

# How is money created?

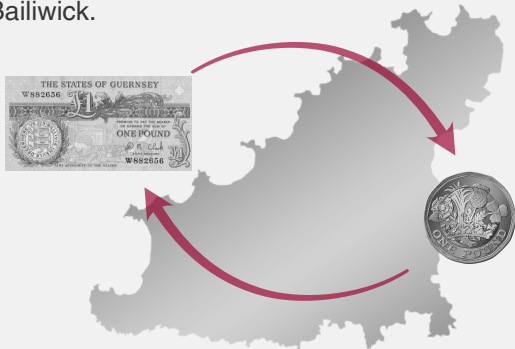
## THE ESSENTIALS

For economic agents (households, companies and governments), money exists in two forms:

**Coins and notes:** this is what is called **fiduciary money**.

**Bank account entries:** this is what is known as **scriptural money**, which today represents approximately 96% of the money in circulation in the UK.

Fiduciary money is issued by the central bank that prints the bank notes. In the UK, it is the Bank of England which prints the pound sterling. Coins are a special case because they are issued by the Royal Mint. The Bailiwick of Guernsey adopted the sterling currency in 1921, and issues its own banknotes and coins, which hold the same value as the British pound sterling. Guernsey pounds and coins are legal tender only within the Bailiwick, and therefore they are generally not accepted in the UK. That said, British notes and coins circulate freely within the Bailiwick.



Scriptural money is created by commercial banks, when economic agents (e.g. households and businesses) borrow to finance their activities. Thus, when a commercial bank grants a loan to an individual or a company, the amount of this credit is recorded in the borrower's bank account; money is thus created (see the simplified accounting scheme diagram).

This is why it is said that **credits make deposits**. The borrower can then convert this amount into fiat money, by withdrawing cash (coins and notes), or use it scripturally using means of payment such as cheques, payment cards or transfers, for example.

Thereafter, the money created by the commercial banks continues to circulate between the various economic agents.

The amount of money in circulation in a country or an economic area is called the **money supply**. It corresponds to all the securities held by economic agents and likely to be immediately converted into cash or that can be instantly used as means of payment.

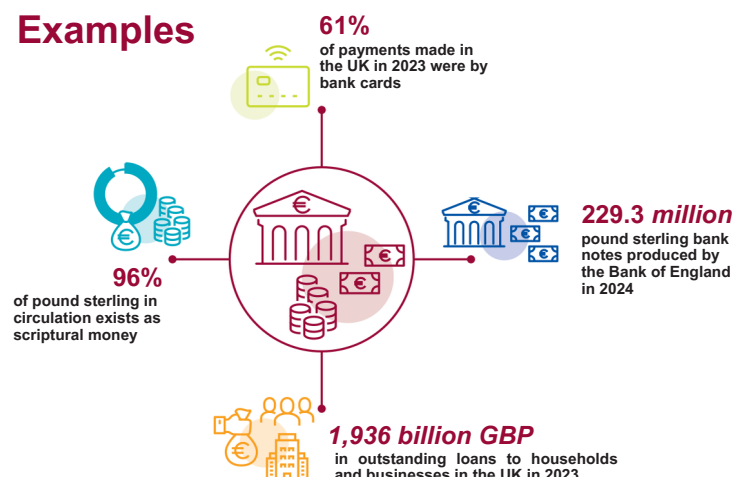
### Which role does the central bank play in this process?

It manufactures **fiat** money and has a monopoly on the issuance of this money, which alone is legal tender. In respect of pound sterling, banknotes are manufactured by the Bank of England and coins by the Royal Mint.

In addition, monetary policy and banking regulation influence the creation of scriptural money by commercial banks. As part of its objective of price stability, the central bank guides the process of money creation by commercial banks by **controlling short-term interest rates**, in particular through the setting of its **key rates**.

By lowering or increasing key interest rates, it influences the rates at which banks lend to businesses and households, which affects the supply and demand of credit and, consequently, the level of money creation. If rates are high, the demand for credit is reduced and therefore the creation of money by banks is limited.

