroleum exporter and a hypothetical Country B that is an oil importer. If the price of oil goes up, this is an advantage for Country A, and a disadvantage for Country B. If the oil price goes up, this stimulates the economy of Country A; to avoid "overheating" the economy, Country A's central bank would support increasing the interest rate of Country A. At the same time, Country B's economy is damaged by the increased price of oil, and Country B's central bank would seek to lower the interest rate in order to stimulate the economy. However, Country A and Country B would be unable to do this if they shared the same currency.

Historical local currencies

The Wörgl experiment that was conducted from July 1932 to November 1933 is a classic example of the potential efficacy of local currencies. Wörgl is a small town in Austria with 4000 inhabitants that introduced a local scrip during the Great Depression. By 1932 unemployment in Wörgl had risen to 30%. The local government had amassed debts of 1.3 million Austrian schillings (AS) against cash reserves of 40,000 AS. Local construction and civic maintenance had come to a standstill. On the initiative of the town's mayor, Michael Unterguggenberger, the local government printed 32,000 in labor certificates which carried a negative 1% monthly interest rate and could be converted into...
schillings at 98% of face value. An equivalent amount in schillings was deposited in the local bank as cover for the certificates in case of mass redemption and earned interest for the government. The certificates circulated so rapidly, that only 12,000 were ever actually put into circulation. According to reports by the mayor and economists of the day who studied the experiment, the scrip was readily accepted by local merchants and the local population. It utilized the scrip to carry out 100,000 AS in public works projects involving construction and repair of roads, bridges, tanks, drainage systems, factories and buildings. The scrip was also accepted as legal tender for payment of local taxes. In the one year that the currency was in circulation, it circulated 13 times faster than the official shilling and served as a catalyst to the local economy. The heavy arrears in local tax collection declined dramatically. Local government revenue rose from 2,400 AS in 1931 to 20,400 in 1932. Unemployment was eliminated, while it remained very high throughout the rest of the country. No increase in prices was observed. Based on the dramatic success of the Wörgl experiment, several other communities introduced similar scrips.

In spite of the tangible benefits of the program, it met with stiff opposition from the regional socialist party and from the Austrian central bank, which opposed the local currency as an infringement on its powers over the currency. As a result the program was suspended, unemployment rose and the local economy soon degenerated to the level of other communities in the country.

9.3.4 Local Currencies: character and benefits

The Wörgl experiment dramatically illustrates some of the common characteristics and major benefits of local currencies.

Local currencies tend to circulate much more rapidly than national currencies. The same amount of currency in circulation is employed more times and results in far greater overall economic activity. It produces greater benefit per unit. The higher velocity of money is a result of the negative interest rate which encourages people to spend the money more quickly.
Local currencies enable the community to more fully utilize its existing productive resources, especially unemployed labor, which has a catalytic effect on the rest of the local economy. They are based on the premise that the community is not fully utilizing its productive capacities, because of a lack of local purchasing power. The alternative currency is utilized to increase demand, resulting in a greater exploitation of productive resources. So long as the local economy is functioning at less than full capacity, the introduction of local currency need not be inflationary, even when it results in a significant increase in total money supply and total economic activity.

Since local currencies are only accepted within the community, their usage encourages the purchase of locally-produced and locally-available goods and services. Thus, for any given level of economic activity, more of the benefit accrues to the local community and less drains out to other parts of the country or the world. For instance, construction work undertaken with local currencies employs local labor and utilizes as far as possible local materials. The enhanced local effect becomes an incentive for the local population to accept and utilize the scrips.

Some forms of complementary currency can promote fuller utilization of resources over a much wider geographic area and help bridge the barriers imposed by distance. The Fureai kippu system in Japan issues credits in exchange for assistance to senior citizens. Family members living far from their parents can earn credits by offering assistance to the elderly in their local community. The credits can then be transferred to their parents and redeemed by them for local assistance. Airline frequent flyer miles are a form of complementary currency that promotes customer-loyalty in exchange for free travel. The airlines offer most of the coupons for seats on less heavily sold flights where some seats normally go empty, thus providing a benefit to customers at relatively low cost to the airline.

While most of these currencies are restricted to a small geographic area or a country, through the Internet electronic forms of complementary currency can be used to stimulate transactions on a global basis. In China, Tencent's QQ coins are a virtual form of currency that has gained wide circulation. QQ coins can be purchased for Renimbi and
used to purchase virtual products and services such as ringtones and on-line video game time. They are also obtainable through on-line exchange for goods and services at about twice the Renimbi price, by which additional 'money' is being directly created. Though virtual currencies are not 'local' in the tradition sense, they do cater to the specific needs of a particular community, a virtual community. Once in circulation, they add to the total effective purchasing power of the on-line population as in the case of local currencies.

Society utilizes only a small portion of its resources and opportunities. Almost everyone has underutilized knowledge, skills and time that can be engaged productively. Most manufacturers and services have underutilized machinery or capacity. Complementary currencies are a creative means to enhance this untapped social potential.

**Difficulties**

A common difficulty arising with many local currencies is pooling, with sudden release of the pool, creating hyperinflation. This is particularly likely when the local currency is not exchangeable for the coin of the realm and there are only a few vendors of basic necessities (such as food or housing) accepting the local currency for full, or nearly full, payment.