## The euro: in our pockets for $\mathbf{2 0}$ years

In 2022, the euro is celebrating the 20th anniversary of its launch in the form of banknotes and coins. The transition to a common currency was a milestone in European integration. The euro banknotes and coins have changed dramatically over the past two decades. The spectacular growth in the number of banknotes in circulation has made it the world's second-largest currency in circulation, and the demand for euro banknotes continues unabated. In France alone, the stock of banknotes in circulation has increased almost sixfold since 2002. The uses of this currency have also evolved. Its role as a payment instrument has diminished, mainly replaced by bank card payments. Euro banknotes are increasingly being held for other reasons, such as a store of value or demand from outside the euro area, reflecting the confidence in the single currency.

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20 yems
of euro banknotes and coins
2nd
global currency
in circulation, in the form of banknotes,
in volume and value,
behind the US dollar
and in front of the yen
7
denominations
of euro banknotes replaced
the 75 denominations of national banknotes
in 2002
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[^1]Note: Stock of banknotes in circulation.

EUROSYSTÈME

On 1 January 2002, 12 EU countries' gave up their national currencies and adopted a single currency: the euro. The 7 denominations of the euro replaced the 75 denominations previously used by 313 million Europeans. This constituted the largest currency changeover in modern history, but was also an unprecedented logistical challenge that proved to be a great success. Euro banknotes and coins are one of the most tangible symbols of European integration for the 343 million inhabitants of the euro area, which now comprises 19 countries. More than three-quarters (79\%) of Europeans are now in favour of the single currency. ${ }^{2}$ Despite the digitalisation of payment instruments, euro cash is still very popular in France, Europe and worldwide. With almost 29 billion banknotes in circulation ${ }^{3}$ totalling EUR 1,600 billion, the euro is the second most widely-used currency in the world after the US dollar.

## 1 The changeover to the euro: a historic challenge

## From the idea of the single currency to the creation of euro banknotes

In 1970, the Werner Report laid the foundations for the practical transition to Economic and Monetary Union (EMU) with a common currency at its heart. ${ }^{4}$ However, it was not until 1992, with the Maastricht Treaty, that the EMU process was set in motion with the "eventual adoption" of a single currency, the name of which, "euro", was decided by the European Council in 1995. The adoption of the euro then took place in two stages:

- First, as of 1 January 1999, the euro became the legal tender for the first 11 members of the euro area. Greece joined this group in 2001 and thus participated in the changeover on 1 January 2002 like the other eleven member countries. In accounting terms, national currencies officially became subdivisions of the euro at a fixed exchange rate and based on the double accounting principle. In France, 1 euro is worth 6.55957 French francs.
- Second, as of 1 January 2002, the cash euro was made available to the general public in seven banknote denominations and eight coin denominations.

From a practical point of view, the adoption of the euro greatly simplified trade within the euro area and considerably reduced the financial and environmental costs of the European cash industry. Thanks to pooled research and development expertise, it was possible to design highly innovative and secure banknotes. This has reduced the risk of counterfeiting and has ensured the reliability of cash as a means of payment.

## From the French franc to the euro

In many ways, the introduction of the euro and the withdrawal of national currencies from circulation was a huge logistical challenge. In December 2001, more than one billion franc banknotes were in circulation, which could no longer be used for payment as of 17 February 2002. This deliberately short deadline encouraged French citizens to quickly exchange their francs for euro. In order to meet the massive exchange needs, as well as to build up a logistical stock, 2.5 billion euro banknotes were produced by the Eurosystem for France, while in 2002 more than one billion banknotes (worth EUR 36 billion) were issued by the Banque de France. Euro banknotes were made available very quickly. On 3 January 2002, 96\% of ATMs in the 12 euro area countries only dispensed euro banknotes.

Although franc banknotes could no longer be used for transactions shortly after the launch of the euro, it was still possible to exchange them at face value at Banque de France counters up to 17 February 2012, which is a short period of time compared to other countries. In the euro area, only Italy imposed a shorter exchange period, while Germany did not establish a time limit for exchanging marks. On 17 February 2012, there were still 55 million banknotes from the last series of francs, 115 million including the previous series, which had not been exchanged for euro banknotes (worth EUR 1.9 billion). As of this date, the face value of franc

[^2]banknotes still held was written off. Nevertheless, this value did not disappear. Following the end of this exchange period, an accounting and financial adjustment exercise was carried out for these banknotes and coins. The difference between the value of the banknotes issued and the sum collected after franc demonetisation, i.e. the balance of banknotes issued but not presented for exchange, constituted a debt owed by the Banque de France to the banknote holders. In order to offset this debt, in accordance with the law, the Banque de France reimbursed the Treasury for the value of this balance. ${ }^{5}$ This payment was therefore an inflow of resources for the public finances.

