[Template:About](/wiki/Template:About" \o "Template:About) [Template:Redirect4](/wiki/Template:Redirect4) [Template:Pp-move-indef](/wiki/Template:Pp-move-indef) [Template:Use British English](/wiki/Template:Use_British_English) [Template:Use dmy dates](/wiki/Template:Use_dmy_dates) [Template:Infobox currency](/wiki/Template:Infobox_currency)

The **euro** ([sign](/wiki/Currency_sign): [**€**](/wiki/Euro_sign); [code](/wiki/ISO_4217): **EUR**) is the official currency of the [eurozone](/wiki/Eurozone), which consists of 19 of the [Template:EUnum](/wiki/Template:EUnum) [member states of the European Union](/wiki/Member_state_of_the_European_Union): [Austria](/wiki/Austria), [Belgium](/wiki/Belgium), [Cyprus](/wiki/Cyprus), [Estonia](/wiki/Estonia), [Finland](/wiki/Finland), [France](/wiki/France), [Germany](/wiki/Germany), [Greece](/wiki/Greece), [Ireland](/wiki/Republic_of_Ireland), [Italy](/wiki/Italy), [Latvia](/wiki/Latvia), [Lithuania](/wiki/Lithuania), [Luxembourg](/wiki/Luxembourg), [Malta](/wiki/Malta), the [Netherlands](/wiki/Netherlands), [Portugal](/wiki/Portugal), [Slovakia](/wiki/Slovakia), [Slovenia](/wiki/Slovenia), and [Spain](/wiki/Spain).[[1]](#cite_note-1)[[2]](#cite_note-2) The currency is also officially used by the [institutions of the European Union](/wiki/Institutions_of_the_European_Union) and [four other European countries](/wiki/International_status_and_usage_of_the_euro), as well as unilaterally by two others, and is consequently used daily by some 337 million [Europeans](/wiki/Europeans) [Template:As of](/wiki/Template:As_of).[[3]](#cite_note-3) Outside of Europe, a number of [overseas territories of EU members](/wiki/Special_member_state_territories_and_the_European_Union) also use the euro as their currency.

Additionally, 210 million people worldwide [Template:As of](/wiki/Template:As_of) use currencies [pegged](/wiki/Fixed_exchange_rate) to the euro. The euro is the second largest [reserve currency](/wiki/Reserve_currency) as well as the second most traded currency in the world after the [United States dollar](/wiki/United_States_dollar).[[4]](#cite_note-4)[[5]](#cite_note-5)[[6]](#cite_note-6)[Template:As of](/wiki/Template:As_of), with more than €995,000,000,000 in circulation, the euro has the highest combined value of banknotes and coins in [circulation](/wiki/Circulation_(currency)) in the world, having surpassed the [U.S. dollar](/wiki/United_States_dollar).[[note 1]](#cite_note-7)[Template:Update inline](/wiki/Template:Update_inline) Based on [International Monetary Fund](/wiki/International_Monetary_Fund) estimates of 2008 [GDP](/wiki/GDP) and [purchasing power parity](/wiki/Purchasing_power_parity) among the various currencies, the eurozone is the second largest economy in the world.[[7]](#cite_note-8) The name *euro* was officially adopted on 16 December 1995.[[8]](#cite_note-9) The euro was introduced to world financial markets as an [accounting currency](/wiki/Unit_of_account) on 1 January 1999, replacing the former [European Currency Unit](/wiki/European_Currency_Unit) (ECU) at a ratio of 1:1 (US$1.1743). Physical euro [coins](/wiki/Coin) and [banknotes](/wiki/Banknote) entered into circulation on 1 January 2002, making it the day-to-day operating currency of its original members.[[9]](#cite_note-10) While the euro dropped subsequently to US$0.8252 within two years (26 October 2000), it has traded above the U.S. dollar since the end of 2002, peaking at US$1.6038 on 18 July 2008.[[10]](#cite_note-11) Since late 2009, the euro has been immersed in the [European sovereign-debt crisis](/wiki/European_sovereign-debt_crisis) which has led to the creation of the [European Financial Stability Facility](/wiki/European_Financial_Stability_Facility) as well as [other reforms](/wiki/History_of_the_euro#Reform) aimed at stabilising the currency. In July 2012, the euro fell below US$1.21 for the first time in two years, following concerns raised over Greek debt and Spain's troubled banking sector.[[11]](#cite_note-12) [Template:Asof](/wiki/Template:Asof), the euro–dollar exchange rate stands at ~ US$1.1137.[[12]](#cite_note-13)

