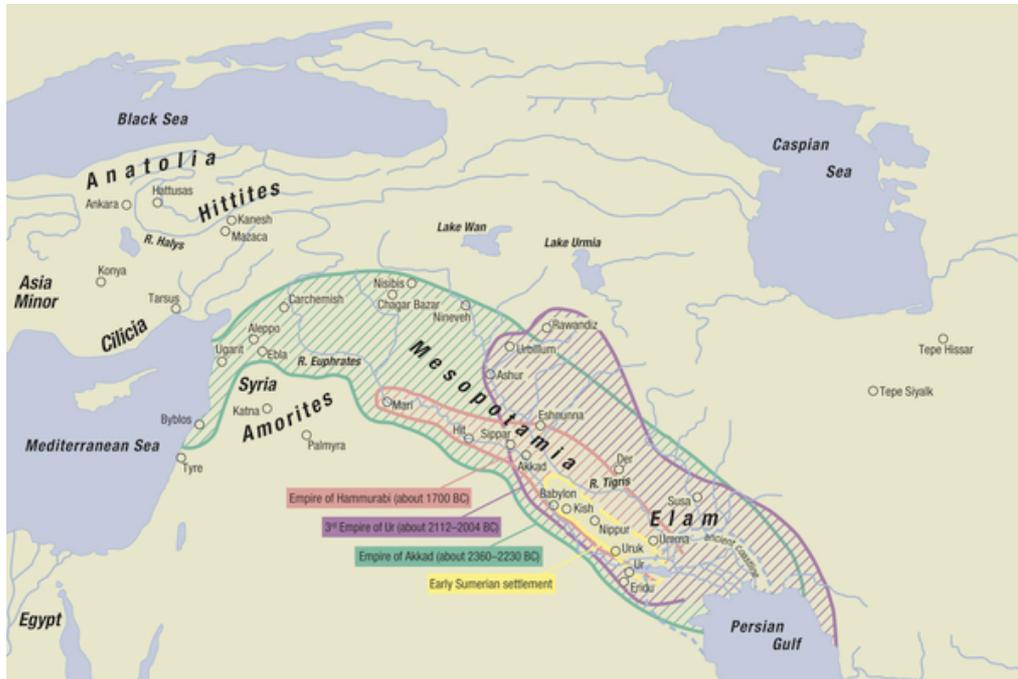


# The History of Money

By Jürg Konzett

Money is beautiful, money is interesting, money allows freedom – but like a spinning top it must be kept in motion. Hoard it and you are enslaved ... But from where or what does money originate? And why it gains and loses value again and again? Here you will find answers.

## The birth of writing – a basis for money



The ancient middle east was the cradle of civilization. Similar to Egypt, Mesopotamia (today's Iraq) became a fruitful land through irrigation to nourish its dense population. This led to the invention of water mills, canals, writing and to the development of governmental administrations. The latter initially were city-states; later empires were founded with the aim to unite the entire then-known world between the Persian Gulf and the Mediterranean, and to rule it from a center – first Akkad, then Ur, and finally Babylon. It was at this time that the fatal idea of world supremacy came into existence.

## Clay tablet with cuneiforms from the Old Akkadian period of Mesopotamia from about 2350-2150 BC



The Greek word for "to write" literally means "to scratch." The reason for that derives from the development of writing. The oldest form of writing, developed at the end of the 4th millennium BC in the lime-rich lowlands of Mesopotamia, was the cuneiform writing. One took an angular tool and pressed it into the clay, thus making tapered signs. Besides Mesopotamia cuneiform writing was also used in Egypt, where people wrote with hieroglyphs. Those are the two oldest forms of writing, and they both used hundreds of different signs. Only a small elite was able to use them.

This clay tablet from the Old Akkadian period displays a list of different goods: jars of fine oil are mentioned, loaves and certain amounts of flour.