## 2 A success for the general public

## A currency that has gained the trust of its users

In France, the under-20s (16 million French citizens), i.e. almost a quarter of the population, have always known the euro as their currency. Yet, in January 2022, $27 \%$ of French people, in certain circumstances, continued to think in francs. This is still a high proportion, although it has fallen sharply in ten years from $43 \%$ in December $2011 .{ }^{6}$

The European Commission's Eurobarometer survey in autumn 2021 showed that $66 \%$ of French citizens consider the euro to be "a good thing" for the country, which is the same percentage as in 2002 (see Chart 1). This level of support has fluctuated considerably over the last twenty years: from 2004 onwards, it fell to a low of $47 \%$ in 2007, then recovered, albeit erratically from 2010 onwards, after the subprime crisis. Since 2018, support has been growing steadily, with $89 \%$ of French people believing that the euro has made trade between different European countries easier and $87 \%$ believing that it has made it simpler to compare prices and purchases in different European countries.

Euro banknotes and coins are also the means of payment that the French trust the most, ahead of bank cards with codes. Cash is also considered the payment instrument


Source: Flash Eurobarometer 501 (European Commission).
with the lowest risk of fraud (29\%), well below that of bank card payments ( $37 \%$ ). ${ }^{7}$ In the euro area, for every one million banknotes in circulation, the number of counterfeit banknotes detected over one year fell to 12 in 2021, which represents a very sharp decline over the past ten years (in 2014 and 2015, the number was around 50). Lastly, banknotes and coins are an inclusive means of payment, i.e. accessible to all.

## The euro faced with changing payment habits

Net issuance, i.e. the stock of banknotes in circulation, has risen sharply over the past twenty years. Conversely, inflows and oufflows of banknotes at Banque de France counters, as well as in the cash industry as a whole, have been declining for the past ten years (see Chart 2 below). In the years following the introduction of the euro, these flows increased continuously until peaking between 2008 and 2012 at around 7.5 billion banknotes (or EUR 180 billion). This decline in flows then started to accelerate each year, with the health crisis of 2020 intensifying this process.

Overall, the decline in these flows linked to the drop in the use of cash as a means of payment can be explained by the increasing dematerialisation of the payment instruments used by consumers in France. This stems

[^3]

Source: Banque de France.
both from changes in payment behaviour and the effects of rapid innovation in the sector. In 2020, two factors combined explain the acceleration in this trend. First, habits changed radically as a result of the health crisis. Second, households reduced their spending because
of financial difficulties and uncertainty, as well as the administrative closure of many businesses. The apparent stabilisation of flows observed in 2021 and expected for 2022 is misleading: it only reflects the marked rebound in household spending and is unlikely to reverse the general downward trend.

## The cash paradox: rising demand despite declining use in transactions

The growth in net issuance over the past twenty years (see Chart 3) on the one hand and the decline in banknote flows since 2012 on the other - with these curves crossing in 2018-19 and their rapid divergence, due to much higher issuance than active circulation flows - reflect a phenomenon known as the "cash paradox".

The situation seems paradoxical because net issuance, which indicates the overall demand for cash, is increasing while annual flows, which mainly reflect the use of cash as an payment instrument, are decreasing. The flows
b) France, in value

d) Euro area, in value


## Source: Banque de France.

Note: Between December 2002 and December 2021, net banknote issuance in France increased by a factor of 5.8.
at Banque de France counters stood at around 4 billion banknotes in 2021, while net issuance amounted to 7 billion banknotes. Why is the public demanding more and more banknotes when their use as a payment instrument is clearly on the decline?

This paradox can be explained if we consider that the reason for holding cash is not only related to the use of money as a means of payment. In this case, the increase in demand may reflect the strengthening of other reasons for holding cash. A recent paper by the European Central Bank - ECB (Zamora-Pérez, 2021) analyses the different reasons for acquiring and holding banknotes in order to estimate their respective shares in the stock of currency in circulation. It appears that, just before the health crisis, out of every 100 euro "in circulation" inside or outside the euro area, only about 20 euro were used for day-to-day transactions within the euro area. The remainder was divided equally between its function as a store of value within the euro area and non-euro area holdings, i.e. a net "export" of banknotes which could also be used as a store of value (see Chart 4).

The increase in non-euro area banknote holdings has been confirmed over the past two decades. This phenomenon contributes to the consolidation of the international role of the euro and testifies to its success as a global currency. The euro is clearly the second global currency, after the dollar and before the yen, in terms of the number of banknotes in circulation, both in

C4 Estimated distribution of euro banknotes in circulation, in value (\%)


Source: Zamora-Pérez (2021).

C5 Ranking of the three main currencies


Sources: European Central Bank, Federal Reserve and Bank of Japan. Note: Data to end-2021.
a) Data estimated by the Banque de France.
volume or value terms (see Chart 5). This was not a given in the 2000s, but it gradually became a reality in the 2010s. A comparison between net issuance in francs and in euro in France since 1980 shows a clear change in trends (see Chart 6). The growth in the number of euro banknotes in circulation has been much greater that of the franc and has been steadily increasing over the last twenty years. This trend reflects the paradigm shift in the use of euro cash in France and the rest of the euro area. These developments and, in particular, the decline in transactional use are also a challenge for the cash industry, which must adapt to this new context. To this end, the Banque de France is working closely with industry players within the framework of a domestic strategy, the National Cash Management Policy (NCMP),

C6 Net banknote issuance in France (in millions of banknotes)


Source: Banque de France.
Note: Stock of banknotes in circulation.
which is based on five pillars: acceptance of cash, access to cash, quality of cash, robustness of the cash industry and its efficiency (economic and environmental).

## 3 Twenty years on, what's next? Let's picture the euro of the future

## A new look for banknotes

Since the launch of the euro in 2002, the euro banknotes have featured bridges, arches and windows representing "European architectural periods and styles", illustrating the links between countries and the cohesion of our monetary area. The selection of the theme of the banknote is a very important symbolic issue and the decision must be taken unanimously, with a choice that meets the criteria of representativeness and aesthetics. As of 2013, the banknotes gradually evolved towards the second "Europa" series in order to modernise their design and increase their security, without changing their theme.

To mark the twentieth anniversary of the euro, the ECB has been working on a new series of banknotes with an original theme. A working group of 19 experts representing each euro area Member State has been tasked with submitting proposals for new themes to the Governing Council and the general public. The final decision will be made in 2024 following a selection process that will collect the views of euro area citizens through a number of surveys.

The coins have already been redesigned. In the framework of the celebration of the 20th anniversary of the launch of the cash euro, the Monnaie de Paris

C7 New 2 euro coin in France


Credit: Monnaie de Paris.
has made public a new national side for the $€ 1$ coin for numismatic purposes, and the $€ 2$ coin, which can now be used in France (see Chart 7).

## What will the euro look like in ten years' time?

The Governing Council launched in July 2021 a two-year investigation phase of a digital euro project aimed at the general public. The aim of the digital euro would be to preserve the role of the central bank currency for payments in a context of increasing digitalisation of the economy. It could be used to pay for everyday purchases at retailers, both in shops and online, as well as for transactions between individuals. This new form of central bank money would be guaranteed by the Eurosystem in the same way as banknotes. The investigation phase aims to define the practical details of the implementation of a digital euro, from issuance to distribution. The role of intermediaries, primarily banks, will be a key element in the deployment of this new form of the euro to the general public. On the basis of the findings of the investigation phase, the Governing Council will decide by the end of 2023 whether to launch the development phase of the digital euro. If this digital euro were to be put into circulation, it would exist alongside the physical euro and would be complementary in terms of its uses.

The banknotes and coins will remain the symbol of monetary union and, more generally, of European unity. They are the payment instrument of last resort, as cash is highly resilient in situations of severe crisis (large-scale power outages, disruption of telecommunication systems and the Internet, cyber attacks, natural disasters, etc.). In addition, several hundred thousand French citizens who do not have a bank account or access to a bank card use cash exclusively for their everyday transactions, making cash an essential instrument for financial and social inclusion.

However, an analysis of trends in cash over the last twenty years shows that it is evolving. Banknotes and coins are being used less and less frequently to settle transactions, being replaced by new cashless and digital payment instruments. Yet hundreds of millions of people around the world continue to make extensive use of the euro, particularly as a store of value, as evidenced by the continuing rise in demand for euros. Euro banknotes and coins still have a bright future ahead of them.
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[^0]:    Pascale Gardiennet, Julien Giner, Raymond de Pastor, Hugo de Tarlé

[^1]:    Source: Banque de France.

[^2]:    1 Austria, Belgium, Finland, France, Germany, Greece, Ireland, Italy, Luxembourg, Netherlands, Portugal and Spain.
    2 "The euro area", Flash Eurobarometer 501, Ipsos European Public Affairs, December 2021.
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    4 Report to the Council and the Commission on the realisation by stages of Economic and Monetary Union in the Community, "Werner Report", 8 October 1970.

[^3]:    5 In accordance with Article 141-5 of the French Monetary and Financial Code: "The Banque de France shall pay the State the balance of franc banknotes withdrawn from circulation and not presented at its counters".
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