## Contents

* 1 Administration[[edit](/index.php?title=(none)&action=edit&section=1)]
* 2 Issuing modalities for banknotes[[edit](/index.php?title=(none)&action=edit&section=2)]
* 3 Characteristics[[edit](/index.php?title=(none)&action=edit&section=3)]
  + 3.1 Coins and banknotes[[edit](/index.php?title=(none)&action=edit&section=4)]
* 4 Direct and indirect usage[[edit](/index.php?title=(none)&action=edit&section=10)]
  + 4.1 Direct usage[[edit](/index.php?title=(none)&action=edit&section=11)]
  + 4.2 Use as reserve currency[[edit](/index.php?title=(none)&action=edit&section=12)]
  + 4.3 Currencies pegged to the euro[[edit](/index.php?title=(none)&action=edit&section=13)]
* 5 Economics[[edit](/index.php?title=(none)&action=edit&section=14)]
  + 5.1 Optimal currency area[[edit](/index.php?title=(none)&action=edit&section=15)]
  + 5.2 Transaction costs and risks[[edit](/index.php?title=(none)&action=edit&section=16)]
  + 5.3 Price parity[[edit](/index.php?title=(none)&action=edit&section=17)]
  + 5.4 Macroeconomic stability[[edit](/index.php?title=(none)&action=edit&section=18)]
    - 5.4.1 Trade[[edit](/index.php?title=(none)&action=edit&section=19)]
    - 5.4.2 Investment[[edit](/index.php?title=(none)&action=edit&section=20)]
    - 5.4.3 Inflation[[edit](/index.php?title=(none)&action=edit&section=21)]
    - 5.4.4 Exchange rate risk[[edit](/index.php?title=(none)&action=edit&section=22)]
    - 5.4.5 Financial integration[[edit](/index.php?title=(none)&action=edit&section=23)]
    - 5.4.6 Effect on interest rates[[edit](/index.php?title=(none)&action=edit&section=24)]
    - 5.4.7 Price convergence[[edit](/index.php?title=(none)&action=edit&section=25)]
    - 5.4.8 Tourism[[edit](/index.php?title=(none)&action=edit&section=26)]
* 6 Exchange rates[[edit](/index.php?title=(none)&action=edit&section=27)]
  + 6.1 Flexible exchange rates[[edit](/index.php?title=(none)&action=edit&section=28)]
  + 6.2 Against other major currencies[[edit](/index.php?title=(none)&action=edit&section=29)]
* 7 Linguistic issues[[edit](/index.php?title=(none)&action=edit&section=30)]
* 8 Criticism[[edit](/index.php?title=(none)&action=edit&section=31)]
  + 8.1 Unemployment[[edit](/index.php?title=(none)&action=edit&section=32)]
* 9 See also[[edit](/index.php?title=(none)&action=edit&section=33)]
* 10 Notes[[edit](/index.php?title=(none)&action=edit&section=34)]
* 11 References[[edit](/index.php?title=(none)&action=edit&section=35)]
* 12 Further reading[[edit](/index.php?title=(none)&action=edit&section=36)]
* 13 External links[[edit](/index.php?title=(none)&action=edit&section=37)]

## Administration[[edit](/index.php?title=(none)&action=edit&section=1)]

[thumb|150px|The](/wiki/File:European_Central_Bank_-_building_under_construction_-_Frankfurt_-_Germany_-_13.jpg) [central bank](/wiki/European_Central_Bank) has [its seat](/wiki/Seat_of_the_European_Central_Bank) in [Frankfurt](/wiki/Frankfurt) (Germany) and is in charge of the monetary policy of the [euro area](/wiki/Eurozone). [Template:Main](/wiki/Template:Main)

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

The 1992 [Maastricht Treaty](/wiki/Maastricht_Treaty) obliges most EU member states to adopt the euro upon meeting certain monetary and budgetary [convergence criteria](/wiki/Euro_convergence_criteria), although not all states have done so. The United Kingdom and Denmark negotiated exemptions,[[13]](#cite_note-14) while Sweden (which joined the EU in 1995, after the Maastricht Treaty was signed) turned down the euro in a 2003 referendum, and has circumvented the obligation to adopt the euro by not meeting the monetary and budgetary requirements. All nations that have joined the EU since 1993 have pledged to adopt the euro in due course.

## Issuing modalities for banknotes[[edit](/index.php?title=(none)&action=edit&section=2)]

Since 5 January 2002, the national central banks (NCBs) and the [ECB](/wiki/European_Central_Bank) have issued euro banknotes on a joint basis.[[14]](#cite_note-15) Euro banknotes do not show which central bank issued them. Eurosystem NCBs are required to accept euro banknotes put into circulation by other Eurosystem members and these banknotes are not repatriated. The ECB issues 8% of the total value of banknotes issued by the Eurosystem.[[14]](#cite_note-15) In practice, the ECB's banknotes are put into circulation by the NCBs, thereby incurring matching liabilities vis-à-vis the ECB. These liabilities carry interest at the main refinancing rate of the ECB. The other 92% of the euro banknotes are issued by the NCBs in proportion to their respective shares in the capital key of the ECB,[[14]](#cite_note-15) calculated using national share of European Union population and national share of European Union GDP, equally weighted.[[15]](#cite_note-16)

## Characteristics[[edit](/index.php?title=(none)&action=edit&section=3)]

### Coins and banknotes[[edit](/index.php?title=(none)&action=edit&section=4)]

[Template:Main](/wiki/Template:Main)

[left|thumb|Euro coins and banknotes of various denominations.](/wiki/File:Euro_coins_and_banknotes.jpg)

The euro is divided into 100 [cents](/wiki/Cent_(currency)) (sometimes referred to as *euro cents*, especially when distinguishing them from other currencies, and referred to as such on the common side of all cent coins). In Community legislative acts the plural forms of *euro* and *cent* are spelled without the *s*, notwithstanding normal English usage.[[16]](#cite_note-17)[[17]](#cite_note-18) Otherwise, normal English plurals are sometimes used,[[18]](#cite_note-19) with many [local variations](/wiki/Linguistic_issues_concerning_the_euro) such as *centime* in France.

All circulating coins have a *common side* showing the denomination or value, and a map in the background. Due to the [linguistic plurality of Europe](/wiki/Languages_of_the_European_Union), the Latin alphabet version of *euro* is used (as opposed to the less common Greek or Cyrillic) and [Arabic numerals](/wiki/Arabic_numerals) (other text is used on national sides in national languages, but other text on the common side is avoided). For the denominations except the 1-, 2- and 5-cent coins, the map only showed the 15 member states which were members when the euro was introduced. Beginning in 2007 or 2008 (depending on the country) the old map is being replaced by a map of Europe also showing countries outside the Union like Norway. The 1-, 2- and 5-cent coins, however, keep their old design, showing a geographical map of Europe with the 15 member states of 2002 raised somewhat above the rest of the map. All common sides were designed by [Luc Luycx](/wiki/Luc_Luycx). The coins also have a *national side* showing an image specifically chosen by the country that issued the coin. Euro coins from any member state may be freely used in any nation that has adopted the euro.

[thumb|Right|The new banknotes were introduced in the beginning of 2013. The top half of the image shows the front side of the banknote and the bottom half shows the back side.](/wiki/File:New_finnish_2013_5_euro.png) [thumb|](/wiki/File:EUR_10_obverse_(2014_issue).png)[10 euro note](/wiki/10_euro_note) from the new Europa series written in [Latin](/wiki/Latin_alphabet) (EURO) and [Greek](/wiki/Greek_alphabet) (EYPΩ) alphabets, but also in the [Cyrillic](/wiki/Bulgarian_alphabet) (ЕВРО) alphabet, as a result of [Bulgaria](/wiki/Bulgaria) joining the European Union in 2007.

The coins are issued in [€2](/wiki/2_euro_coins), [€1](/wiki/1_euro_coins), [50c](/wiki/50_cent_euro_coins), [20c](/wiki/20_cent_euro_coins), [10c](/wiki/10_cent_euro_coins), [5c](/wiki/5_cent_euro_coins), [2c](/wiki/2_cent_euro_coins), and [1c](/wiki/1_cent_euro_coins) denominations. To avoid the use of the two smallest coins, some cash transactions are rounded to the nearest five cents in the Netherlands and Ireland[[19]](#cite_note-20) [Ireland](/wiki/Economy_of_the_Republic_of_Ireland) and [Portugal](/wiki/Economy_of_Portugal) and also some EU countries outside the area.[[34]](#cite_note-37) Iceland, the country which experienced the largest [crisis in 2008](/wiki/2008–11_Icelandic_financial_crisis) when its entire international banking system collapsed, has emerged less affected by the sovereign-debt crisis as the government was unable to bail the banks out. In the EU, especially in countries where sovereign debts have increased sharply due to bank bailouts, a crisis of confidence has emerged with the widening of [bond](/wiki/Bond_(finance)) [yield spreads](/wiki/Yield_spread) and risk insurance on [credit default swaps](/wiki/Credit_default_swap) between these countries and other EU members, most importantly Germany.[[35]](#cite_note-38)[[36]](#cite_note-39) To be included in the eurozone, the countries had to fulfil certain [convergence criteria](/wiki/Euro_convergence_criteria), but the meaningfulness of such criteria was diminished by the fact it was not enforced with the same degree of strictness from country to country.[[37]](#cite_note-40) According to the [Economist Intelligence Unit](/wiki/Economist_Intelligence_Unit) in 2011, "[I]f the [euro area] is treated as a single entity, its [economic and fiscal] position looks no worse and in some respects, rather better than that of the US or the UK" and the budget deficit for the euro area as a whole is much lower and the euro area's government debt/GDP ratio of 86% in 2010 was about the same level as that of the United States. "Moreover", they write, "private-sector indebtedness across the euro area as a whole is markedly lower than in the highly leveraged [Anglo-Saxon](/wiki/Anglosphere) economies". The authors conclude that the crisis "is as much political as economic" and the result of the fact that the euro area lacks the support of "institutional [paraphernalia](/wiki/Paraphernalia) (and mutual bonds of solidarity) of a state".[[38]](#cite_note-41) The crisis continued with S&P downgrading nine euro-area countries, including France, then downgrading the entire [European Financial Stability Facility](/wiki/European_Financial_Stability_Facility) (EFSF) fund.[Template:Citation needed](/wiki/Template:Citation_needed)

In May 2012, socialist [François Hollande](/wiki/François_Hollande) was elected as president of France and a month later the French socialist legislative position was strengthened, while German leader [Angela Merkel](/wiki/Angela_Merkel) "has appeared to be floundering and been badly let down by her advisers in recent months", one commentator said. As such, "serious discord between French and German monetary decision-makers was [comparable to that of] ... 1992–93, at the height of the crisis over the [European Monetary System](/wiki/European_Monetary_System), the forerunner to EMU" ([European Monetary Union](/wiki/European_Monetary_Union)). "[H]itherto relatively dormant signs of [euro skepticism](/wiki/Euroscepticism) in German public opinion and throughout industry have been multiplying in recent months, making Hollande's proposals increasingly unpalatable to a broad swathe of German opinion. Although considerable controversy will continue to swirl over Greece and Spain, the real battle lines over the future of the euro will be drawn up between Germany and France", the commentary concluded.[[39]](#cite_note-42) Another historical parallel – to 1931 when Germany was burdened with debt, unemployment and austerity while France and the United States were relatively strong creditors – [gained attention](/wiki/Liaquat_Ahamed#Lords_of_Finance) in summer 2012[[40]](#cite_note-43) even as Germany received a [debt-rating](/wiki/Bond_credit_rating#Credit_rating_agencies) warning of its own.[[41]](#cite_note-44)[[42]](#cite_note-45)

## Direct and indirect usage[[edit](/index.php?title=(none)&action=edit&section=10)]

[Template:Further](/wiki/Template:Further) [Template:Eurozone Labelled Map](/wiki/Template:Eurozone_Labelled_Map)

### Direct usage[[edit](/index.php?title=(none)&action=edit&section=11)]

The euro is the sole currency of 19 [EU member states](/wiki/European_Union_member_states): Austria, Belgium, Cyprus, Estonia, Finland, France, Germany, Greece, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, the Netherlands, Portugal, Slovakia, Slovenia, and Spain. These countries constitute the "[eurozone](/wiki/Eurozone)", some 332 million people in total [Template:As of](/wiki/Template:As_of).[[43]](#cite_note-46) With all but two of the remaining EU members obliged to join, together with future members of the EU, the [enlargement of the eurozone](/wiki/Enlargement_of_the_eurozone) is set to continue. Outside the EU, the euro is also the sole currency of Montenegro and Kosovo and several [European microstates](/wiki/Microstates_and_the_European_Union) (Andorra, Monaco, San Marino and the Vatican City) as well as in four [overseas territories of EU members](/wiki/Special_member_state_territories_and_the_European_Union) that are not themselves part of the EU ([Saint Barthélemy](/wiki/Saint_Barthélemy), [Saint Pierre and Miquelon](/wiki/Saint_Pierre_and_Miquelon), the [French Southern and Antarctic Lands](/wiki/French_Southern_and_Antarctic_Lands) and [Akrotiri and Dhekelia](/wiki/Akrotiri_and_Dhekelia)). Together this direct usage of the euro outside the EU affects nearly 3 million people.

The Euro has been used as a trading currency in Cuba since 1998,[[44]](#cite_note-47) and Syria since 2006.[[45]](#cite_note-48) There are also various currencies pegged to the euro (see below). In 2009, Zimbabwe abandoned its [local currency](/wiki/Zimbabwean_dollar) and used major currencies instead, including the euro and the United States dollar.[[46]](#cite_note-49)

### Use as reserve currency[[edit](/index.php?title=(none)&action=edit&section=12)]

Since its introduction, the euro has been the second most widely held international [reserve currency](/wiki/Reserve_currency) after the U.S. dollar. The share of the euro as a reserve currency has increased from 18% in 1999 to 27% in 2008. Over this period the share of the U.S. dollar fell from 71% to 64% and the Yen fell from 6.4% to 3.3%. The euro inherited and built on the status of the [Deutsche Mark](/wiki/Deutsche_Mark) as the second most important reserve currency. The euro remains underweight as a reserve currency in advanced economies while overweight in emerging and developing economies: according to the [International Monetary Fund](/wiki/International_Monetary_Fund)[[47]](#cite_note-50) the total of euro held as a reserve in the world at the end of 2008 was equal to $1.1 trillion or €850 billion, with a share of 22% of all currency reserves in advanced economies, but a total of 31% of all currency reserves in emerging and developing economies.

The possibility of the euro becoming the first international reserve currency is now widely debated among economists.[[48]](#cite_note-51) Former [US Federal Reserve](/wiki/US_Federal_Reserve) Chairman [Alan Greenspan](/wiki/Alan_Greenspan) gave his opinion in September 2007 that it is "absolutely conceivable that the euro will replace the US dollar as reserve currency, or will be traded as an equally important reserve currency".[[49]](#cite_note-52) In contrast to Greenspan's 2007 assessment, the euro's increase in the share of the worldwide currency reserve basket has slowed considerably since 2007 and since the beginning of the worldwide [credit crunch](/wiki/Credit_crunch) related recession and [European sovereign-debt crisis](/wiki/European_sovereign-debt_crisis).[[47]](#cite_note-50)

### Currencies pegged to the euro[[edit](/index.php?title=(none)&action=edit&section=13)]

[Template:Main](/wiki/Template:Main)

[thumb|300px|Worldwide use of the euro and the US dollar:](/wiki/File:DOLLAR_AND_EURO_IN_THE_WORLD.svg) [Template:Legend](/wiki/Template:Legend) [Template:Legend](/wiki/Template:Legend) [Template:Legend](/wiki/Template:Legend) [Template:Legend](/wiki/Template:Legend) [Template:Legend](/wiki/Template:Legend) [Template:Legend](/wiki/Template:Legend) [Template:Legend](/wiki/Template:Legend) [Template:Legend](/wiki/Template:Legend) <hr /> Note: The [Belarusian ruble](/wiki/Belarusian_ruble) is pegged to the Euro, [Russian ruble](/wiki/Russian_ruble) and US$ in a currency basket.

Outside the eurozone, a total of 22 countries and territories that do not belong to the EU have currencies that are directly pegged to the euro including 13 countries in mainland Africa ([CFA franc](/wiki/CFA_franc)), two African island countries ([Comorian franc](/wiki/Comorian_franc) and [Cape Verdean escudo](/wiki/Cape_Verdean_escudo)), three French Pacific territories ([CFP franc](/wiki/CFP_franc)) and three Balkan countries, Bosnia and Herzegovina ([Bosnia and Herzegovina convertible mark](/wiki/Bosnia_and_Herzegovina_convertible_mark)), Bulgaria ([Bulgarian lev](/wiki/Bulgarian_lev)) and Macedonia ([Macedonian denar](/wiki/Macedonian_denar)).[[50]](#cite_note-53) On 28 July 2009, São Tomé and Príncipe signed an agreement with Portugal which will eventually tie its currency to the euro.[[51]](#cite_note-54) Additionally, the [Moroccan dirham](/wiki/Moroccan_dirham) is tied to a basket of currencies, including the Euro and the US dollar, with the Euro given the highest weighting.

With the exception of Bosnia, Bulgaria, Macedonia (which had pegged their currencies against the Deutsche Mark) and Cape Verde (formerly pegged to the Portuguese escudo), all of these non-EU countries had a currency peg to the French Franc before pegging their currencies to the euro. Pegging a country's currency to a major currency is regarded as a safety measure, especially for currencies of areas with weak economies, as the euro is seen as a stable currency, prevents runaway inflation and encourages foreign investment due to its stability.

Within the EU several currencies have a peg to the euro, in most instances as a precondition to joining the eurozone. The [Bulgarian lev](/wiki/Bulgarian_lev) was formerly pegged to the Deutsche Mark; one other EU member state has a direct peg due to ERM II: the [Danish krone](/wiki/Danish_krone).