## Examples



## Understanding

### The theoretical debate on money creation

The fractional reserve theory was supported by many economists until the 1970s. According to this theory, banks are only required to hold a fraction of deposits available for withdrawal, whilst using the remainder to grant loans or to invest. In other words, deposits always precede credits.

Whilst this model may have been used by some banks in the past, that is no longer the case. Instead, today, it is now accepted that **'loans make deposits.'** It is the banks themselves that create their own capital, by issuing loans and destroying bank liabilities as loans are repaid. The expression **'credits make deposits'** illustrates the fact that by a simple set of entries, a credit immediately becomes a deposit, and this accounting entry inflates the money in circulation within the economy.

Any credit granted by the banking system is equivalent to **money creation**. This is true when the deposit generated by a loan remains on deposit on the liabilities side of the bank's balance sheet, for example if the borrowing customer's repaid funds are then paid into the account of a customer of the same bank (i.e. without any new cash flow needs for the bank).

This is also true when the deposit generated by a loan leaves the liabilities of the bank's balance sheet - for example, when the borrowing customer's repaid funds are then paid into the account of a customer of another bank (generating a need for cash, and therefore refinancing for the lending bank).

It is the **economic agents' need for financing**, and therefore demand for credit, which instigates this money creation.



### However, money creation is limited

Commercial banks cannot grant credit and therefore create money in an unlimited way.

There are two types of limits in respect of money creation. On the one hand, the objective to maintain price stability leads the central bank, within the **monetary policy** framework, to indirectly regulate the quantity of money in circulation in the economy by modifying the quantity of refinancing granted to the banking sector.

On the other hand, **banking regulations** set prudential rules, for example:

- Commercial banks must hold a **minimum amount (reserve requirements)** in their central bank account, proportional to the amount of customer deposits they hold



- The amount of the banks' **own funds** (capital, reserves, etc.) must be **proportional to the loans granted**. Money creation through credit is therefore accompanied by an increase in the capital needs of banks; and

- They must have appropriate **risk assessment** procedures in place to **assess borrowers'** ability to repay and thus limit the default risk.

### Unconventional monetary policies

#### Quantitative easing and quantitative tightening

**Quantitative easing** involves the intervention of a central bank in a massive, widespread and prolonged manner within the financial markets, by buying assets from investors, including commercial banks in order to stimulate the economy.

By making these purchases, the central bank creates money with which it buys securities.



Following the 2008 crisis, and in order to maintain favourable conditions for financing the economy in the medium and long term, many central banks, such as the Bank of England, the US Federal Reserve and the European Central Bank, used quantitative easing alongside more conventional measures.

In this way, central banks have created large amounts of money in an unprecedented way, even though the **primary objective** of these programs was to **lower long-term interest rates** by buying long bonds.

In 2009, the Bank of England established the **Asset Purchase Facility (APF)** as part of its quantitative easing programme. This involved the Bank of England creating money which it used to buy assets (mainly government bonds).

By increasing the amount of money in the economy, the aim was to boost the economy by encouraging banks to increase lending and customers to increase spending.

The last time the Bank of England announced an increase in the amount of quantitative easing was in November 2020.

Since 2022, the Bank of England has also been reducing the stock of bonds that were bought during that process - a process sometimes called **quantitative tightening**.



## Simplified accounting scheme: money creation and the circulation of banknotes

*In the example below, we have an economy composed of a single commercial bank **Bank 1**, and a Central Bank with a monopoly on the issuance of banknotes. Bank 1 has an account at the Central Bank.*

### Step 1: Money creation

Individual X borrows £10,000 from Bank 1. By a simple game of entries, X's deposit account at Bank 1 is credited with £10,000. Money is thus created. Conversely, when the individual repays his loan, there is monetary destruction. The same situation occurs when the bank lends to a company or a local authority:



### Step 2: Putting the banknotes into circulation

Customer X withdraws £1,000 in bank notes. To do this, Bank 1 must buy these notes from the central bank. Its account at the central bank is debited for £1,000, in return for the banknotes, which the bank can deliver to its customer X:

