



MoneyMuseum

Drachm, Dirham, Thaler, Pound

Money and currencies in history
from earliest times to the euro

Coins and maps from the MoneyMuseum
with texts by Ursula Kampmann





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The Publisher's Foreword



"Coins tell stories. They are a means to an end, but in their beauty and significance also objects in their own right. The Greek coin gems from Sicily are the Picassos of antiquity."
(Leo Mildenberg)

Can you imagine making do without cash clinking in your pocket? Will our great-grandchildren never hold a coin in their hand any more? In the early 3rd millennium AD it looks as if money is becoming dematerialized.

Originally money consisted of basic materials such as shells, copper, silver and gold, then, for 2,000 years, of coins and eventually, after the introduction of banknotes in the 19th century, it was made of paper as well. Today it encompasses credit cards, checks, accounts, luminous signs on chip cards or flight mile credit. In recent times, currency systems that go back to barter schemes have increasingly also had a chance. Coins, on the other hand, are only still used for small amounts. Nowadays, anyone who pays in cash is really rather odd in many cases. The coin, long the tangible and visible epitome of money, is being used less and less. As a result, there are many indications to suggest that its 2,500-year history is coming to an end. But in order to understand today and tomorrow it is important to be familiar with yesterday.

In *Drachm, Dirham, Thaler, Pound* the MoneyMuseum combines coins and historical maps with texts to help you to traverse the history of mankind since the beginning of money. In doing so, you will come across some of the finest and most expressive pieces from the history of coins, gems of the past, the basis of our present time.

Coins can not only be used to acquire things, but also to bear eloquent witness to their time and touch us with their artistic beauty, as the opening quotation of the numismatist, coin dealer and collector of antiques Leo Mildenberg (1913–2001) has aptly formulated it. For me, collecting coins also means preserving the memory of civilization. For on a coin economics, politics and art come together on the smallest possible space.

Jürg Conzett
www.moneymuseum.com





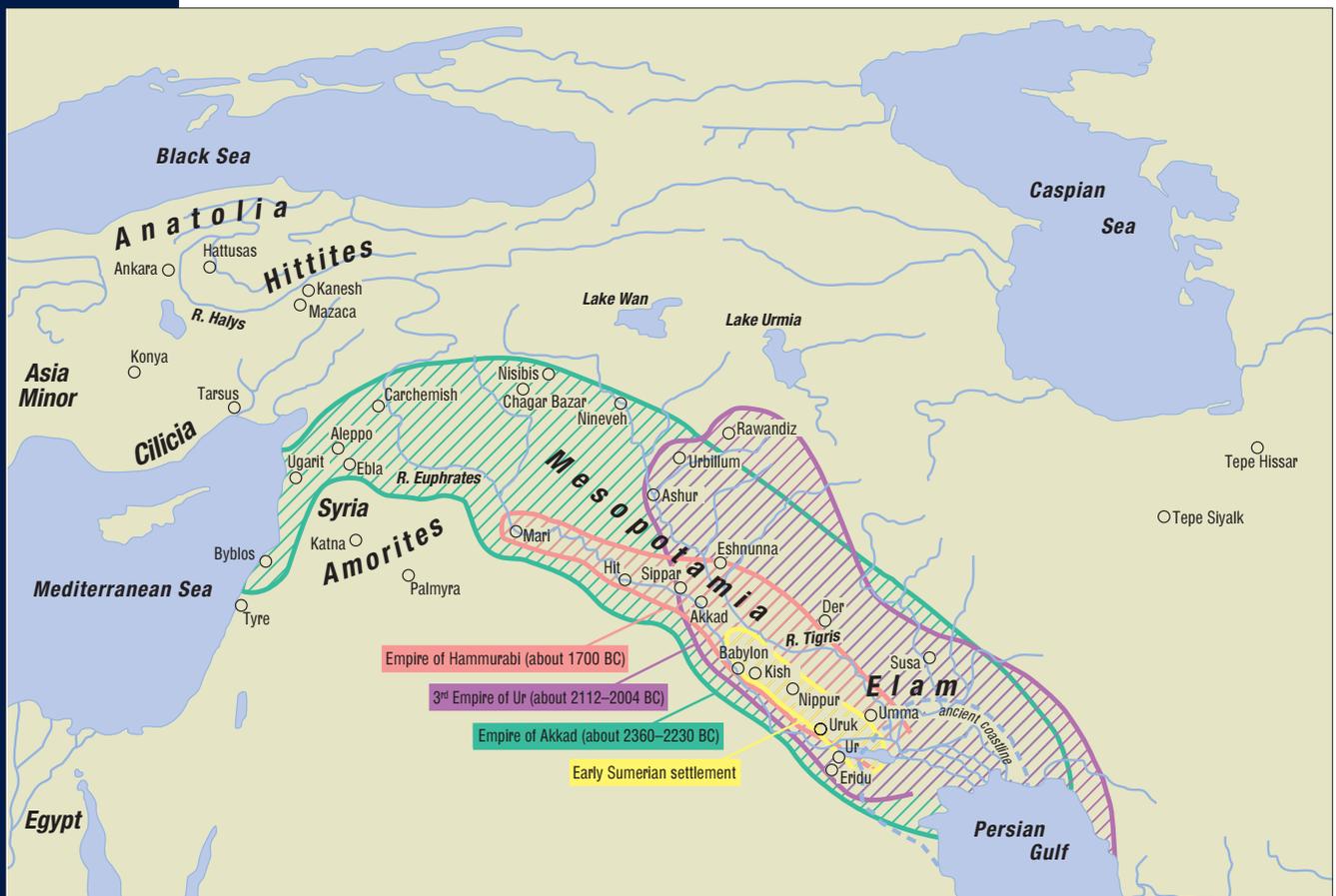
The Ancient Orient



3rd millennium BC—first predecessors of money

The first very advanced civilizations of humankind developed in Mesopotamia and Egypt where rivers made the fields fertile. It is there that we discover the roots of what is known as money today. In Mesopotamia, silver was used as early as the 3rd millennium BC to settle accounts. Certainly no “coins” were used, but crude metal which was weighed. Authorities strictly controlled the weights applied.

The man in the street, however, did not calculate in silver, but in grain, which was used as a kind of alternative money in precisely measured quantities.





Mesopotamia, clay tablet with cuneiform writing, c. 2350–2150 BC

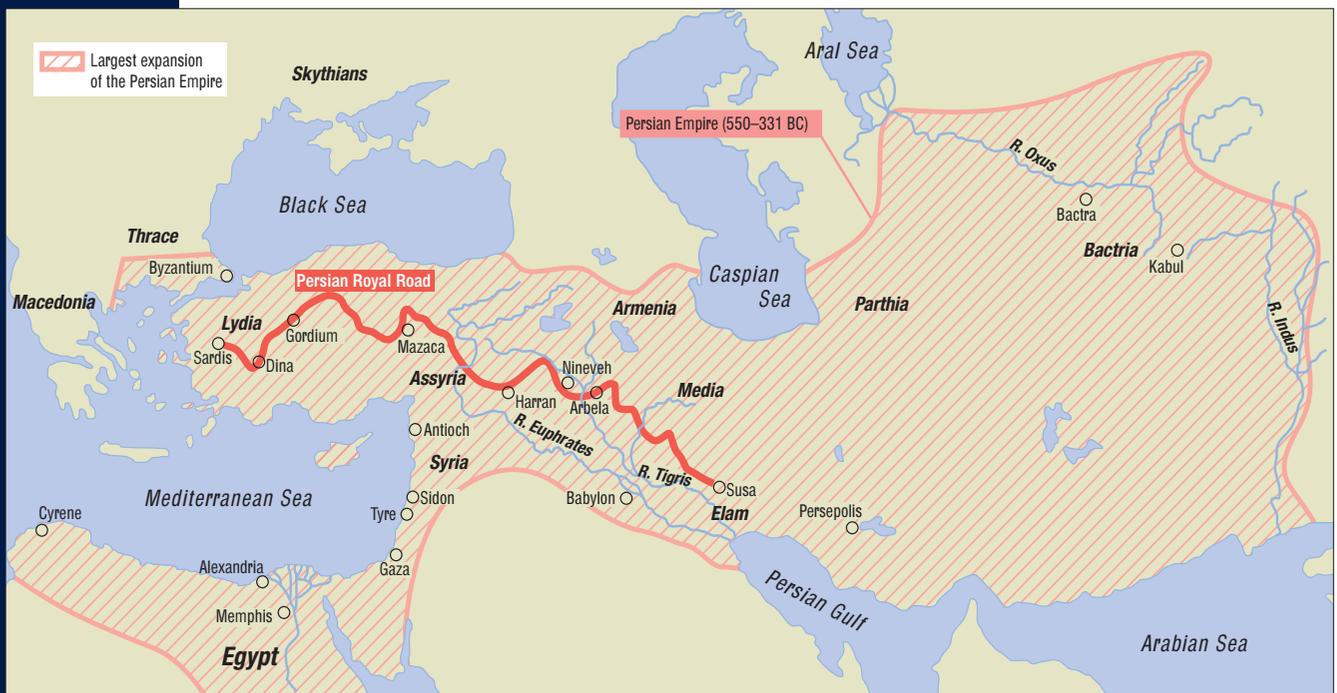
The Greek word for writing literally means "scratching." This is closely linked with the history of writing. The first characters, the cuneiform writing, developed in Mesopotamia (today Iraq) at the end of the 4th millennium BC: scribes took notes by pressing a slopingly cut-off style in soft clay, which left behind cuneiform marks. These marks recorded what occupied human minds; even then this meant mainly economic facts: sales and stocks, tax rolls and credit contracts. Speaking of credit, we know from similar tablets that at the time of Hammurabi, the temple loaned silver at the annual rate of 20 % interest.

The Coin's Birth



Between Persians and Greeks

The first coins in history were produced in Asia Minor, in the borderland between the Persian Empire and the Greek world, during the first half of the 6th century B.C. They looked like little nuggets, were of standardized weight and made of electrum, an alloy of gold and silver. A symbol on the obverse identified them as a product of a certain source. We do not know whether these first coins were produced by traders, craftsmen, rulers or priests.





**Sardis (Lydia), stater, gold (8.08 g),
after 550 BC**

The staters, which show the forepart of a lion fighting against a bull on the obverse, are traditionally linked to the Lydian king Croesus who reigned from approximately 560 until 547. Even today, we use his name to designate an exceptionally rich man. In fact, this last Lydian king disposed of vast reserves of precious metals, above all the gold from river Pactolos. The tributes from rich trading towns at the coast of Asia Minor, controlled by Croesus, also contributed to his wealth.

Therefore, it is quite possible that he implemented a coin reform around 560 BC, which replaced the old electrum coins by a bimetallic system of nominals. For the first time in history, the relation between coins made of gold and coins made of silver was determined at a fixed rate. The new currency was based on a gold stater of about 8 g which corresponded to 10 silver staters. The stater was struck in various fractions in order to make it easier to pay relatively "small" amounts—but even the very small fractions, the $\frac{1}{48}$ staters with a weight of 0.16 g each, were still precious. The new coin was so popular that the Persians maintained it after the conquest of the Lydian empire in 547. It is therefore not absolutely certain whether our coin was struck under Croesus or under Persian rule. But it is a fact that it was made for the trade with Greek cities.



From Asia Minor, the coin started its triumphal march as a bartering object to all Greek cities around the Mediterranean Sea. Within only two generations, it dominated all market places where Greek traders offered their goods. The reasons for this development were complex. It may have been connected with the political changes occurring approximately at that time: tribes which had formerly been commanded by an aristocracy transformed into urban communities where citizens owed their social status not solely to their birth, but also to their wealth. At the same time, the interurban and the international trade both grew. Not least, the supply of the markets with change encouraged the division of labors. The new medium "coin" offered a lot of advantages to the up-coming cities; nevertheless, there have been communities which managed to get by without their own coins for centuries.



Sardis (Lydia), 1/3 stater, silver (3.45 g), after 550 BC

Even if the golden staters may look really impressive, silver became the major minting metal in Greece. Cities and tribes who possessed their own silver mines could consider themselves lucky. Athens's wealth and its military power have their origin – among others – in the silver mines at the neighboring Laurion.

Those who didn't mine any or not enough silver had to buy the raw material for their coins on the free market. They had to melt down other cities' coins in order to restrike them with their own standard and coin motif.



The Drachm

Athens's hegemony over Greece

The Greco-Persian wars (500–448 BC) laid the foundation of Athens's position as the protector of the Greek cities against the Persians. Athens defended its allies by means of its powerful fleet and thus made those allies either provide ships for the fight or pay tribute to the league's treasury.

At the beginning, the Delian League founded in 477 was an alliance of equal members, but Athens soon developed into an aggressive ruler due to its superior instruments of power. In the end, Athens spent the tributes of its allies at its own discretion.





Athens, tetradrachm, silver (17.2 g), c. 455 BC

Between 510 and 500, the Athenians introduced the coin motif that was to become famous in the whole world: the owl, sacred animal of the divine protector of the city of Athens, Athena. They called their new coin drachm and subdivided it into 6 oboloi. This system seems to be rooted in the past when metal spits were used as bartering objects in Greece. "Obolos" is the Greek word for spit and six spits are a handful, in Greek words a drachm.

Early owls are very rare; the ones having been struck during the 5th century BC, however, are very common. This is due to the fact that Athens used the silver of the Delian League's treasury to strike coins and to pay for the improvement of Athens's infrastructure. During the age of Pericles, the allies' funds did not only finance Athenian democracy, but also the buildings of the famous acropolis. The Parthenon and the Propylaea are said to have swallowed up 1,000 talents, i.e. 6 million drachms. Phidias' famous statue of Athena cost between 600 and 1,000 talents. If somebody could not attend work because he had to carry out a democratic function, he was paid off. A judge was given 2 obols a day. In other words, he would have had to attend court for twelve days in order to earn a tetradrachm like ours.

The drachm of Athens became the most popular trading coin of ancient times—its weight standard spread over all Mediterranean coasts. Various authorities imitated it before the drachm of Alexander the Great displaced the Athenian drachm.

**Syracuse (Sicily), decadrachm,
silver (43.3 g), c. 405 BC**

Coins were not only bartering objects in ancient Greece. The city fathers hired the best die engravers of their times and were proud of the works of art they created. The coins of Syracuse, the most important trading center of Sicily, are a good example for this.

For more than a century, the Syracusan tetradrachms' motif remained the same. From 510 onward, the reverses presented Arethusa, a water nymph who furnished the important fortress Ortygia, which was located on an island surrounded by brine, with drinking water. The inhabitants of Syracuse saw a sign of divine grace in this present of Mother Nature, and they thanked the water nymph with their worship and the fact that Arethusa was chosen as a coin motif. The coins, however, did not always depict the same young woman, unchanged. Arethusa was shown with differing hairstyles and physiognomies.

Our decadrachm is an extremely nice example. Its die was made by an artist named Kimon who was granted the honor to carve his name into the die. The letters KIMΩN are written on the body of the dolphin below the neck of Arethusa, and the first letter of the die engraver's name K can be read on the ribbon in Arethusa's hair directly above her brow. Signatures like this one are an exception. During antiquity and the Middle Ages, the artists designing the coins remained anonymous.





The Eleians for Olympia (Peloponnese), stater, silver (12.2 g), c. 350 BC

The letters FA that can be found on the reverse of this coin are the abbreviation of *faleion*, which means "(coin) of the Eleians." The Eleians were the tribe controlling the sanctuary of Olympia. Every four years, they organized the great sacrifices

in honor of Zeus, of which the Olympic games formed part. These famous games attracted multitudes of Greeks from all parts of the Mediterranean region. The guests had to be furnished with a standardized currency in order to facilitate the trade between the visitors. This is the reason why the Eleians struck coins on the occasion of the Olympic games as from the second quarter of the 5th century. Of course, these coins were no commemorative coins. The idea of a commemorative coin developed in modern times.



Alexander's empire

When Alexander started his great campaign against the Persians, his stock of silver consisted of 70 talents, whereas he had debts of 200 talents. A few years later, his financial standing had changed completely. The conquest of Susa won him 50,000 talents of silver, the capture of Persepolis 120,000, and the fall of Ekbatana 180,000. Therewith Alexander disposed of more silver than any Greek before him. He did not bury his treasures in the treasury as the Persians had done before, but initiated the most extensive coin emission of the Greek period.





**Philip II, king of the Macedonians
359–336 BC, stater, gold (8.6 g)**

Under the reign of Alexander's father Philip II, gold came back in widespread use as a metal for coins. Staters of gold circulated side by side with the omnipresent tetradrachms of silver. The conquest of the gold mines of the Pangaion Mountains in northern Greece had made the emission of gold coins possible on a large scale. Philip chose a propagandistic picture for his coins. On the obverse, we find Apollo, in whose name Philip fought against the Phocians. The reverse depicts the biga with which Philip won the Olympic games. The greatest of all Macedonian kings paid not only his mercenaries with those coins, but also the politicians who acted on his behalf in Greece.

His son Alexander continued to strike this coin type. And this very piece with the delicate face of Apollo makes some archeologists think of a portrait of Alexander.

**Alexander III, king of the Macedonians
336–323 BC, tetradrachm, silver (17.1 g),
Memphis (Egypt)**

Millions of tetradrachms featuring the head of Heracles on the obverse and the figure of Zeus on the reverse were struck under the reign of Alexander. Nevertheless, the tetradrachms issued in Alexander's lifetime are only marginal compared to the mass emission which started after Alexander's death. Since traders all over the world as it was known at the time had got used to these coins, every important trading center struck tetradrachms of the Alexander type, some even until the 1st century B.C.

Little differences within the coin type indicate when and where the coins were produced. The mintmark—in this case a rose for Memphis—points to the minting city. The later the coin was struck, the more the face of Heracles resembles the portrait of Alexander. There is a good reason for that: Alexander himself did not depict his own face on coins. This changed, however, under his successors. The human portrait became connected with the coin's obverse in such a degree that later die engravers could not imagine Alexander not to have his face placed on the coins. Therefore, they assimilated the features of Heracles to the known features of Alexander.





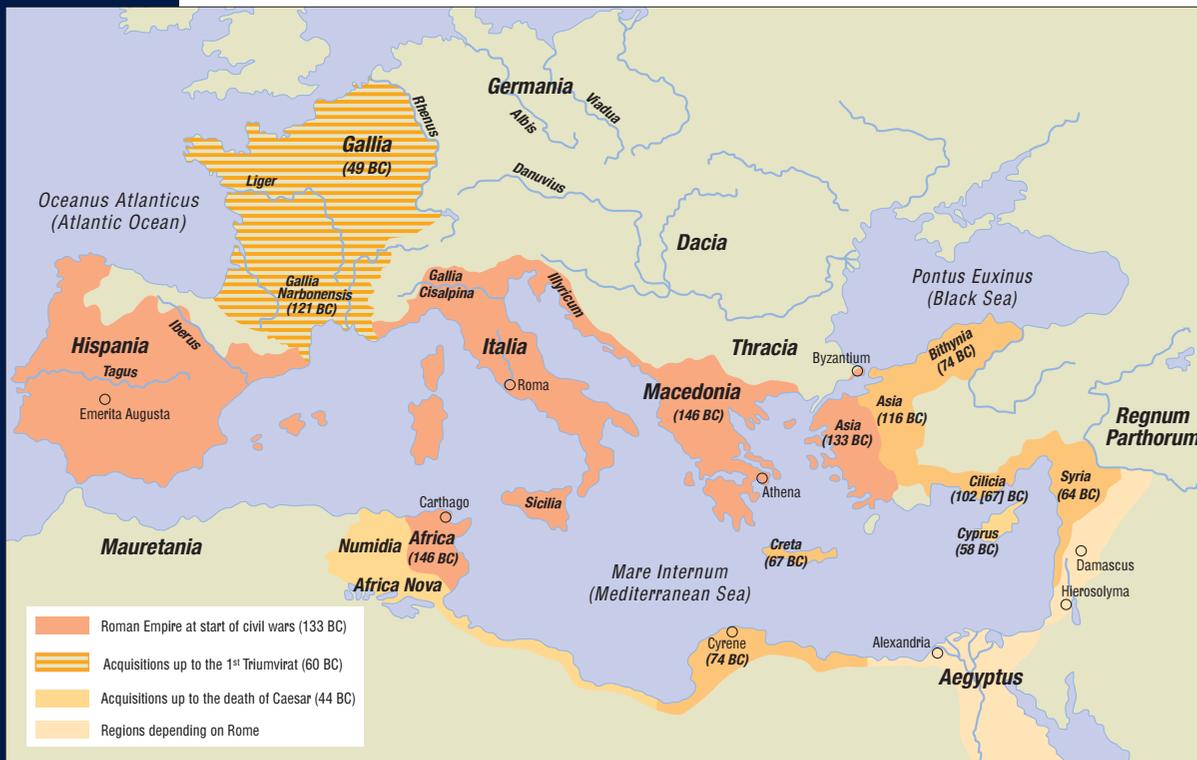
The Denarius



Rome's rise to power

Rome, in the first instance an unimportant village in central Italy, located in the borderland of different cultures, developed into the most important power in Italy, conquering afterwards the world as it was known then. Sicily, Spain, Asia Minor, Gallia—Rome soon disposed of the income from rich trading cities and even richer metal deposits.

The Roman currency spread together with Roman rule. The denarius had been created in 211 BC, a time of huge threat, during the war against Hannibal. It was produced until the 3rd century AD.