In total, [Template:As of](/wiki/Template:As_of), 182 million people in Africa use a currency pegged to the euro, 27 million people outside the eurozone in Europe, and another 545,000 people on Pacific islands.[[43]](#cite_note-46) Since 2005, stamps issued by the [Sovereign Military Order of Malta](/wiki/Sovereign_Military_Order_of_Malta) have been denominated in euros, although the Order's official currency remains the [Maltese scudo](/wiki/Maltese_scudo).<ref name=smom><http://www.orderofmalta.int/catalogue/stamps/35675/associate-countries/?lang=en> Retrieved 3 October 2011.</ref> The Maltese scudo itself is pegged to the euro and is only recognised as legal tender within the Order.[[52]](#cite_note-55)

## Economics[[edit](/index.php?title=(none)&action=edit&section=14)]

### Optimal currency area[[edit](/index.php?title=(none)&action=edit&section=15)]

[Template:Further](/wiki/Template:Further)

In economics, an optimum currency area, or region (OCA or OCR), is a geographical region in which it would maximise economic efficiency to have the entire region share a single currency. There are two models, both proposed by [Robert Mundell](/wiki/Robert_Mundell): the [stationary expectations model](/wiki/Optimum_currency_area#OCA_with_stationary_expectations) and the [international risk sharing model](/wiki/Optimum_currency_area#OCA_with_international_risk_sharing). Mundell himself advocates the international risk sharing model and thus concludes in favour of the euro.[[53]](#cite_note-56) However, even before the creation of the single currency, there were concerns over diverging economies. Before the [late-2000s recession](/wiki/Late-2000s_recession) the chances of a state leaving the euro, or the chances that the whole zone would collapse, were considered extremely slim.[[54]](#cite_note-57) However the [Greek government-debt crisis](/wiki/Greek_government-debt_crisis) led to former [British Foreign Secretary](/wiki/British_Foreign_Secretary) [Jack Straw](/wiki/Jack_Straw) claiming the eurozone could not last in its current form.[[55]](#cite_note-58) Part of the problem seems to be the rules that were created when the euro was set up. John Lanchester, writing for [*The New Yorker*](/wiki/The_New_Yorker), explains it thus:

The guiding principle of the currency, which opened for business in 1999, were supposed to be a set of rules to limit a country's annual deficit to three per cent of gross domestic product, and the total accumulated debt to sixty per cent of G.D.P. It was a nice idea, but by 2004 the two biggest economies in the euro zone, Germany and France, had broken the rules for three years in a row.[[56]](#cite_note-59)

### Transaction costs and risks[[edit](/index.php?title=(none)&action=edit&section=16)]

[Template:Most traded currencies](/wiki/Template:Most_traded_currencies)

The most obvious benefit of adopting a single currency is to remove the cost of exchanging currency, theoretically allowing businesses and individuals to consummate previously unprofitable trades. For consumers, 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](/wiki/Credit_card), [debit cards](/wiki/Debit_card) and [cash machine](/wiki/Cash_machine) withdrawals).

The absence of distinct currencies also theoretically removes [exchange rate](/wiki/Exchange_rate) risks, although the imposition of transfer restrictions in [2012–13 Cypriot financial crisis](/wiki/2012–13_Cypriot_financial_crisis) means that the situation is not quite so simple. The risk of unanticipated exchange rate movement has always added an additional risk or uncertainty for companies or individuals that invest or trade outside their own currency zones. Companies that [hedge](/wiki/Hedge_(finance)) against this risk will no longer need to shoulder this additional cost. This is particularly important for countries whose currencies had traditionally fluctuated a great deal, particularly the Mediterranean nations[Template:Citation needed](/wiki/Template:Citation_needed).

Financial markets on the continent are expected to be far more [liquid](/wiki/Market_liquidity) 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. However, although transaction costs were reduced, some studies have shown that [risk aversion](/wiki/Risk_aversion) has increased during the last 40 years in the Eurozone.[[57]](#cite_note-60)

### Price parity[[edit](/index.php?title=(none)&action=edit&section=17)]

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](/wiki/Law_of_one_price). Differences in prices can trigger [arbitrage](/wiki/Arbitrage), i.e., [speculative](/wiki/Speculation) trade in a [commodity](/wiki/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 eurozone markets.[[58]](#cite_note-61)

### Macroeconomic stability[[edit](/index.php?title=(none)&action=edit&section=18)]

Low levels of inflation are the hallmark of stable and modern economies. Because a high level of inflation acts as a tax ([seigniorage](/wiki/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](/wiki/Bundesbank) in Germany; as the European Central Bank is modelled on the Bundesbank,[[59]](#cite_note-62) it is independent of the pressures of national governments and has a mandate to keep inflation low. Member countries that join the euro hope to enjoy the macroeconomic stability associated with low levels of inflation. The ECB (unlike the [Federal Reserve](/wiki/Federal_Reserve_System) in the United States of America) does not have a second objective to sustain growth and employment.

Many national and corporate [bonds](/wiki/Bond_(finance)) denominated in euro are significantly more liquid and have lower interest rates than was historically the case when denominated in national currencies. While increased liquidity may lower the [nominal interest rate](/wiki/Nominal_interest_rate) on the bond, denominating 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.

Unfortunately, there is also a cost in structurally keeping inflation lower than in the United States, UK, and China. The result is that seen from those countries, the euro has become expensive, making European products increasingly expensive for its largest importers. Hence export from the euro zone becomes more difficult. This is one of the main reasons why economic growth inside the euro zone now lags behind growth in other large economies.[Template:Citation needed](/wiki/Template:Citation_needed) This effect is strongest in European countries with a weak economy.

In general, those in Europe who own large amounts of euros are served by high stability and low inflation. Those who now need to earn euros, including those countries who need to pay interest on large debts, are likely better served with a slightly less strong euro leading to more export. Because with a lower euro, investors would see better chances for (companies in) southern European countries to grow themselves out of the crisis. As a result, investing there would become less risky, and that would push interest rates for southern countries more in line with the European average.[Template:Citation needed](/wiki/Template:Citation_needed)

The contradiction here is that high macroeconomic stability in the form of ongoing historically low inflation over time leads to economic problems, creating higher interest rates and political and economic instability for the weaker partners.[Template:Citation needed](/wiki/Template:Citation_needed)

#### Trade[[edit](/index.php?title=(none)&action=edit&section=19)]

A 2009 consensus from the studies of the introduction of the euro concluded that it has increased trade within the eurozone by 5% to 10%,[[60]](#cite_note-63) although one study suggested an increase of only 3%[[61]](#cite_note-64) while another estimated 9 to 14%.[[62]](#cite_note-65) However, a [meta-analysis](/wiki/Meta-analysis) of all available studies suggests that the prevalence of positive estimates is caused by [publication bias](/wiki/Publication_bias) and that the underlying effect may be negligible.[[63]](#cite_note-66) Furthermore, studies accounting for [time trend](/wiki/Time_trend_analysis) reflecting general cohesion policies in Europe that started before, and continue after implementing the common currency find no effect on trade.[[64]](#cite_note-67)[[65]](#cite_note-68) These results suggest that other policies aimed at European integration might be the source of observed increase in trade.

#### Investment[[edit](/index.php?title=(none)&action=edit&section=20)]

Physical investment seems to have increased by 5% in the eurozone due to the introduction.[[66]](#cite_note-69) Regarding foreign direct investment, a study found that the intra-eurozone FDI stocks have increased by about 20% during the first four years of the EMU.[[67]](#cite_note-70) Concerning the effect on corporate investment, there is evidence that the introduction of the euro has resulted in an increase in investment rates and that it has made it easier for firms to access financing in Europe. The euro has most specifically stimulated investment in companies that come from countries that previously had weak currencies. A study found that the introduction of the euro accounts for 22% of the investment rate after 1998 in countries that previously had a weak currency.[[68]](#cite_note-71)

#### Inflation[[edit](/index.php?title=(none)&action=edit&section=21)]

The introduction of the euro has led to extensive discussion about its possible effect on inflation. In the short term, there was a widespread impression in the population of the eurozone that the introduction of the euro had led to an increase in prices, but this impression was not confirmed by general indices of inflation and other studies.[[69]](#cite_note-72)[[70]](#cite_note-73) A study of this paradox found that this was due to an asymmetric effect of the introduction of the euro on prices: while it had no effect on most goods, it had an effect on cheap goods which have seen their price round up after the introduction of the euro. The study found that consumers based their beliefs on inflation of those cheap goods which are frequently purchased.[[71]](#cite_note-74) It has also been suggested that the jump in small prices may be because prior to the introduction, retailers made fewer upward adjustments and waited for the introduction of the euro to do so.[[72]](#cite_note-75)

#### Exchange rate risk[[edit](/index.php?title=(none)&action=edit&section=22)]

One of the advantages of the adoption of a common currency is the reduction of the risk associated with changes in currency exchange rates. It has been found that the introduction of the euro created "significant reductions in market risk exposures for nonfinancial firms both in and outside of Europe".[[73]](#cite_note-76) These reductions in market risk "were concentrated in firms domiciled in the eurozone and in non-Euro firms with a high fraction of foreign sales or assets in Europe".

#### Financial integration[[edit](/index.php?title=(none)&action=edit&section=23)]

The introduction of the euro seems to have had a strong effect on European financial integration. According to a study on this question, it has "significantly reshaped the European financial system, especially with respect to the securities markets [...] However, the real and policy barriers to integration in the retail and corporate banking sectors remain significant, even if the wholesale end of banking has been largely integrated."[[74]](#cite_note-77) Specifically, the euro has significantly decreased the cost of trade in bonds, equity, and banking assets within the eurozone.[[75]](#cite_note-78) On a global level, there is evidence that the introduction of the euro has led to an integration in terms of investment in bond portfolios, with eurozone countries lending and borrowing more between each other than with other countries.[[76]](#cite_note-79)

#### Effect on interest rates[[edit](/index.php?title=(none)&action=edit&section=24)]

[thumb|300px|Long-term interest rates of Euro countries, 1993–2016](/wiki/File:Long-term_interest_rates_of_eurozone_countries_since_1993.png)

As of January 2014, and since the introduction of the euro, interest rates of most members countries (particularly those with a weak currency), have decreased. The countries whose interest rates fell most as a result of the adoption of the euro are Greece, Ireland, Portugal, Spain, and Italy. These very countries have had the most serious sovereign financing problems.

The effect of declining interest rates, combined with excess liquidity continually provided by the ECB, made it easier for banks within the countries in which interest rates fell the most, and their linked sovereigns, to borrow significant amounts (above the 3% of GDP budget deficit imposed on the eurozone initially) and significantly inflate their public and private debt levels.[[77]](#cite_note-80) Following the [late-2000s financial crisis](/wiki/Late-2000s_financial_crisis), governments in these countries found it necessary to bail out or nationalise their privately held banks to prevent systemic failure of the banking system when underlying hard or financial asset values were found to be grossly inflated and sometimes so near worthless there was no liquid market for them.[[78]](#cite_note-81) This further increased the already high levels of public debt to a level the markets began to consider unsustainable, via increasing government bond interest rates, producing the ongoing European sovereign-debt crisis.

#### Price convergence[[edit](/index.php?title=(none)&action=edit&section=25)]

The evidence on the convergence of prices in the eurozone with the introduction of the euro is mixed. Several studies failed to find any evidence of convergence following the introduction of the euro after a phase of convergence in the early 1990s.[[79]](#cite_note-82)[[80]](#cite_note-83) Other studies have found evidence of price convergence,[[81]](#cite_note-84)[[82]](#cite_note-85) in particular for cars.[[83]](#cite_note-86) A possible reason for the divergence between the different studies is that the processes of convergence may not have been linear, slowing down substantially between 2000 and 2003, and resurfacing after 2003 as suggested by a recent study (2009).[[84]](#cite_note-87)

#### Tourism[[edit](/index.php?title=(none)&action=edit&section=26)]

A study suggests that the introduction of the euro has had a positive effect on the amount of tourist travel within the EMU, with an increase of 6.5%.[[85]](#cite_note-88)

## Exchange rates[[edit](/index.php?title=(none)&action=edit&section=27)]

[thumb|300px|Euro-US Dollar exchange rate, starting from 2002. More recent information is available](/wiki/File:EUR-USD.PNG) [here](http://www.ecb.europa.eu/stats/exchange/eurofxref/html/eurofxref-graph-usd.en.html).

### Flexible exchange rates[[edit](/index.php?title=(none)&action=edit&section=28)]

The ECB targets [interest rates](/wiki/Interest_rate) rather than [exchange rates](/wiki/Exchange_rate) and in general does not intervene on the foreign exchange rate markets. This is because of the implications of the [Mundell–Fleming model](/wiki/Mundell–Fleming_model), which implies a central bank cannot (without [capital controls](/wiki/Capital_control)) maintain interest rate and exchange rate targets simultaneously, because increasing the [money supply](/wiki/Money_supply) results in a [depreciation](/wiki/Depreciation) of the currency. In the years following the [Single European Act](/wiki/Single_European_Act), the EU has liberalised its capital markets, and as the ECB has chosen monetary autonomy, the exchange-rate regime of the euro is flexible, or [floating](/wiki/Floating_exchange_rate). The result of the ECB maintaining historically low interest rates and restricting money supply has been that over the last decade the euro has become expensive relative to the currency of Europe's main trading partners. However, in 2010, the euro started on a sharp decline. Starting at U.S$1.60 in 2008, and dropping to [US$](/wiki/United_States_dollar)1.04 in 2015. The [Canadian Dollar](/wiki/Canadian_Dollar) despite seeing a decline in value against the [USD](/wiki/USD), has seen a growth in [EURO](/wiki/EURO) -> [CAD].

### Against other major currencies[[edit](/index.php?title=(none)&action=edit&section=29)]

The euro is the second-most widely held [reserve currency](/wiki/Reserve_currency) on earth after the U.S. dollar. After its introduction on 4 January 1999 its exchange rate against the other major currencies fell reaching its lowest exchange rates in 2000 (25 October vs the U.S. dollar, 26 October vs Japanese Yen, 3 May vs Pound Sterling). Afterwards it regained and its exchange rate reached its historical highest point in 2008 (15 July vs U.S. dollar, 23 July vs Japanese Yen, 29 December vs Pound Sterling). With the advent of the [global financial crisis](/wiki/Late-2000s_financial_crisis) the euro initially fell, only to regain later. Despite pressure due to the [European sovereign-debt crisis](/wiki/European_sovereign-debt_crisis) the euro remained stable.[[86]](#cite_note-89) In November 2011 the euro's exchange rate index – measured against currencies of the bloc's major trading partners – was trading almost two percent higher on the year, approximately at the same level as it was before the crisis kicked off in 2007.[[87]](#cite_note-90)\*Current and historical exchange rates against 29 other currencies (European Central Bank)[[88]](#cite_note-91)\*Current dollar/euro exchange rates (BBC)[[89]](#cite_note-92)\*Historical exchange rate from 1971 until now[[90]](#cite_note-93)[Template:Exchange Rate](/wiki/Template:Exchange_Rate)

## Linguistic issues[[edit](/index.php?title=(none)&action=edit&section=30)]

[Template:Main](/wiki/Template:Main)

[thumb|](/wiki/File:EUR_5_obverse_(2013_issue).png)[5 euro note](/wiki/5_euro_note) from the new Europa series written in [Latin](/wiki/Latin_alphabet) (EURO) and [Greek](/wiki/Greek_alphabet) (EYPΩ) alphabets, but also in the [Cyrillic](/wiki/Bulgarian_alphabet) (EBPO) alphabet, as a result of [Bulgaria](/wiki/Bulgaria) joining the European Union in 2007.

The formal titles of the currency are *euro* for the major unit and *cent* for the minor (one hundredth) unit and for official use in most eurozone languages; according to the ECB, all languages should use the same spelling for the nominative singular.[[91]](#cite_note-94) This may contradict normal rules for word formation in some languages, e.g., those where there is no *eu* [diphthong](/wiki/Diphthong). Bulgaria has negotiated an exception; *euro* in the Bulgarian Cyrillic alphabet is spelled as eвро (*evro*) and not eуро (*euro*) in all official documents.[[92]](#cite_note-95) In the Greek script the term ευρώ (evró) is used; the Greek "cent" coins are denominated in λεπτό/ά (leptó/á). Official practice for English-language EU legislation is to use the words euro and cent as both singular and plural,[[93]](#cite_note-96) although the European Commission's [Directorate-General for Translation](/wiki/Directorate-General_for_Translation_(European_Commission)) states that the plural forms *euros* and *cents* should be used in English.[[94]](#cite_note-97)

## Criticism[[edit](/index.php?title=(none)&action=edit&section=31)]

### Unemployment[[edit](/index.php?title=(none)&action=edit&section=32)]

Nobel memorial prize-winning economist [James Meade](/wiki/James_Meade) thought that a central bank should not make price stability the objective of aggregate demand management. When prices are likely to be pushed up due to increase of indirect taxes or adverse terms-of-trade shocks, the surge in prices must be cancelled out by decline in domestic money wage costs, as long as such a price stability policy is adopted.<ref name=meade1978ngdp>J. Meade, The Economic Journal, vol 88, No 351, (1978)</ref> There would be unemployment in the all industrial sectors under a price stabilisation policy, suggesting that in the short run the elasticity of demand for labour is low.

Under the ECB's price stabilisation policy, many people in the eurozone have difficulty finding a job. The unemployment rate of Spain is around 25 percent in 2014, and an economic forecast says that the figure will not decrease below 20 percent until 2017.[[95]](#cite_note-98) ELSTAT, the statistics agency of Greece, shows that Greece's unemployment rate was 27 percent in June 2014.[[96]](#cite_note-99) OECD forecasts that Greece's unemployment rate will remain around 27 percent until 2016. Due to long-term unemployment, skills of jobless persons have been depreciated and their motivation of finding jobs has been lost, which causes the country's level of unemployment to remain high.[[97]](#cite_note-100) [Template:#invoke:Chart](/wiki/Template:#invoke:Chart)

Spain's youth unemployment rate is 53.8 percent in July 2014, and this is the highest figure in the eurozone.<ref name=ffi2014aug29U>[Eurozone unemployment unchanged at 11.5% in July](http://www.finfacts.ie/irishfinancenews/article_1028130.shtml) Finfacts Ireland, EU economy, 29 Aug 2014</ref> This figure is comparable to 53.1 percent of the Greek youth unemployment in May 2014.

In July 2014, the averaged unemployment rate of the eurozone is 11.7 percent, slight decrease from 11.9 percent in 2013.[[98]](#cite_note-101)[[99]](#cite_note-102) Likewise, [Paul Krugman](/wiki/Paul_Krugman) argued that the existence of a single shared currency across the entire eurozone, in combination with tight money policies of the ECB (motivated by insistence of Germany on low inflation), placed much of the Southern Europe in a state of permanent high unemployment. According to Krugman, during the period between the creation of the euro and the 2008 financial crisis, countries of Southern Europe experienced abnormally high rates of wage growth due to high influx of investor money. Between 2000 and 2008, unit labor costs actually declined slightly in Germany, but rose by 30% in Spain and Greece.[[100]](#cite_note-103) This created an imbalance that put these countries at competitive disadvantage relative to Northern Europe. Returning to full employment at this point requires that the labor costs gap is somehow cancelled. If Spain and Greece had their own currencies, this would have easily happened through exchange rate adjustment. Since they don't, it can either happen through a decrease in nominal wages in Spain and Greece, also known as "internal devaluation", (an extremely difficult and slow process, since nominal wages, in general, exhibit [downward rigidity](/wiki/Nominal_rigidity)), or through an equal increase in nominal wages (i.e. inflation) in Northern Europe, which does not happen because of active resistance from Germany.[[101]](#cite_note-104)[[102]](#cite_note-105)

## See also[[edit](/index.php?title=(none)&action=edit&section=33)]

[Template:Portal](/wiki/Template:Portal)

* [Currency union](/wiki/Currency_union)
* [Hungary and the euro](/wiki/Hungary_and_the_euro)
* [List of currencies replaced by the euro](/wiki/Category:Currencies_replaced_by_the_euro)
* [Captain Euro](/wiki/Captain_Euro)

## Notes[[edit](/index.php?title=(none)&action=edit&section=34)]

[Template:Reflist](/wiki/Template:Reflist)

## References[[edit](/index.php?title=(none)&action=edit&section=35)]

[Template:Reflist](/wiki/Template:Reflist)

## Further reading[[edit](/index.php?title=(none)&action=edit&section=36)]

* [Template:Cite journal](/wiki/Template:Cite_journal)
* [Template:Cite journal](/wiki/Template:Cite_journal)
* [Template:Cite book](/wiki/Template:Cite_book)
* [Template:Cite book](/wiki/Template:Cite_book)
* [Template:Cite web](/wiki/Template:Cite_web)

[Template:Refend](/wiki/Template:Refend)

* Simonazzi, A. and [Vianello, F.](/wiki/Fernando_Vianello) [2001], “Financial Liberalization, the European Single Currency and the Problem of Unemployment”, in: Franzini, R. and Pizzuti, R.F. (eds.), *Globalization, Institutions and Social Cohesion*, Springer Verlag, Heidelberg, ISBN 3-540-67741-0.

## External links[[edit](/index.php?title=(none)&action=edit&section=37)]

[Template:Sister project links](/wiki/Template:Sister_project_links)

* [Eurozone official portal](http://www.eurozone.europa.eu)
* [The euro](http://ec.europa.eu/economy_finance/euro/index_en.htm) – [Europa](/wiki/Europa_(web_portal))
* [European Central Bank - Euro Exchange Rates](http://exchangerate-euro.com/)
* [European Central Bank](http://www.ecb.europa.eu)

[Template:Navboxes](/wiki/Template:Navboxes) [Template:Authority control](/wiki/Template:Authority_control)

[Template:Good article](/wiki/Template:Good_article)

[Category:Euro](/wiki/Category:Euro) [Category:1999 in economics](/wiki/Category:1999_in_economics) [Category:1999 introductions](/wiki/Category:1999_introductions) [Category:2002 introductions](/wiki/Category:2002_introductions) [Category:Currencies of the Commonwealth of Nations](/wiki/Category:Currencies_of_the_Commonwealth_of_Nations) [Category:Currencies of North America](/wiki/Category:Currencies_of_North_America) [Category:Currencies of South America](/wiki/Category:Currencies_of_South_America) [Category:Currencies of the Caribbean](/wiki/Category:Currencies_of_the_Caribbean) [Category:Currencies of Zimbabwe](/wiki/Category:Currencies_of_Zimbabwe) [Category:Currency unions](/wiki/Category:Currency_unions) [Category:Economy of the European Union](/wiki/Category:Economy_of_the_European_Union) [Category:Eurozone](/wiki/Category:Eurozone) [Category:Symbols of the European Union](/wiki/Category:Symbols_of_the_European_Union) [Category:Warrants issued in Hong Kong Stock Exchange](/wiki/Category:Warrants_issued_in_Hong_Kong_Stock_Exchange)