**Roman Republic, denarius,
silver (4.5 g), 211 BC**

Between 213 and 211, the Romans made a radical currency cut. This happened at the climax and turning point of the Second Punic War against Hannibal, shortly after the conquest of Syracuse. They introduced the denarius, which was a silver coin of about 4.5 g valued at 10 asses of bronze (as indicated by the letter X, the Roman 10, which can be seen behind the female head). This woman with the helmet is traditionally regarded as Roma, the personification of the Roman city-state. The reverse presents the Gemini, Castor and Pollux, who were considered a kind of divine rescuer.



The denarius replaced a highly complex system of Roman money. As from the end of the 4th century, the city fathers had made different coins for different purposes. There were silver coins of Greek standard for the trade with the Greek cities in southern Italy, and there were bronze bars for the Italian communities in central Italy. About 280, Rome started to produce aes grave, heavy bronze coins. All these forms of money circulated side by side, posing more or less problems, until the currency reform of the Second Punic War standardized the money system for centuries.

The denarius became the most successful currency of all times. Its name became the paragon of coin and survives in many modern coin names.



C. Julius Caesar, denarius, silver (3.7 g), March 44 BC

In Rome, Caesar's new title of "Caesar dictator perpetuo," i.e. "Caesar dictator for life," was a novelty. The city-state's constitution only disposed of the function of a dictator, an official who was elected in times of war and possessed the absolute authority in the course of a fixed period. The fact that this office was bestowed without a limit of time was an incredible scandal in Roman eyes.

Another scandal was the fact that Caesar had his portrait placed on the obverse of his coins. So far, only Greek kings – whom the Romans thought to be tyrants – had done so. The face of a Roman still alive on a coin's obverse must have been a signal to the upper class. It was interpreted as the end of democracy. Only a few days after this coin was struck, Brutus and his friends murdered odious Caesar. Sure enough, the Roman people had a different opinion of this man who had brought discipline and peace to a society that had been mixed up profoundly by civil wars. They worshipped Caesar and supported his heir Octavian, who was to found the emperors' rule over the Roman Empire.



**Caracalla, Roman emperor 198–217,
antoninianus (= double denarius), silver (5.1 g)**

The defense of the Roman frontiers against the beginning migration of peoples asked too much of the empire's resources. As long as new provinces became attached to Rome's territory and as long as new societies had to be supplied with Roman money, the fact that the face value of the denarius was much higher than its intrinsic value had not mattered yet. This changed, however, during the crises of the 3rd century. The Barracks emperors procured the funds for the immense cost of their soldiers by reducing the silver content of the denarius drastically. Caracalla participated in this development by producing a double denarius which had only 1.5 times the weight of a denarius, thus further heating up inflation. It was not before Diocletian's currency reform that somebody tried to fight against the ongoing depreciation of currency. The great reformer failed dismally in this case.





The Solidus



Rome's successor—the Byzantine empire

While the Western Roman Empire perished in the turmoil of the migration period, Roman administration, Roman economy, and the Roman army survived in the eastern part of the empire. This part is called the Byzantine Empire by today's historians, after Byzantium, the name of the Greek city where the new capital city of Constantinople was founded. Even though the Byzantine emperor had to tolerate the loss of important territories in the Near East, in Africa and the Balkans, the Byzantine Empire existed for nearly another 1,000 years after the conquest of Rome. In 1453 the Turks captured it and made it their own capital.





**Constantine I, Roman emperor 307–337,
solidus, gold (4.45 g), 314, Trier**

In 324, the Roman emperor Constantine founded a city which bore his name, Constantinople. This metropolis located in the borderland between East and West was to replace Rome as capital of the Roman Empire.

The foundation of the new city coincided with the introduction of the solidus, a new gold coin of the Roman Empire which was struck in Trier from the year 309 onward, in all other mints as from 324. The solidus became an extremely stable coin—as a matter of fact, we still use the word “solid” for things that are going to last. It was struck for more than 1,000 years almost without any changes and influenced the surrounding currency systems deeply. It was imitated, for instance, by the tribes of the migration period, and the Merovingians based their own coins on the Byzantine tremissis, the third of the solidus. Until the first Western gold coins were struck in Italy, the solidus was the most important gold coin circulating in the Occident.



**Justinian II, Byzantine emperor 685–695
and 705–711, solidus, gold (4.4 g),
Constantinople, after 705**

As from 44 B C onward, the heads of Roman and Byzantine emperors had occupied the coins' obverses. Justinian II was the first to break this convention. He tried to strengthen his realm's internal cohesion against external enemies by celebrating his empire as a divine institution. This policy was reflected in his coins: the emperor's bust was transposed from the coins' obverse to the reverse. The obverse was reserved for the image of Christ.

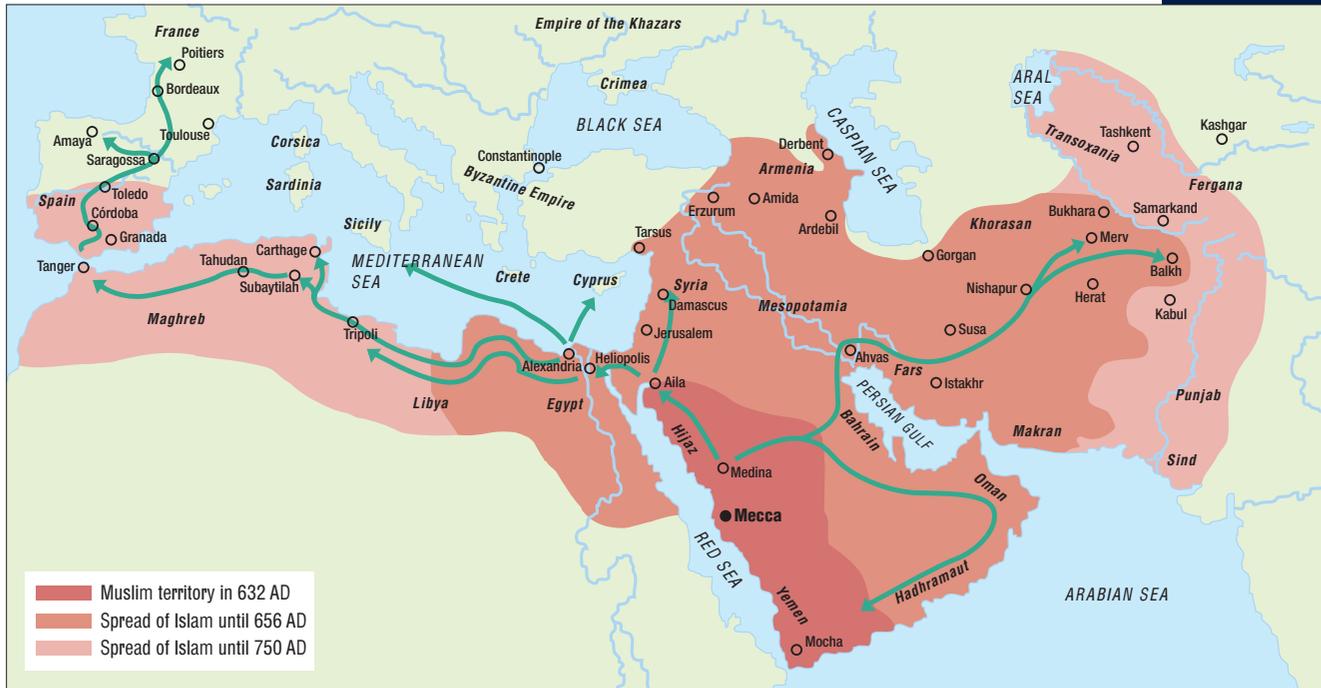
But this change was soon withdrawn when, in 726, the iconoclasm began. During this period, clergymen who had been influenced by the ideas of Islam tried to end the Byzantine adoration of icons. For more than a century, the reproduction of the effigy of Christ was controversial. In 843, the iconodules, i.e. those who worshipped icons, politically got the upper hand. A council approved the icons and their adoration as a legal form of Christian faith.

Dinar and Dirham

Islam conquers the Orient

In the early 7th century, the prophet Muhammad experienced his revelation in Mecca, a very important commercial center of Arabia at the time. The Islamic era starts with his emigration from Mecca to Medina. Even today, the date on Islamic coins refers to that important milestone in Islamic history.

In Medina, Muhammad founded the first Islamic community, which controlled the religious life of its members as well as their secular behavior. It was this religious unity that enabled the Muslim to disseminate their religion and to extend their power to the entire southern and eastern part of the Mediterranean Sea. Within a very short period of time, the Islam controlled the former realm of the Sassanian dynasty and a great part of the Byzantine provinces.





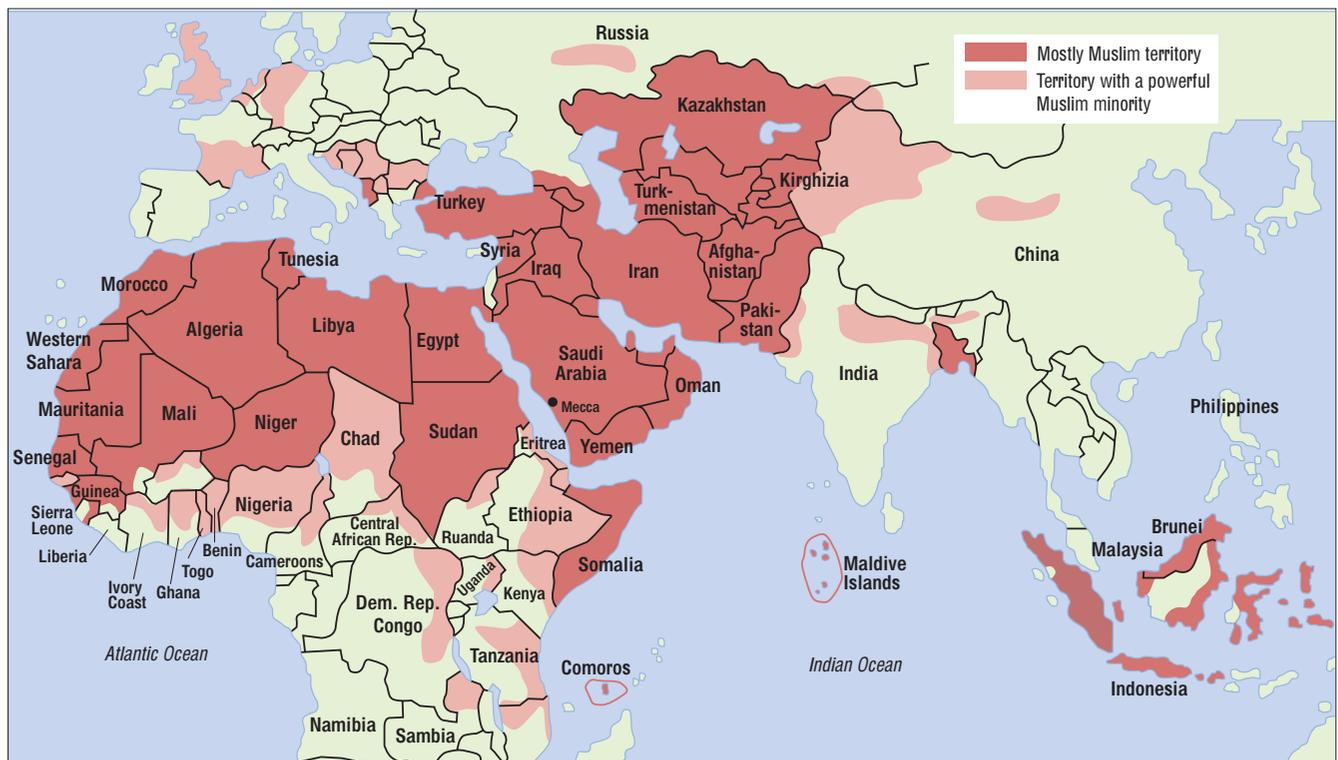
Abd al-Malik, caliph and ruler of the Umayyad caliphate 685–705, dinar, gold (4.23 g), Damascus, 83 AH (= 702),

In 696, i.e. 77 after the Hegira, Muhammad's emigration from Mecca, Abd al-Malik conducted a monetary reform. Until then, the Umayyads had imitated the Sassanian silver and the Byzantine gold coins, but especially the depictions on these coins seemed no longer appropriate to a Muslim empire. The authorities, which had handled aniconism casually in the beginning, took more and more notice of it. Therefore, Abd al-Malik created a new gold currency, the dinar, which had a weight of 20 Arabic carats or 4.25 g. Its design summarized the essentials of the Islamic confession. The inscription on the obverse read, "There is no God besides Allah; there is none next to him." The reverse said, "God is unequalled, God is eternal, he doesn't create and he wasn't created."

Al-Walid, caliph and ruler of the Umayyad caliphate 705–715, dirham, silver (2.77 g), Abarshahr, 92 AH (= 711)

The silver dirham was introduced at the same time as the golden dinar. Its weight depended on local habits.

Today dirhams are not only found on the Arabian Peninsula. Numerous pieces were brought to and buried in Scandinavia. This is due to the fact that as from the 9th century, the Vikings from the north traveled via the rivers of Russia to the Near East in order to carry on trade. They brought slaves, furs, honey, and wax with them and traded them for silver. The Vikings are said to have exported silver to such a degree that the mines under Islamic control did not supply enough silver to cover the want for silver dirhams. Gold became the preferred material for coins.



Today's Islamic world

Today 1.4 billions of individuals, which are about 28 % of the world's population, profess to Islam. The Islamic religion is mainly spread over desert areas extending from the Sahara over the Near East and the Caucasus Mountains to central Asia. But in many other states, Islam is predominant, too. Indonesia, for example, is the state with the largest number of Muslims worldwide. The Islamic countries are intergovernmentally organized in the Organization of the Islamic Conference, the OIC; some countries with a substantial Muslim minority belong to the OIC as well.

The controversial issue whether or not a secular Muslim state is possible became an essential question for all states inhabited by Muslims. Since the Cairo Declaration, fundamentalist politicians have pressed for the Sharia to be made the basis of legislation in all Muslim states. The different systems of values – of the states ruled by Islamic fundamentalists and of the Western democracies, influenced by Christianity and capitalism – resulted and still result in a series of attacks by extremists from both sides.



Abdülhamid II, sultan of the Ottoman Empire 1876–1909, 100 piaster, gold (7,2 g), 1896

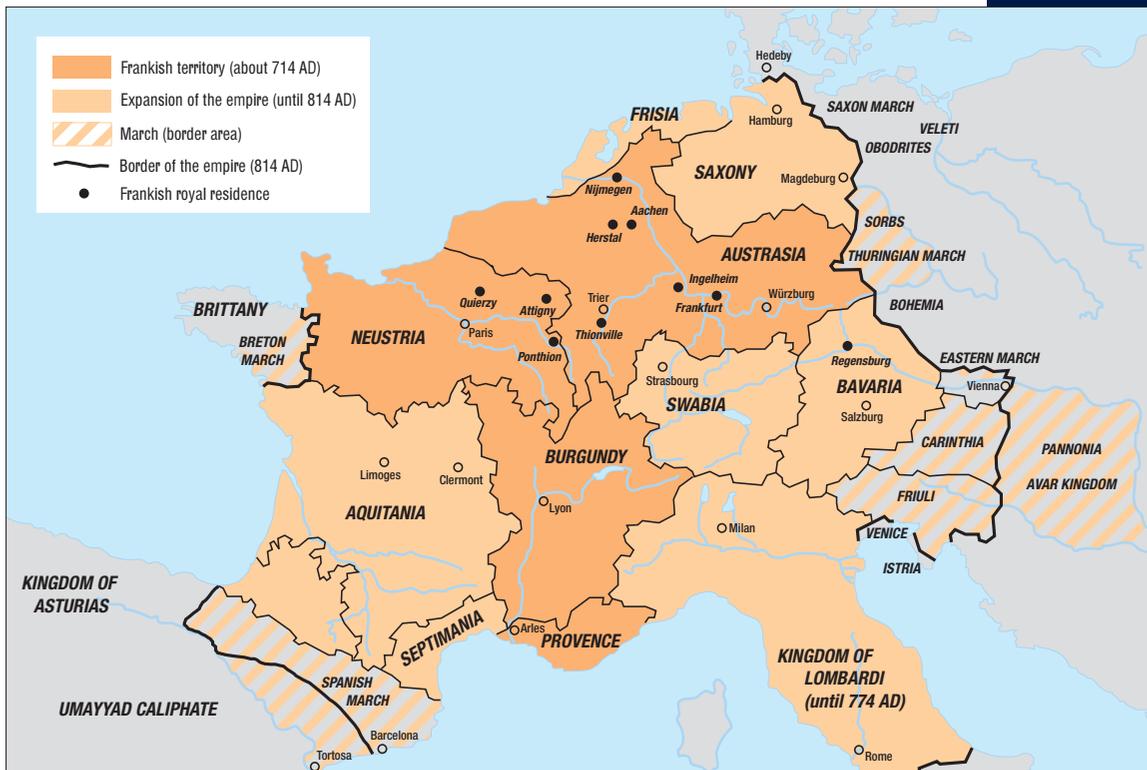
In 1844, the Ottoman Empire modernized its coinage. Under the influence of the West, the Turks did not only introduce paper money but also mechanical coin production. The appearance of the coins was secularized; the inscriptions did not communicate religious messages any more, but merely the sultan's name as well as place and year of striking. At the time of the introduction of the piaster, 100 golden piasters were planned to be made of one pound of gold. This pound of gold was valued at 2,000 silver medshidije. But starting 1873 at the latest, the silver price fell compared to the gold price, so that gold coins could only be acquired with a 5 % addition. Anyone who wanted to recover an amount invoiced correctly had to make a distinction between a gold piaster, a silver piaster or even a governmental piaster. It was not before the Young Turk's coming into power that the new Turkish government founded a national bank, which succeeded in getting the monetary system under control, but not inflation.

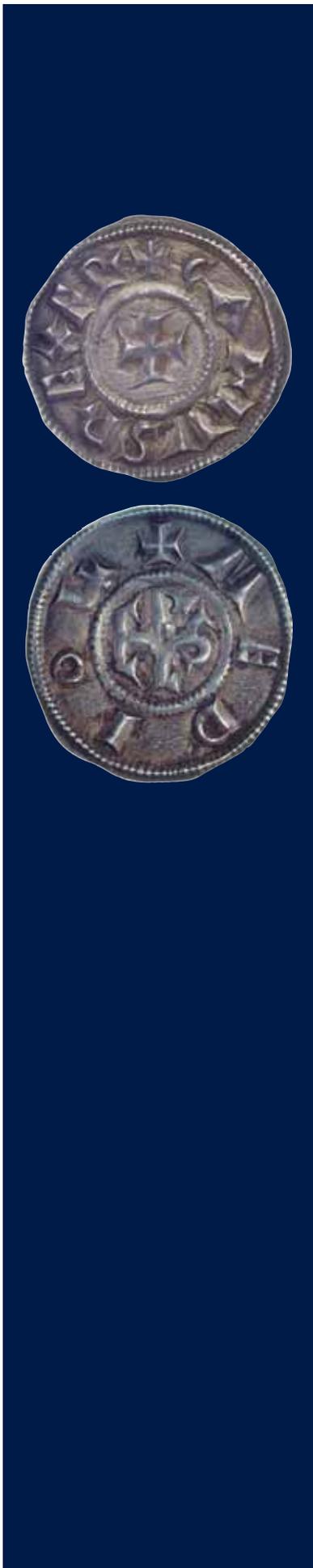
The Penny

The Carolingian empire around 800 AD

When Pope Leo III crowned Charlemagne emperor in Rome on December 25, 800 AD, a new Western European empire was founded. Charlemagne then possessed more power than any other medieval ruler had had before. He controlled an enormous realm, from the Pyrenees to Saxony, from Frisia to Carinthia, from northern Italy to Bavaria and Alamannia, to Burgundy and Aquitaine.

Imitating the Roman Empire, Charlemagne tried to enforce a uniform organization of his countries. A standardized monetary system was part of that, just as the *missi dominici* (Lat. for the envoy of the Lord) who controlled the nobility and the clergy, reigning over their fief. Both the French and the Germans are proud of "their" emperor "Charlemagne" or "Charles the Great," who has been reckoned among the saints of the Catholic Church since 1165.





Charlemagne, ruler of the Carolingian empire 768–814, penny, silver (1.72 g), Milan, after 793/4

In 755, Charles' father Pippin (king 751–768) reserved the privilege to strike coins to himself as one of his regalia. Towards 781, Charlemagne created a new standardized monetary system, which lasted in some regions until the 20th century: The pound (Lat. *librum*) was divided into 20 shillings (Lat. *solidi*) or 240 pennies (Lat. *denarii*) resp. Until the 13th century, only the penny actually existed as real coin. Shilling and pound were only used in calculations, invoices and bookkeeping. Our coin shows a monogram in the middle which combines the letters CROLS for Carolus; beneath, the name of the mint can be found: "MEDIO L" for Mediolanum, i.e. Milan. The reverse presents a cross with the inscription "CAR(o)LVS REX FR(ancorum)," meaning "Charles, king of the Franks."

Trade in the early Middle Ages

We should not overestimate the importance of the pennies for the Carolingian trade. Besides the buying and selling on a monetary basis, there were a lot of other possibilities for luxuries and everyday goods to change hands. Luxury goods in particular were spread as diplomatic presents at the highest level, such as the famous white elephant that Harun ar-Rashid presented to Charlemagne together with precious textiles. In return, Charlemagne bestowed the Arabic envoys with Carolingian swords, which were especially popular then. As from late antiquity onward, however, the greater part of everyday economy had been based on self-sufficient farm complexes where nearly everything essential for living was produced. What could not be manufactured was acquired by barter, by trading surplus goods for other people's products.

Louis the Pious, ruler of the Carolingian empire 814–840, penny, silver (1.66 g), Italy (?), after 814

This denarius shows the name of Louis with the imperial title on the obverse. On the reverse, a Christian church in ancient style is presented, the inscription runs "XRISTIANA RELIGIO" (Lat. for Christian piety, the Greek X stands for Ch). Louis the Pious does not bear his name erroneously. He took care of a reform of the church law. His partiality for the church was pernicious to the standardized coin system: in 833 the king conferred the privilege to strike coins—which had been reserved exclusively for the king until then—to the monastery of Corvey, presumably in order to contribute to the construction costs of the new church. For the right of coinage was connected with high revenues: the owner of this privilege received the difference between face value and production costs.

Halberstadt, penny, silver (0.89 g), c. 1200

In the course of the high Middle Ages, the German emperor lost influence, whereas the cities won power—also concerning the right of coinage. Numerous trading centers occupied this privilege and struck pennies for their own markets. In order to enlarge the mint authorities' profit, these pennies became worse and worse. They lost weight and purity. This development climaxed in the so-called bracteates, a modern term coming from bractea (Lat. for thin piece of metal) which stands for a very thin, single-sided penny.

Bracteates are not just money; most of them are important works of Romanic art. Our coin, which was struck on the orders of Bishop Gero von Schermke for his diocese, features an extremely elaborate depiction of Saint Stephen, the patron saint of Halberstadt.





Groschen, Gulden, Thaler



Italy's pioneering role as a trading power

Towards the year 1000, Europe had made it—the Christian army had driven back the foreign enemies behind the borders. The Arabs had withdrawn to the south of Spain, the Normans were integrated into the European feudal system, and the church had brought the Slavic pagan tribes under its sway by Christianization. This brought the leisure to Europe to concentrate on itself.

The centuries after the turn of the millennium did not only produce political innovations, but also a wealth of economical changes. Strong monasteries like those of the Cistercians cultivated the land and introduced new agricultural methods. Cities set up as centers of trade and industry. The roads became safer. The Crusades brought a close connection to the East. Soon many active and courageous merchants traveled through Europe, Africa and Asia.





In the market places, the range of products multiplied. Merchants traded luxuries and victuals over farther distances. Due to the accelerated turnover of goods, the demand for coins with a higher value grew. Economically active cities started to redesign their money. Italy took the lead, on the one hand because it connected the East and the West, on the other hand because there was no effective central authority and the merchants were able to take the initiative.

Jacopo Contarini, doge of Venice 1275–1280, matapan, silver (2.18 g), undated (1275)

In the reign of Doge Enrico Dandolo (1192–1205), the first Venetian grosso was struck. The matapan as it was called was worth 24 pennies and continued to be produced until the middle of the 14th century.

The idea to strike a "grosso" (Ital. for fat), i.e. a heavier silver coin, was not new. In 1172 Genoa already had made grossi, other cities followed. The success of the Venetian matapan was connected with the city's increase in power. As a matter of fact, the first matapans were issued in order to pay for the construction of the ships the Crusaders had ordered for their passage to the Holy Land. The knights had to declare themselves insolvent, so that the Venetians were able to abuse the army for their own purposes: the Fourth Crusade ended with the conquest of Constantinople in 1204. This was the beginning of the Venetian trading empire.



Louis IX, king of France 1226–1270, gros tournois, silver (4.22 g)

The concept to strike heavier silver coins spread from Italy to the north. In 1266, the French king Louis IX, better known as Saint Louis, created a new silver coin valued at 12 pennies. This coin was called gros tournois, after the Italian grossi. It showed the emblem of Tour on the obverse. The two circles connected by a line were interpreted as the manacles of Saint Louis, who was taken prisoner during the Sixth Crusade. After having paid an enormous ransom, he was allowed to return to France. His coat of arms, a wreath of lilies, is depicted on the obverse as well. The reverse presents a cross in the middle and the inscription, "Praise the name of our Lord Jesus Christ."

The French merchants had been eager for a coin like this. Within only a few years, the gros tournois circulated at every important fair and trading center in France. It was so popular that it was imitated immediately. The Netherlands as well as the economically active Rhineland, for instance, both struck "Turnosen."

Florence, fiorino d'oro, gold (3.5 g), 1252–1307

Around 1252, half a century after the heavier silver coins had come into use in Italy, the important trading cities Florence and Genoa started to strike gold coins nearly at the same time. These compensated for the cessation of the Byzantine solidi, which had been used to settle large amounts so far. But not only European cash developed. In the bankers' city of Genoa, the essentials of cashless money transfer such as account, remittance and bill of exchange were invented in the same century.

The gold coins of Florence were the expression of the merchants' grown ego. In 1250, they had won participation in the city's government. The new government placed the lily, the city's coat of arms, on the fiorino d'oro, which was also called florin or gulden (derived from golden) in foreign countries. This coin was to form European currencies during the coming centuries.



**Sigismund the Rich, archduke of Austria
1477–1490, guldengroschen,
silver (31.6 g), Hall, 1486**

While there was enough silver in Europe, gold was lacking and had to be imported from the Islamic East at a high price. Therefore, the idea of a heavy silver coin which could replace the gold coins at least to some extent seemed to suggest itself. But the production of a silver coin with the value of a gold coin involved huge technical problems: such a silver coin was bound to be much bigger and heavier than a gold coin. In 1486, the mint of Hall in Tyrol succeeded in striking the guldengroschen, a silver coin which equaled the gulden concerning its value. At that time, Hall was one of the most important mints in Europe. The many tons of silver that came from the rich deposits at Schwaz and were transferred into coins in Hall made the archduke of Tyrol go down in history as Sigismund "the Rich."





Zurich, guldiner, silver (29.6 g), 1512

The first guldengroschen from Hall was rather made to represent and impress than to serve the trade. But the idea of a heavy silver coin spread over the whole of Europe. Already before 1500, the new coin was struck on a regular basis in the territories of Tyrol, Lorraine, Hesse, Saxony, Sitten, Bern, Savoy, Hungary, Spain and Bohemia.

Our example originates from Zurich and was struck in 1512. It is a representative coin, showing objects of pride of Zurich citizens before Reformation: On the obverse, two lions present two shields featuring the coat of arms of Zurich. Above, a shield with the imperial double-headed eagle calls attention to the fact that Zurich possessed the imperial immediacy. 16 coats of arms surround this picture. They belong to various regions where the city of Zurich provided the Vogt.

The reverse depicts the three patron saints of Zurich, Felix, Regula and Exuperantius, holding their heads in their hands. They are said to have been beheaded on the very spot where today the Wasserkirche is located, during Diocletian's persecution of Christians.

**Schlick County, Stefan and his brothers,
lords of Joachimsthal 1510–1528,
thaler, silver (28.8 g), undated (after 1520),
Joachimsthal**

Not only the archduke of Tyrol disposed of important silver deposits, but also, e.g., the counts of Schlick. The Bohemian king had given them the privilege to exploit the mines of the valley of Konradsreuth, where large quantities of silver had been found. With the permission of the Bohemian council, they established a mint at the newly founded city of Joachimsthal (Jachimov) in 1520. (Joachims-)Thalers, featuring the picture of Saint Joachim on the obverse and the Bohemian lion on the reverse, were struck there in vast numbers and soon became the paragon of a heavy silver coin. Their name replaced the term "guldengroschen" and still survives in "dollar."



The Spanish Peso



The Spanish spoliation of America in the 16th century

During the first half of the 16th century, a series of happy coincidences converted Spain into the richest and most powerful country on earth at the time. In 1519, Hernán Cortés conquered the huge Aztec empire with an army of only 600 soldiers; in 1531, Francisco Pizarro succeeded in destroying the Inca empire with 180 mercenaries. Not the booties, however, but rather the enormous deposits of silver at Potosí and Zacatecas produced the true wealth of Spain. They allowed for incredible masses of silver to be won by the latest methods. In the thirties of the 16th century, "only" 86 tons of silver reached Spain, whereas in the seventies, silver production increased to 1,119 tons and stagnated at around 2,200 tons per decade during the first third of the 17th century.



Two great dangers threatened this wealth.

On the one hand, storms and heavy sea claimed their tribute: 402 ships fell victim to adverse conditions between 1546 and 1650. Bearing in mind that one ship could transport up to 300,000 reales de a ocho, it is easy to see why even today private entrepreneurs go on expeditions to salvage those wrecks. On the other hand, England, France and the Netherlands, which were at war with Spain, supplied corsairs with letters of marque in order to capture Spanish galleons. English pirates, among them the well-known Francis Drake, were temporarily able to snatch up to 15 % of the silver with destination Seville.

Nevertheless, the major part of the silver reached its destination, and this meant an enormous increase in power for the Spanish king because he collected the lion's share of this flood of silver by means of taxes and duties. But neither Philip II (1556–1598) nor his successors succeeded in investing this capital wisely in the improvement of the infrastructure. The silver from the New World paid Old Europe's wars of religion instead. This overcharged even America's stock of precious metal, although it had appeared to be almost inexhaustible: Philip II had to declare national bankruptcy several times.

Spanish mentality, which considered all trade and industry degrading for a noble man, brought it about that the silver did not remain in Spain, but flowed off to other European countries. The Venetian ambassador noted clear-sightedly in 1595, "The Spaniards state with quite good reason that the treasure which comes from the West Indies to Spain produces the same effect as rain on the roofs. If there is heavy rain, the water will pour down and the first to be hit won't be able to profit."

So the silver was for the benefit of the whole of Europe—and it came just in time. During the Renaissance, trade had enormously increased and the constant lack of silver handicapped business. At last, enough precious metal reached Europe to strike as many coins as needed. The reales de a ocho, earned by selling arms and by soldiers' pay, were melted and converted into the various national currencies. Spanish silver financed German, Italian, English and Dutch economic growth.



**Philip II, king of Spain 1556–1598,
real de a ocho, silver, Segovia, 1590**

The most important silver coin, the real de a ocho, was invented not in Spain, but in the New World. The viceroyalty of New Spain authorized the mint of Mexico-City by a note written in 1537 to strike coins valued at 8, 4, 2, 1 and ½ reales. Due to technical difficulties, the mint did not strike the new high nominal immediately. But around 1560, it spread over the whole Spanish Empire.

Our coin was produced in Segovia in 1590, which is clearly indicated by the mintmark, an aqueduct. Philip had built a mint disposing of the latest technology there with the help of his Austrian relatives. It was equipped with a rolling mill, a new Austrian invention, which made it possible to strike much better coins than with the hammer.



**Charles II, king of Spain 1665–1700,
real de a ocho, silver, Potosí, 1677**

In Germany, they are called "Schiffspesos": the coins that came to Spain from the New World. Pesos because this term refers to coins of the weight (Span. peso) of 8 reales, and "Schiff" (ship) because in the 17th century, the crude coins were believed to have been struck in the course of the passage in order to avoid the tax that was charged when silver bars were imported. Coins paid no toll.

The reverse presents the Pillars of Heracles, which were considered to be the bounds of the habitable world, and a banner featuring the motto "PLVS VLTRA" (Lat. for beyond that). They became a symbol of the New World—the dollar sign \$ is believed to originate from the two pillars and the banner winding around them.

**Philip V, viceking of New Spain 1724–1746,
real de a ocho, silver (26,92 g),
Mexico City, 1738**

Spanish reales were the most important trading coins in the Far East. Enormous bulks of silver were shipped to India and China to pay for luxury goods such as silk, tea or spices. In India, the silver coins were reminted as rupees at once, whereas the Chinese used the foreign coins in their own monetary transactions.

The negative balance of trade between East and West did not change until the English discovered opium. Soon a profitable triangular trade between England, India and China developed, making the use of pesos unnecessary: cheap cotton goods were shipped from England to India and traded for opium, which in turn was sent to China to barter for luxury goods for England.





The struggle for the new worlds

The discovery of new trade routes excited the greed of other Western nations likewise for resources and products from overseas. While South America remained under Spanish control, the Dutch, the British and the French struggled for markets and trading profits in Africa, North America and the Far East.

Gold, ivory and slaves were imported from Africa. North America supplied fur. The Far East was the favorite destination for 16th and 17th century tradesmen as far as elaborated products of arts and crafts, silk, tea and especially spices were concerned. It was there that the highest profits could be made. Just think, for example, of nutmegs, which grew solely on the Banda Islands. While ten pounds of nutmegs cost less than one English penny on the islands, a merchant paid more than 2 pounds and 10 shillings for the same spice in London—this meant an incredible profit margin of 60,000—in letters sixty thousand—percent.

No wonder that numerous trading companies sprang up in Europe, hoping to do profitable business overseas, especially in the East Indies.

They were privately owned and invested their capital in trading vessels sailing to the Far East. After the return of the merchant fleet, the profit was distributed among the investors. East India companies did not only exist in England; merchants in the Netherlands, Denmark, Sweden, Portugal, France, Austria and Prussia had also founded such promising enterprises.

Private trading companies transacted business with America and Africa, too. Their foundations and trading empires developed into bargaining counters to which the diplomats of the 18th century resorted again and again when they had to make peace once more after one of the various European wars. The Peace of Utrecht, for example, which brought an end to the War of the Spanish Succession in 1713, won Great Britain North America, Newfoundland and the Hudson Bay, in addition to the monopoly of slavetrade in the Spanish colonies of America. There is little evidence of how the natives coped with the fact that their world was distributed in Europe. The Asians and Africans, the “Indians” and the inhabitants of India, they all had no choice but to yield to the superior military power of the Europeans. Despite their inferiority in number, they held the field in every battle in the long run—thanks to their ships which were equipped with fire-spitting canons and their easily transportable guns.

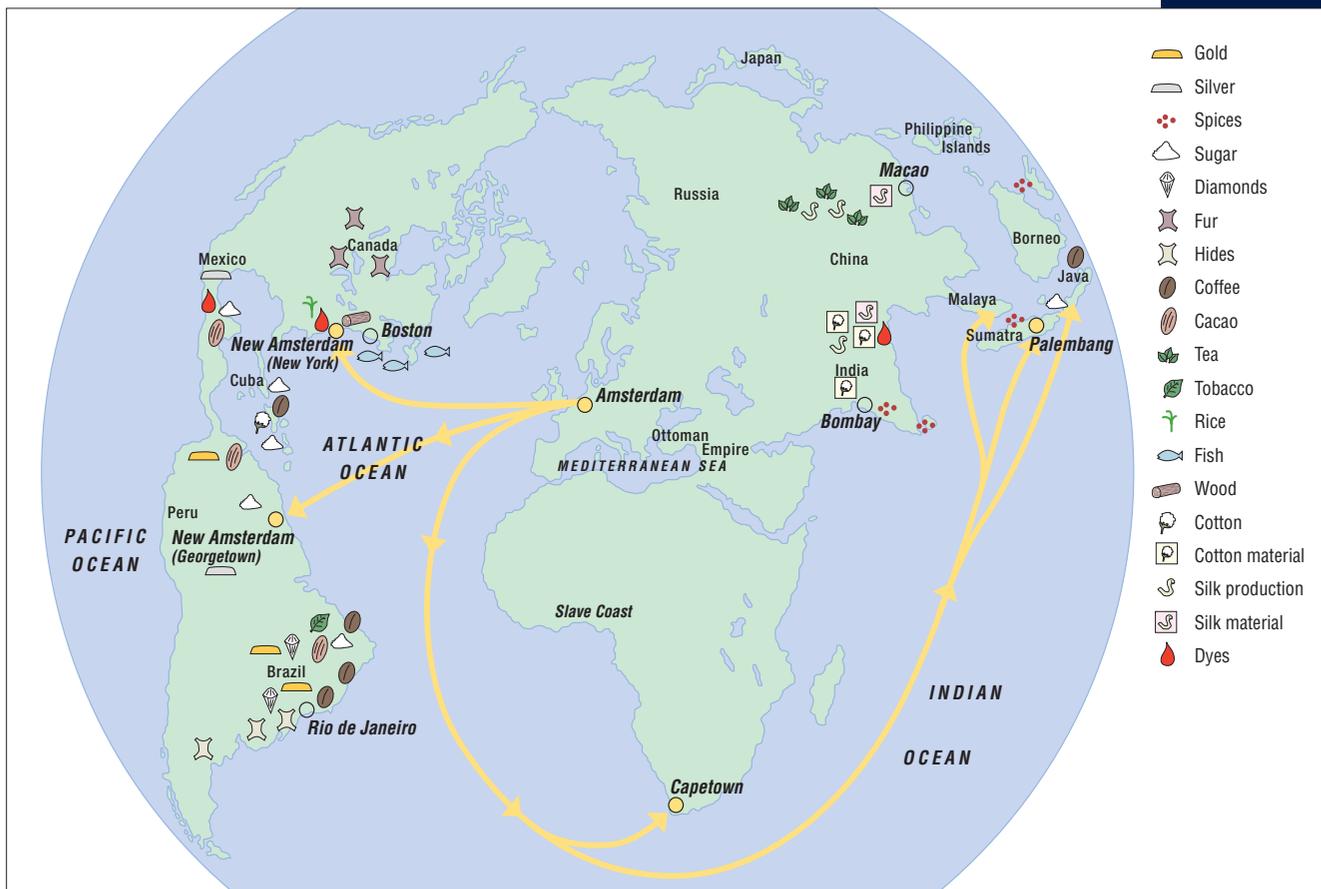
Along with the European armies, the Western monetary system and the profit fixed capitalism gained victory over native currencies and social systems. If today our world is as it is, dominated by Western ideas and economic systems, the roots are to be found in the 16th century.



The Dutch Guilder

The Dutch merchants' empire

The vicinity to the rough North Sea had made the Dutch excellent seamen sailing the Seven Seas. The Dutch East India Company, which dominated the spice trade in India and Indonesia, was the most important Dutch trading company. It had a monopoly of trade within all territories east of the Cape of Good Hope and supplied half of Europe with spices like cloves, nutmeg and cinnamon. The Dutch West India Company carried out trade with West Africa and America. New Amsterdam became its best-known colonial settlement, known as New York today.





**Spanish Netherlands–Flanders, Charles V,
emperor of the German empire 1520–1556,
king of Spain 1516–1556,
florin karolus d'argent, silver, 1540–1548**

Charles V was not only the emperor of the German empire, he also held the office of king of Spain. Thus he controlled the two Sicilies, the Spanish overseas possessions and – probably most important – the rich Netherlands, which paid the greater part of the Spanish inland revenues due to their brisk trading activities and their importance in the textile industry.

In the German empire, Charles created a standardized coin, the Reichsthaler, by conventions in 1524 and 1551. In the Netherlands, on the other hand, he struck the karolus, a silver coin which was a bit lighter than the thaler. There also existed an equivalent in gold.

**United Netherlands, Utrecht,
gouden rijder of 14 guilders, gold (9.94 g),
1751**

The Netherlands, which had gained independence from Spain in the so-called Eighty Year's War of the 16th century, consisted of several independent provinces. Each of them had the right to strike their own coins, as long as they acted according to the common rules. At the beginning of the 17th century, the gouden rijder was introduced, a heavy gold coin valued at 14 guilder. Its name originated from a silver coin named rijder, corresponding with the rider on its obverse.

The Maria Theresa Thaler

The Hapsburg empire

As a saying puts it, "Let others wage war, you, fortunate Austria, marry!" This proverb illustrates the fact that in Austria, it was a successful dynastic policy that managed within few generations to create an empire which had no equal: Maximilian I acquired the rich Netherlands and a part of today's France by marrying the heiress of Burgundy. His grandson Charles V thereto inherited Spain and the kingdom of Naples from his mother. But soon after the end of his reign, the huge empire was divided again. The German house of Hapsburg took over the office of the Roman emperor and ruled Austria and large territories in Eastern Europe. Starting there, merchants traveled primarily to the Levant and Africa. Their coin, the Maria Theresa thaler, was to conquer the Eastern Hemisphere in the 19th century.





**Maria Theresa, archduchess of Austria
1740–1780, thaler, silver (27.98 g),
posthumous emission, Günzburg**

Soon after her accession to the throne, Maria Theresa began to strike thalers. However, the famous Maria Theresa thaler with its constant weight and standard did not come into being until 1753, when Austria and Bavaria agreed on a common trading coin, the Conventionsthaler. Exactly 10 Conventionsthalers should be struck from one Cologne mark of silver (= 233.856 g). The inscription on the edge, "IVSTITIA ET CLEMENTIA" (Lat. for justice and indulgence), made it impossible to imperceptibly file off silver from the edge and to reduce the value of the coin by that. Hence, the weight and the silver standard of the thaler were guaranteed if the inscription on the edge was intact. This was easy to check—and it made the Maria Theresa thaler the most popular trading coin of its time.

On our coin, Maria Theresa is not a young woman any more. She is wearing the widow's veil—her husband died in 1765. Her titles run "Maria Theresia, Roman empress, queen of Hungary and Bohemia." The reverse mentions further titles like archduchess of Austria. The signature below her neck refers to two coin officials of the mint of Günzburg, one of the most important mints of the Hapsburg monarchy. S stands for Tobias Schöbl, F. for Joseph Faby.

The thaler traveled over Trieste, the harbor of the Danube monarchy, to Egypt, a center of the coffee trade at the time. The Arabic world sent the silver to China and India to pay for spices and other exotic goods. In return for Austrian silver, Gold and ivory, ostrich feathers and slaves came from Africa to Europe. In 1780, however, the empress died. Her successor was confronted with the choice of either creating a new trading coin or keeping the Maria Theresa thaler. Merchants from Augsburg asked Joseph II to continue to strike the thaler with his mother's portrait. Joseph agreed and decided to use the portrait of the thalers from Günzburg, which he liked best, for all restrikes. Soon they were not only produced there, but also in Vienna, Alba Iulia (Transylvania), Prague, Kremnica, Milan and Venice.

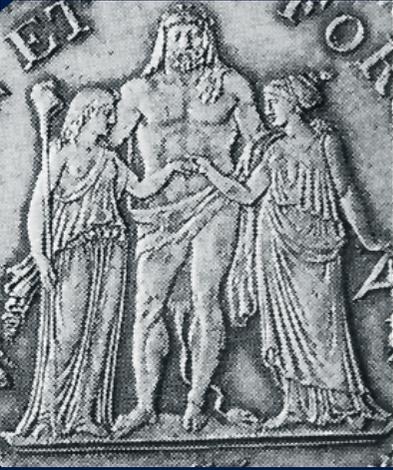
When in the middle of the 19th century the Austrian government decided to suspend the circulation of the Maria Theresa thaler because it did not fit with the currency system any more, emperor Franz Joseph II made sure by means of article 19 of the imperial patent of September 19, 1857, that the thaler could still be struck for the foreign trade. Thus the Austrian mint has produced the Maria Theresa thaler until today. The Maria Theresa thaler is mentioned nearly in every travelbook from the 19th century if it was written by someone making a journey to the Ottoman Empire or to North Africa. The locals called it Abu Teir (= father of the bird, because of the double-headed eagle on the reverse), Abu gnuchtu (= father of satisfaction) or simply rial or rial namsawi (= Austrian thaler). Its value fluctuated from place to place—just as a reference point,

Captain R. A. Mignan, who traveled in Oman in 1820, reported that a date palm cost 10 Maria Theresa thalers and that such a tree bore fruits valued at one or one and a half thaler per year. In the region of Lake Chad, one of these silver coins was exchanged for 4,000 cowries and in Dshedda, one ounce of fine gold cost 22 thalers in 1810.

When Mussolini planned his invasion of Abyssinia, he needed Maria Theresa thalers because they were the common currency there. Schuschnigg, hoping that Mussolini would support him politically in return, delivered the dies to Rome where huge masses of these coins were struck. Actually, the Maria Theresa thaler financed the operations of all combatants in the Levant and in Africa during World War II. Between 1936 and 1939, the Austrian coins were struck in London, Bombay, Paris and Brussels; after the war, the mint of Birmingham took on the production. But at that moment, the demand for Maria Theresa thalers was already declining. Saudi Arabia had officially called it in as early as 1928. Abyssinia followed after World War II. Yemen withdrew them in 1960, Oman in 1972.

But even today you will find Maria Theresa thalers in bazaars of the Near East. Jewelers buy them in order to make jewelry.

The Franc



Napoleon conquers Europe

When the new French constitution was declared on September 3, 1791, the voice of reason or rather the ideas of the era of Enlightenment had gained a victory. But at the same time, the French had made an enemy of every state in Europe ruled by an absolute monarch. In order to stand the ground against superior enemies, revolutionary France created a new military conception: in the militia, soldiers fought from conviction and capable men could rise to the highest ranks. The vanquished were not enslaved, but collected as combatants for the achievements of the French Revolution. Napoleon was to use this army to gain control over half of Europe.



Napoleon's campaigns did not only inflict defeats on European nations, but also caused tremendous suffering. At the same time, the victories of France brought new ideas, among them the French currency, the Franc. These coins achieved monetary unity of France; the French franc was in use all over the country. It was organized according to the decimal system. Hence, one franc was divided into 100 centimes. France had not invented this rational system, though; Peter the Great (tsar of Russia 1682–1725) had created his new currency according to this principle. But the French conquests spread the system, which made the use of coins much easier, over Europe.

By the way, the term "franc" is very old. The first coin of the same name was struck in 1360 in order to pay the ransom for the French king who had fallen into the hands of the English king. The inscription on the obverse contained the title "REX FRANCORUM" (Lat. for king of the Franks), out of which the name of the coin developed.

Napoleon, first consul of the French government 1799–1804, 5 francs, silver (28.83 g), Paris, year 11 (= 1802–1803)

The French representatives did not only reorganize the currency. They also replaced the old calendar, which they felt to be too ecclesiastical. That is why it says "year XI" on our coin. This date refers to the revolutionary era, which started on July 14, 1789, the day the Bastille was stormed.

The year was divided not in weeks, but in decades—the French applied the same rational system they had introduced for their currency, which, by the way, did not only consist of francs and centimes, but of "décimes," pieces of 10 centimes, as well.





Napoleon, first consul of the French government 1799–1804, 5 francs, silver (28.83 g), Paris, year 11 (= 1802–1803)

This coin type, created as the first 5-franc coin of the French Revolution in 1795, was struck by Napoleon for the last time in 1802/3 (= year 11). The coin celebrates revolutionary ideals on its reverse. The personification of Liberty holding the Phrygian cap on a long staff stands left, the personification of reason with angle and perpendicular right. Hercules is found between them. Since his choice of living an exhausting but virtuous life generally was perceived as exemplary, his picture was often used figuratively by artists. During the first half of the 19th century, the franc spread widely due to the immense importance of the French economy. It became the basis of the Latin Monetary Union, which France, Belgium, Italy, and Switzerland concluded on December 23, 1865. In 1868, Greece joined it. The contract laid down the binding standards according to which the coins had to be struck if they were to circulate within all participating nations. The Latin Monetary Union was successful to such a degree that politicians from several European states, from the US, Russia and the Ottoman Empire met during the International Monetary Conference of 1867 in order to think about making the franc the universal world currency. These plans were thwarted by the opposition of England and Prussia. Nevertheless, the franc remained one of the most important trading currencies until the dollar outstripped it after World War I.

The Pound Sterling

The British Empire before 1900

In 1769, Watt invented the steam engine; in 1785, Cartwright's power loom followed. The two machines facilitated an enormous increase in the production of cheap textiles. England produced more cloth than it could sell at home and in Europe. There was a clear demand for new markets and thus the English government supported the intensification of already existing trading connections. Private trading companies became top dogs on the foreign markets. It was only after the English queen had been crowned empress of India that the British (trading) Empire was consolidated systematically as a part of Great Britain. In 1909, the English queen ruled over about 23 % of the world's population.





**Henry III, king of England 1216–1272,
penny (= sterling), silver (1,44 g),
Cambridge, after 1251**

Offa of Mercia/England († 796) followed the Carolingian monetary reform as early as the 8th century. He divided the pound of silver—not the modern pound, of course, but the so-called tower pound of 349.9 g—in 240 pennies, the latter being the only coins to be struck. The present-day term “pound sterling” is nearly as old as that. In the second half of the 12th century, Henry II (king of England 1154–1189) created a coin which later was to be called sterling. Thus a pound sterling stood for nothing else than for a pound of 240 pennies—even if today’s pound has consisted of only 100 pennies since the currency conversion in 1971.

Our coin was struck under the reign of Henry III, son of the luckless John Lackland, who replaced the short cross of his predecessors on the coin’s reverse by a long one in order to impede the customary practice of clipping silver from a coin’s edge.



**Henry VII, king of England 1485–1509,
shilling, silver (9,13 g), 1502 (?)–1504**

Whereas in the course of the early and eighth Middle Ages, large amounts were paid in raw silver weighed on a scale, heavier silver coins prevailed on the market in the late Middle Ages (see p. 35 and 36). Henry VII, the first Tudor king, introduced the shilling valued at 12 pennies in England after the Wars of the Roses. Until then, the shilling had been a unit for calculations only. Henry had his own portrait put on the obverse dies—a usual practice at the time, derived from Italy.

**Elizabeth I, queen of England 1558–1603,
sovereign of 30 shillings, gold (15,44 g),
1583–1600**

Henry VII did not only introduce the shilling, he also invented a gold coin valued at 20 shillings which corresponded to the calculation unit pound. This coin showed the monarch sitting enthroned on the obverse. No wonder this representative coin type went down in history as a sovereign. Elizabeth I, his granddaughter, issued two varieties of this heavy gold coin: the sovereign of 20 shillings featuring her bust in profile on the obverse and a heavier sovereign of 30 shillings which is shown here.

This magnificent gold coin bears testimony to the first heyday of England, when courageous seamen like Francis Drake sailed the Seven Seas, discovered new countries, and the English fleet defeated the Spanish Armada.

Elizabeth I realized a comprehensive coin reform in cooperation with her counselor Sir Thomas Gresham. She systematically replaced all old coins that did not contain enough silver by new ones with a higher silver content.





George III, king of England 1760–1820, sovereign, gold (7,89 g), 1817

The financial burdens of the war against Napoleon led to a situation where a reform of the English currency was overdue. In 1816, it was realized. The golden sovereign valued at a pound became a regularly issued coinage and the most important nominal. The immense expansion of the British Empire caused the sovereign to become the most important trading coin of the world in the 19th and beginning 20th centuries. The most important silver coin, a 5-crown piece, was struck in sterling silver, i.e. the coin had a purity of $\frac{925}{1000}$.

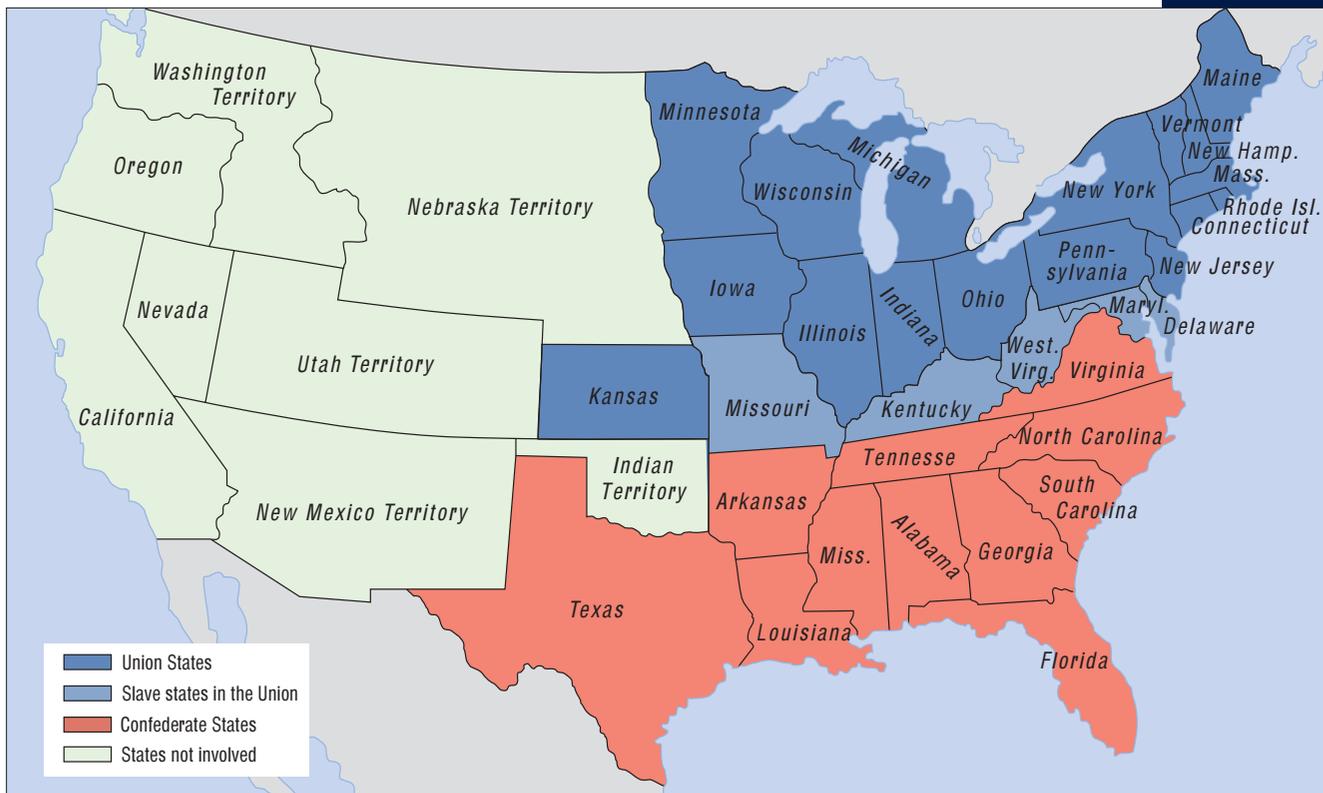
For the design, the patron saint of England was chosen: Saint George slaying the dragon. Bene-detto Pistrucci, an Italian artist working at the mint of London, created the popular coin type. Bullion coins featuring Saint George have been struck in the Royal Mint until this very day.

The US Dollar

Separation or unity?— The American Civil War

The American Civil War (1861–1865), the war between the Union and the Confederacy of America which was officially justified either with wanting to abolish slavery or insisting on the necessity of it, cost the lives of more Americans than any other war in the history of the United States. Still today, it is engraved in the collective memory of all Americans.

The Civil War initiated important economic changes which have set the tone of the American economic history for many years: the industrialized North had won the victory over the South, traditionally a rural area. After the war, the Union forced its economic system upon the defeated Confederate States. At the same time, the administration was centralized and numerous privileges of the federal states were abolished; Congress, for example, imposed the first national income tax then.





USA, dollar, silver (26.96 g), Philadelphia, 1795

In 1792, Congress passed the mint act, which regulated the coinage system of the country. On this occasion, the dollar was declared official currency of the USA. As to its weight and silver content, it depended on the Spanish reales de a ocho, which were called dollars and circulated in large quantities in the US.

In 1794, Philadelphia, the first mint of the US, started to strike coins. Congress had agreed upon the fact that the coin's obverse should not show the portrait of the president, but a personification of Liberty. She is surrounded by stars, whose number refers to the number of states that were members of the USA at that time. Two elements of the reverse were made compulsory: the eagle, heraldic animal of the US, and the inscription "UNITED STATES OF AMERICA."

USA, trade dollar, silver (27.2 g), San Francisco, 1877

The trade dollar was the American answer to European coins circulating in the Far East. It was struck solely for trade with China, Japan and Korea and its silver content was slightly higher than the one of regular coins.

Its obverse presented Lady Liberty pointing to the left, i.e. to the west where China was located, with an olive spray, symbol of peace.

The dollar becomes the world currency

In the late 19th century, the American economic system was shaken by crises and price declines. On December 23, 1913, Congress founded a system of privately controlled and locally oriented central banks to cushion the ups and downs. These banks were united in the Federal Reserve Bank, which in turn was under the supervision of the state. Even today, all banks with a head office located in the USA have to be members of the Federal Reserve System and have to supply a certain amount of money free of interest to their local central bank.

The Federal Reserve Bank is responsible for controlling the amount of money in circulation. It decides how many dollar bills will be printed each year, how many coins will be struck. Moreover, it maintains money reserves, which can be reduced or enlarged if required in order to react quickly to the needs of the market.

The new currency of the United States, the Federal Reserve Note, popularly called greenback, was introduced along with the Federal Reserve Bank. The Gold Standard Act of 1900 backed these bank notes by gold. Bank notes, gold and silver coins were issued at the same time and circulated side by side.

It was not before the Great Depression of 1929 that a change of policy became necessary. Considering the huge masses of unemployed, President Theodore Roosevelt decided to raise funds to overcome the crisis with the help of a limited inflation. To this end, he devalued the dollar by 40.34 % and forbade the circulation of gold coins at the same time. In addition to that, he enacted a law which made the possession of gold and gold coins a punishable offense for private persons. It was not before 1971 that this law was repealed. The dollar was backed by gold only in the international sphere.

This was the basic requirement for the dollar to become the world's reserve currency in the Bretton Woods Conference. At the end of World War II, the European Allies of the United States depended on generous dollar loans to finance reconstruction. That was the reason why the 32 signatory states agreed to accept every dollar presented to their central banks at a value of 35 dollar the ounce of gold. At the same time, many banks replaced their gold reserves by dollar reserves.

These circumstances have fixed the dollar exchange rate for many years. It was not before 1971 when the gold standard was abolished that the US dollar became a free-floating currency in competition with other national currencies.



USA, 20 dollars, gold (33.4 g), 1924

It happened at a casual lunch in 1905: the president of the United States of America, Theodore Roosevelt, talked about the "atrocious hideousness" of American coins to the famous artist Augustus Saint-Gaudens. This informal table talk was the initial spark for the artist to design a coin which was to be known as the most beautiful American coinage ever.

Being backed by the president himself, Saint-Gaudens was able to realize his artistic conception despite strong resistance on the part of the state mint: a Lady Liberty, the personification of freedom, seen from the front and of high relief. In August 1907, only 12,000 specimens were struck according the original draft. Then, even the president had to admit that the design of the artist was not qualified for mass production: up to eleven processes of striking were necessary to obtain the relief as requested.

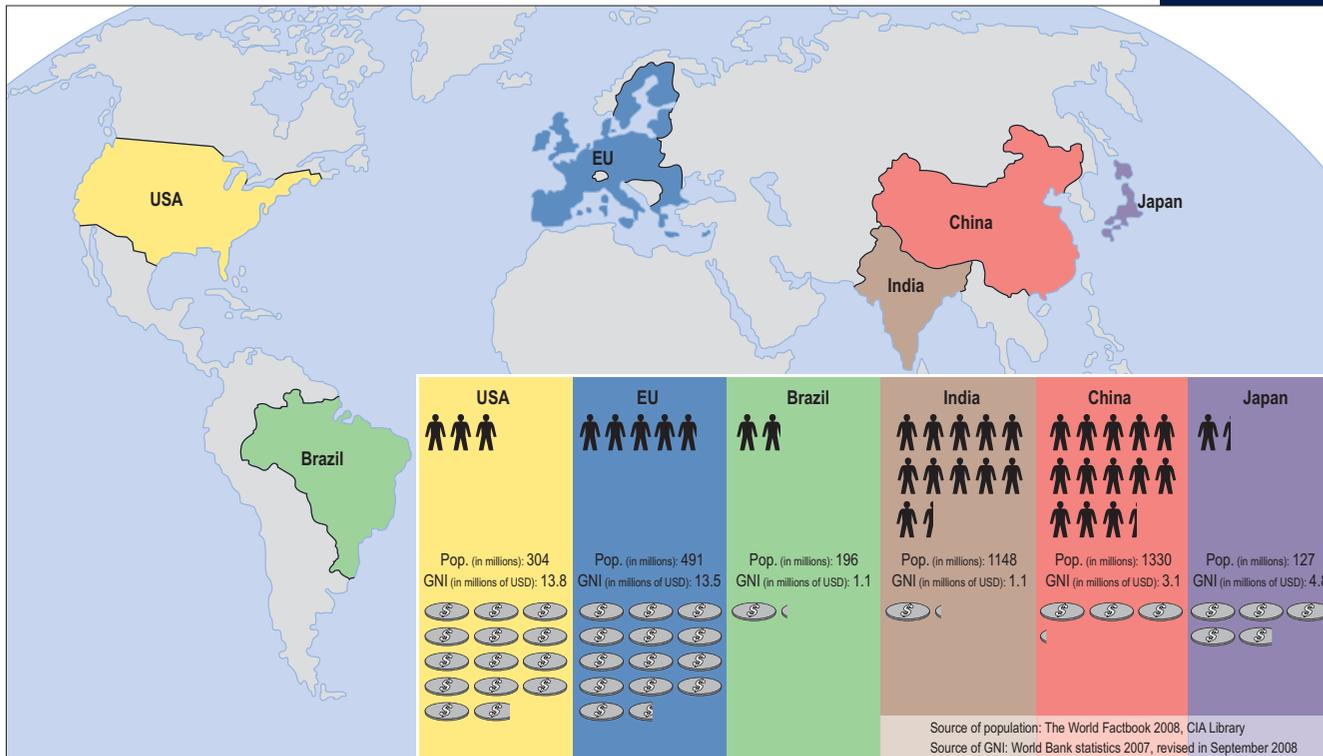
In the meantime, the artist had died, so Charles Barber, the official die engraver and Saint-Gaudens' antagonist, had the chance to adapt the artistic conception to the technical demands. He created a coin motif which was not the "most beautiful ever," but proved to be very useful. The double eagle was struck until 1933.

The Euro

Europe in our world

Europe has witnessed countless wars and it is much to be hoped that its citizens have learned from that. It is not important to stress the differences between the nations in modern Europe, but rather to find a common identity as Europeans. The European single market turns French and English, Spanish and Italian, Polish and German members into one single economic community—a first step to a peaceful united continent. Europe, lacking in mineral and other natural resources, will only be able to hold its ground against giants like the USA and China if it is united.

A European central bank and the introduction of the euro as an accounting currency in 1999 and as physical money in 2002 are the basis for a strong European market.





When the delegates of Belgium, Germany, France, Italy, Luxemburg and the Netherlands signed one of the Treaties of Rome, establishing the European Economic Community (EEC) on March 25, 1957, they dreamed of the creation of a common market for all nations participating. Today, about 50 years later, all expectations are exceeded by far. More than 20 additional nations have joined the six signers of the Rome Treaties; a number of others are negotiating at the moment for a potential membership.

All members of the EU have access to a free labor market and a single market not hindered by customs barriers. Natives as well as EU citizens are granted the right of equal treatment. States who have qualified by a low rate of inflation and a balanced national budget have the possibility to launch the euro as their currency. At present, it is in circulation in more than 20 European countries. Since its introduction, the European currency has set up as a strong, worldwide reserve currency beside the dollar.