## Gold stater of the Lydian king Croesus (561-546 BC), minted in Sardis

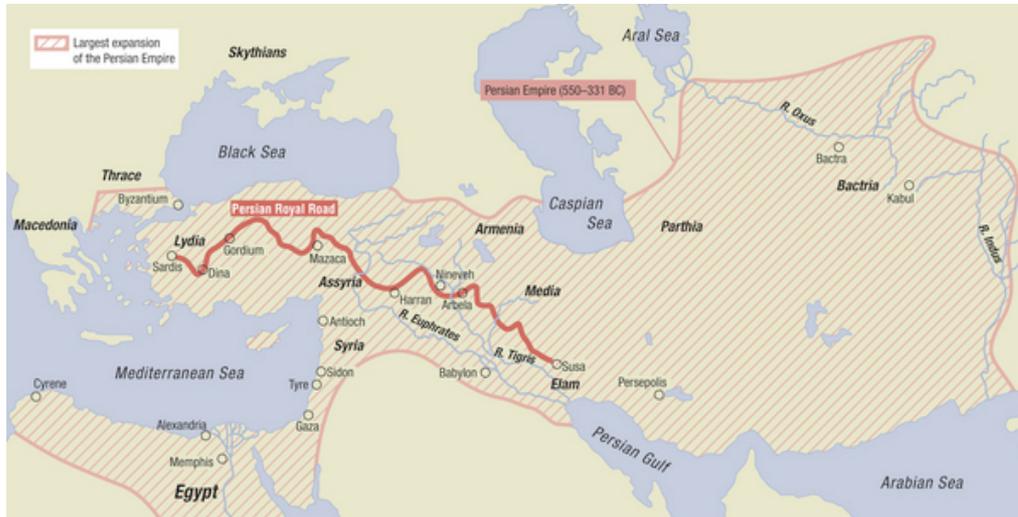


When people changed from self-supporters to traders and consumers, generally recognized means of payment became necessary; gathered surpluses had to be preserved, and to be exchanged when needed. Only metal could fulfill this function: skewers (in Greek: oboloi), axes, ingots, and later coins.

This is one of the very early coins: a gold stater, issued by King Croesus. Instead of the formerly used coins from electrum (a natural alloy of gold and silver), Croesus had money from gold and silver struck. It was thus Croesus who introduced the bimetallic coinage system that has been used in the Western world until the 20th century.

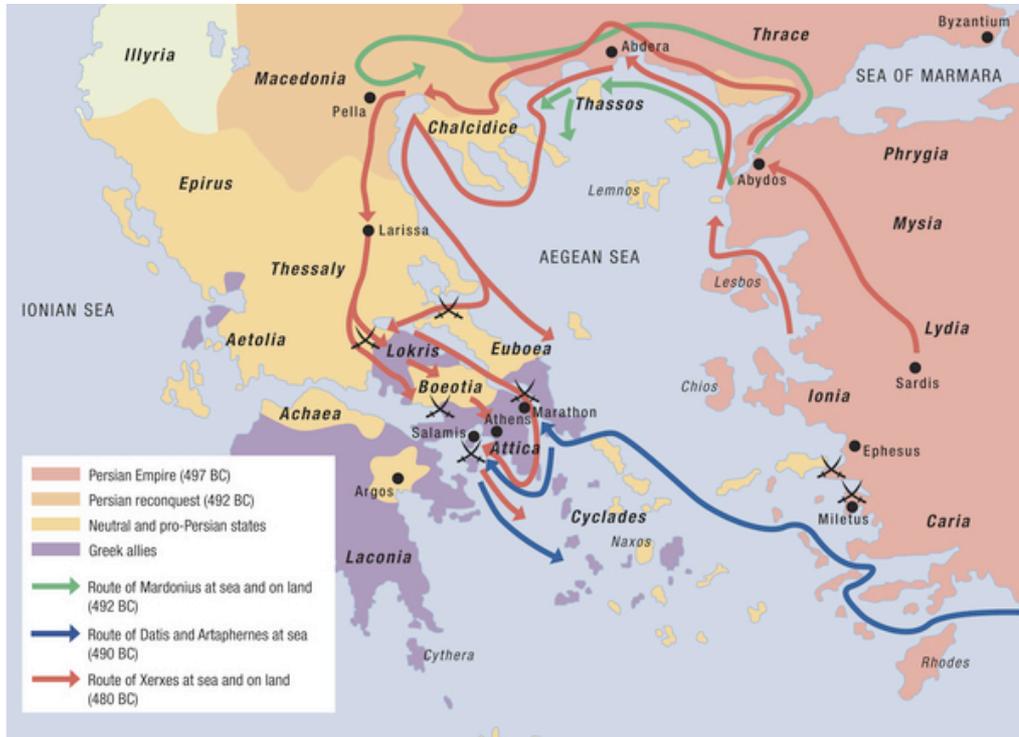
The term "stater" goes back to the Greek word for the weight that was used for balancing a scale. Staters existed in different weights, but they were always the highest denomination of a coin series. The importance of this more than 2,500-year-old coin lies in the fact that it enabled the first system of free and open markets. The result was the flourishing culture of the ancient Mediterranean world.

## The Persian Empire



The most impressive realm before the rise of the Romans was the Persian Empire. It united the most different peoples under the relatively tolerant rule of Great Kings. Independent satraps governed the provinces, although controlled by imperial secret agents. Along the Persian Royal Road ran the world's first postal service, albeit only in the service of the Great King.

## Persians and Greeks



Seen geographically, Europe should be a part of Asia. And indeed again and again invaders from Asia – the Huns, the Mongols, and other Asian peoples – tried to politically integrate the small landmass at the far western end of the continent. The Greeks have earned the credit of having staved off the Persians in their initial attempt to absorb Greece in the battles at Marathon and Salamis. What Europe would look like today if the Persians would have won those battles is a striking yet unanswerable question.

## Tetradrachm of the city of Athens, minted about 455 BC



This is the first major trade coin of the world. Such "owls," as these coins were called for their unvarying design, were issued from 510 to 38 BC. The owl was the attribute of Athens' city goddess Athena, the goddess of wisdom.

The majority of these coins were minted in the mid-5th century BC. At that time the Greek cities of the Delian League had to pay tribute money to Athens. These tributes were used for the construction of the Parthenon and other great buildings.

The tetradrachms, coins worth 4 drachms, remained the leading currency all over the Mediterranean for hundreds of years.

## Alexander's empire



After Alexander the Great had conquered the east of the world known to him, he planned a campaign westwards and hence world supremacy. Organized resistance was only to be expected from Carthage, since Rome was still battling with its nearest neighbors. Yet even if Alexander had not died at the early age of 33, his world supremacy would have hardly worked out. There was too much internal resistance – his Macedonian soldiers rebelled because Alexander forced them to take Persian wives and Persian satraps as counselors; without them, however, the huge empire would not have been governable.

## Tetradrachm of the Macedonian king Alexander III (336-323 BC), minted in Memphis, Egypt

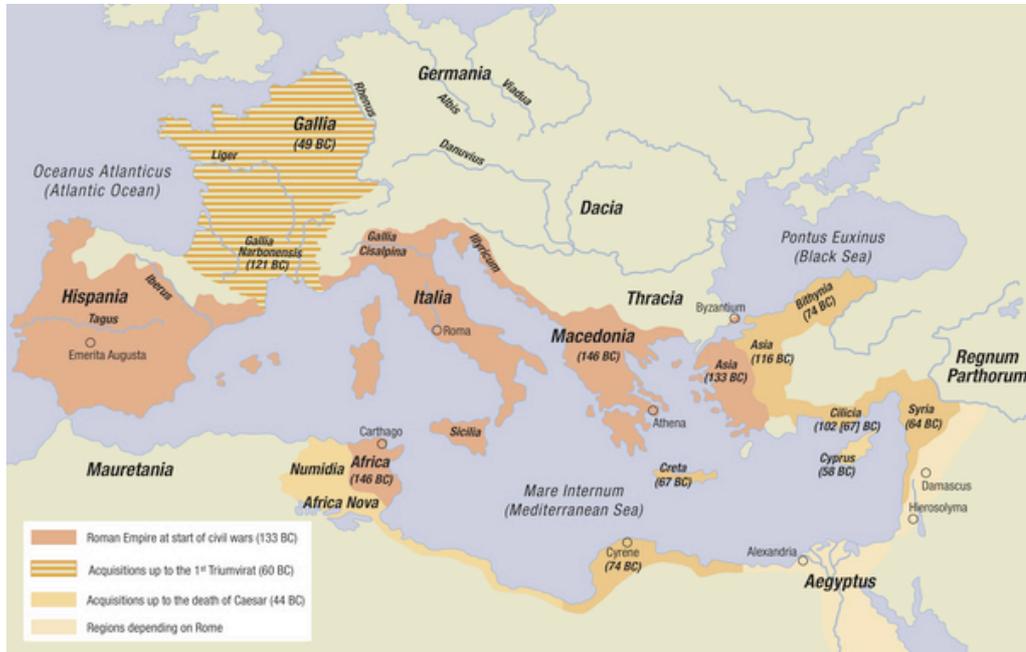


Alexander the Great conquered the entire Persian Empire and Egypt between 334 and 331 BC. When he died in Babylon in 323 BC, his empire stretched from Greece to India. At that time Greek became a world language and Alexander's coins a world currency.

This tetradrachm shows Alexander in the guise of the Greek hero Heracles. Such coins were issued in large numbers. Whenever a new city was captured, the silver hoards in its temples were smelted into coins. This enlarged the cash flow in the realm extremely, which in turn triggered trade.

Even though Alexander's reign lasted only 13 years, he restored Greek glory like no other Greek before him.

## Roman wars of conquest



Rome achieved naval supremacy through the Punic Wars. As a result the ancient culture that had hitherto only been known in the Orient and the eastern Mediterranean, spread throughout the Mediterranean world.

With Pompey's campaign to the east (66-63 BC) began a series of Roman conquests with which the respective commanders not only tried to subdue foreign territories, but also to recruit strong armies to acquire leadership in Rome itself. The main candidates for sole rule – Pompey, Crassus and Caesar – united in the First Triumvirate in 60 BC.

With his conquest of Gaul some years later, Julius Caesar brought Roman culture, especially the Latin language that would later develop into French, into the little cultivated northern lands; with this he became one of the first builders of Europe. Along the way he also gained enormous riches and a loyal and strong army.

## Denarius of the Roman Republic, minted in 211 BC



The silver denarius was introduced around 211 BC. It was geared to the old bronze currency of Rome: the X on the left of Roma's head represented 10 bronze asses; the name "denarius" is Latin and means "tenner." The silver denarii were used to pay mercenaries for their military services, because they had no use for the heavy Roman bronze coins. At the same time the denarius was of similar weight as the Greek drachm, which was convenient for trade. The coin's obverse always depicted Rome's city goddess Roma with a helmet and the X as indication of value.

Initially Rome had used heavy bronze lumps for money, later a combination of cast bronze coins for internal trade and Greek silver coins for far trade. This system collapsed during the chaos of the Second Punic War, and was replaced in 211 BC by the denarius. In the 2nd century AD, the Roman denarius was used from the shores of the Black Sea to Britain, and from North Africa to the Danube River – in other words, the denarius' area of circulation was far larger than that of the modern euro. As a coin, the denarius existed until the big inflation of the 3rd century AD. Its name, however, survived into modern times in the British penny that is abbreviated to d, in the French denier, in the German pfennig, and in the Italian denaro.

## The Byzantine Empire



Occidental ancient history ends with the fall of the Western Roman Empire in 476 AD. The Eastern Roman Empire, or Byzantine Empire, lasted through the Middle Ages until 1453, however. It reached an impressive size in 628 by the triumphs of Emperor Justinian, who reconquered the western lands that had previously been lost to the Goths and the Vandals. Yet the Byzantine Empire was soon reduced again, first by the Lombards, and then by the Arabs.

## Solidus of the Byzantine emperor Constantine I (307-337), minted in 314 in Trier



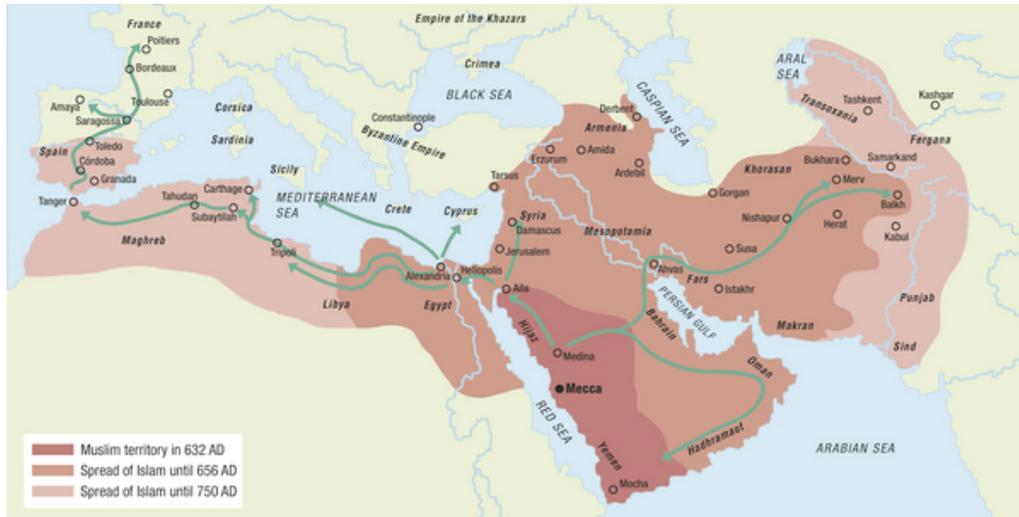
This coin documents the relocation of the center of power from Rome to Constantinople: the reverse of the solidus shows the goddess Roma handing over a globe to the ruler of Constantinople.

The Byzantine Empire lasted for more than a millennium. In the year 330, Emperor Constantine transferred the capital to Byzantium, which was named Constantinople after him. Until 1453, when the city was conquered by the Ottomans under Mohammed II, Byzantium formed a protective barrier between the Occident and the Orient. Antiquity, Orient and Occident were amalgamated in Byzantine art. It was the preservation of Greek and Roman art in Byzantium that sparked off the Renaissance in the 15th century.

The currency of the Byzantine Empire was the golden solidus. This coin became the link between the coinage systems of antiquity and the Middle Ages, because it was minted until the 14th century under different names and with different finenesses. The peoples of the Migration Period copied first the solidus, and later the third of a solidus, the tremissis.

Because of the Arabic conquest of the Mediterranean, the supply of gold for Europe meanwhile ceased bit by bit, however, and silver became the prevalent coin metal. Gold came again into circulation in the 13th century, first in the form of Arabic gold coins in Spain, then in southern Italy, and finally in the northern Italian towns as well. From there, gold coins eventually spread all over Europe again.

## The spread of Islam



When the Prophet Muhammad founded the Islamic religion, he united the quarreling Arabic tribes into a people of world conquerors. In Damascus the dynasty of the Umayyads formed the first Islamic caliphate. They extended the Islamic empire to Turkistan, North Africa, Spain and into the Punjab region. In 750, the Abbasids overthrew the Umayyad caliphate. The Umayyads relocated to Al-Andalus, where they erected a realm that led to a blossoming of Arab culture in Spain.

In Damascus the Umayyads developed the first typical Islamic-Arabic coins that were used as models by the following Islamic dynasties and rulers: nonpictorial golden dinars and silver dirhams that bore suras from the Koran and were dated after the Hijrah\*. The dinars had the same weight as the Byzantine solidi, yet their name derived from the Roman denarius. One golden dinar equaled 10 silver dirhams. Finds from Scandinavia and the Baltic and Slavic countries prove that the dirham was the major Arab trade coin for more than 300 years.

\*Hijrah is the Islamic calculation of time, starting with the migration of the Prophet from Mecca to the city of Medina in 622 (Common Era). It is abbreviated AH (anno hegirae).

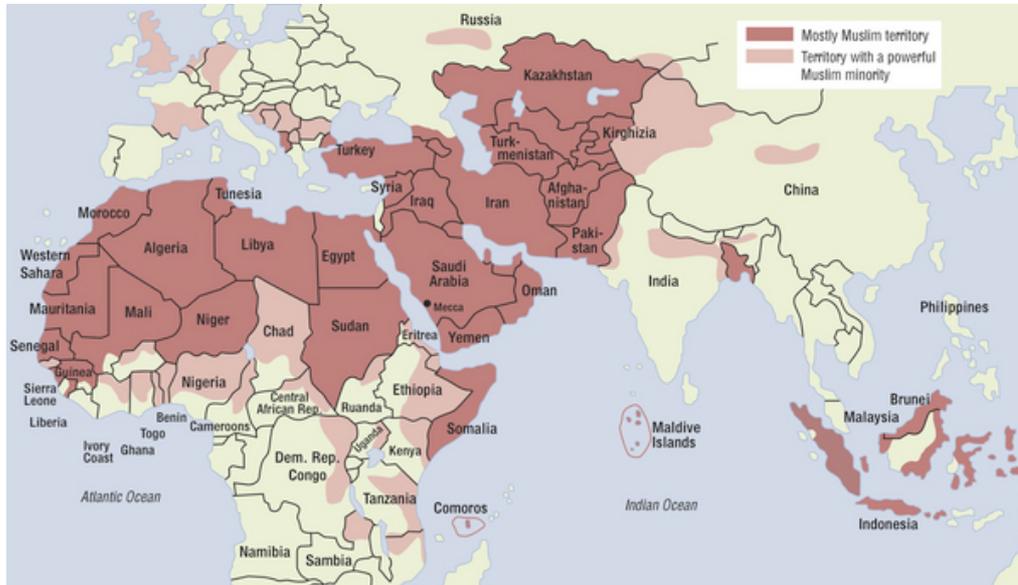
## Dirham of the Umayyad caliph Abd al-Malik (685-705), minted 699-741



Deriving from the Persian drachm of the Sassanid dynasty, the dirham became the silver currency of the Arab coinage system. As a coin of account it was introduced in 632 already, shortly after the death of the Prophet Muhammad. The first real silver dirhams were issued during the reign of the fifth Umayyad caliph, Abd al-Malik. In his currency reform of 695/96, he enforced the Islamic ban of depicting god and his creation on coin designs, too. This coin is one of the first issued after the reform. The obverse bears the inscription that can be read on every Islamic coin: "There is no God but Allah. He has no partners."

The dirham of Abd al-Malik spread throughout the entire caliphate from Bactria to Spain, and was issued in many different mints. It found its largest circulation from 800 to 1012. The name "dirham" is used in some Islamic countries up to this day, namely in Morocco and in the United Arab Emirates.

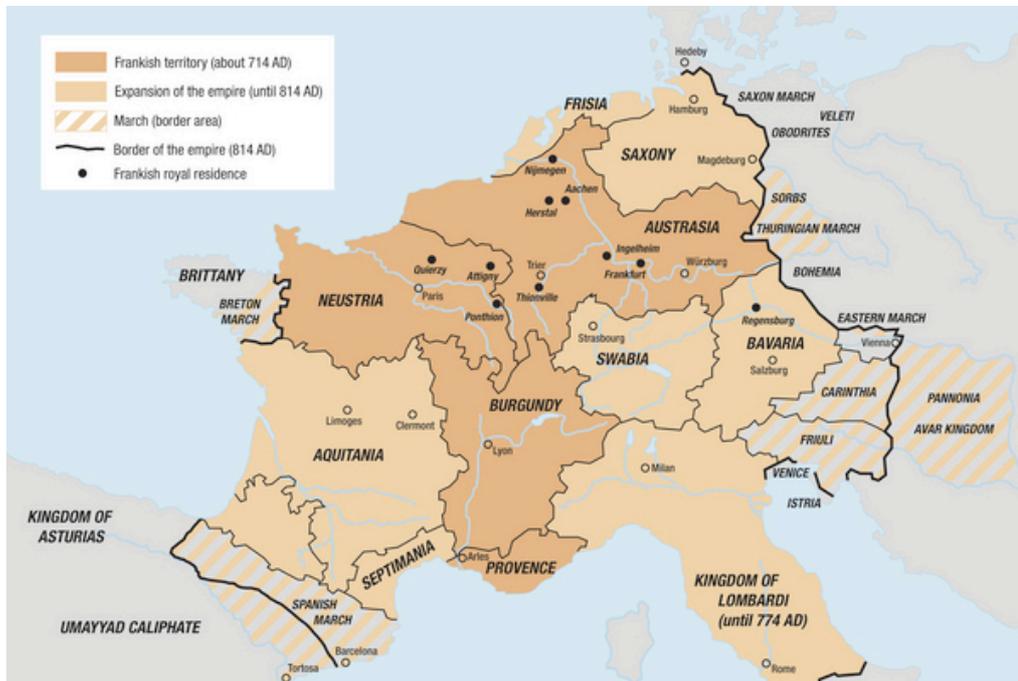
## The Islamic world today



The Arabs were split into several tribes and groups until the 6th century. They were mostly Bedouins (nomads) led by sheiks, having in common only their Semitic language and tradition, as well as the holy city of Mecca and the sanctuary of the Kaaba. In the 7th century, the Prophet Muhammad founded the Islamic religion and in this way united the Arab world. Muhammad's successors expanded Arab power well beyond the Arabian Peninsula, creating an Arabic zone of influence that stretched from northwest India, across Central Asia, the Middle East, North Africa, southern Italy, and the Iberian Peninsula, to the Pyrenees. The dinar became the internationally accepted gold coin, the dirham the silver coin of the Arab countries.

The first Islamic dynasty were the Umayyads, founded by Muawiyah I, the governor of Syria, who proclaimed himself caliph in 660. However, not all the Muslims accepted Muawiyah as their rightful ruler. This resulted in a schism between the Sunnis, the followers of Muawiyah, and the Shiites, the adherents of Ali, the cousin and son-in-law of the Prophet Muhammad. This division is a problem for the Islamic world up to this day. The Sunnis constitute the majority in most Islamic countries. The Shiites initially had their center in the south of modern Iraq; today they are the majority in the countries of the so-called Shiite Crescent: in Iran, Iraq, Bahrain, Azerbaijan and the Lebanon.

## The Frankish empire



The most famous Frankish ruler, Charlemagne, increased his power by spreading Christianity. This was sometimes a very bloody matter, for instance in the case of the Saxons.

In the year 800, the needy pope Leo III bestowed Charles with the title of Roman emperor that at that time still carried much distinction. Charlemagne's empire was not to be compared with the Roman Empire, however: it had few navigational canals and was divided by three mountain ranges – the Alps, the Pyrenees, and the Vosges. This hindered a flourishing economy. Still, the unification of the Roman and German peoples and their rivaling collaboration eventually led to a united Europe.

## Pfennig of the Frankish king Charlemagne (768-814), minted after 794 in Milan



The pfennig was the successor to the Roman denarius. The German term "Pfennig" and the English "penny" are Germanic equivalents of the Latin word "denarius." The d on the British copper pennies was evidence for this relationship until the 20th century.

The coinage system of the Frankish empire was centralized, even if a comprehensive supply with coins needed several mints. This coin bears the inscription "MEDIOL" for Milan; in the center is the monogram of Charlemagne. The reverse of the coin shows the legend "CARLVS REX FR" (Charles, king of the Fr[anks]), and a Christian cross.

Charlemagne introduced a coinage system in which one pound equaled 20 shillings, while a shilling equaled 12 pennies; one pound was thus worth 240 pennies – a system that remained in use in England well into the 20th century.

## Growth in the High Middle Ages



From the mid-11th century began far-reaching changes in Europe. They were caused by a rapid increase of the population that continued into the 14th century. This brought about the settling of new lands, the development of new production techniques and as a result the enhancement of crops. All this again triggered handwork, trade and economy.

This age saw the rise of modern states in Western Europe and the ascent of the great Italian city-states. Education came within reach of wider circles – being able to read and to write was no longer a privilege of clerics, but could be learned by officials and noblemen as well. Minster and convent schools were founded, the first universities opened. At the same time papacy and worldly rulers quarreled for supremacy. The height of this power struggle was the so-called Investiture Controversy about the inauguration of clerics.

The High Middle Ages were also the time of the Crusades, the first European colonization. They brought about a blossoming of knighthood, but also new knowledge like the rediscovery of the writings of Aristotle.

## The Crusades



The seven medieval wars for the sovereignty over Jerusalem were ostensibly driven by religion: the grave of Jesus, Jerusalem and the Holy Land were to be freed from the rule of the "pagan" Muslims. Behind the religious motive, however, stood the claim to political power of the pope. He had the chance to gain world supremacy – at least in the Christian world – if he only succeeded to unite the Christian peoples in their struggle against Islam.

Jerusalem was conquered during the First Crusade (1096-99) indeed, but in 1187 it was lost again to the Muslim sultan Saladin. Yet despite of this the Crusades showed permanent results, particularly in a flourishing Italian trade. The Fourth Crusade (1202-04), financed by Venice, did not even concentrate on Jerusalem any more, but contented itself with razing Zara to the ground, Venice's concurrence on the Dalmatian coast, and to plunder Constantinople.

## The development of international banking in Italy



The Crusades had numerous impacts. While knights from various countries journeyed to the Holy Land – be it for love of adventure or warfare, or out of piety –, the citizens of the northern Italian towns saw their chance to do business with the crusaders as well as with the Orient. Sea republics like Genoa, Pisa or Venice were the first to profit.

The Italian trade towns sent the goods from the Levant – the countries of the eastern Mediterranean – further into Central Europe. The major trading points were the Champagne fairs. The transaction of their merchandise in remote lands gave the merchants of Genoa, Siena or Florence the idea to introduce so-called promissory notes instead of transporting large sums of heavy coins: thus funds accumulated in foreign cities could be deposited at a banker against a receipt, the promissory note. This note could be cashed again in various other towns. This is how the international banking system came into being from about 1200.

The most widely used international trade coin was soon the gulden, issued for the first time in Florence in 1252. The gulden was called "fiorino" in Italian, which in other languages developed into "floren." This is why the guilder, how the coin was called in the Netherlands where it circulated until the introduction of the euro in 2002, was abbreviated to "fl."

## Gold gulden of the Republic of Florence, minted 1252-1307



The gold coin of the rich Italian trade city of Florence had a weight of 3.5 grams and bore a lily flower on the obverse. This fleur de lis (in Latin: flos) is why the coin was called fiorino d'oro in Italian and florin in English. The minting of gold coins was possible from 1252 because the Crusades had brought vast amounts of gold into Italy. Large transactions were much easier with valuable gold coins than with silver. The florin thus became one of the major trade coins of the Middle Ages and was imitated in many countries.

## Grosso of the Holy Roman emperor Frederick II (1197-1250), minted in 1250 in Bergamo



The grosso was the first silver coin larger than a double denaro, the highest denomination that had been issued in medieval Italy so far. The name derived from "grossus denarius," meaning "thick" or "heavy denarius" or "penny."

Grossi were needed because trade flourished in northern Italy in the 12th and 13th centuries. This was the reason why those coins were first issued in the rich Italian trade towns of Genoa and Venice. Later they were copied by many other Italian and northern European towns. In English language, grossi were called groats.

This coin, depicting Frederick as Roman emperor in accordance to his position, equaled 6 denarii.

## The Dutch seafaring



The fight for independence that the Dutch fought against the Spaniards in the 16th century, triggered the construction of a strong fleet. Because Spain was vulnerable on all the oceans, the struggle for Dutch freedom developed into a war in the colonies.

The name "New Amsterdam" was used for three settlements and discoveries in the course of the Dutch seafaring of the 16th and 17th centuries: for an island in the Indian Ocean, for a settlement on the south American coast that later became Georgetown, Guyana, and for a Dutch colony on the island of Manhattan that became New York under English rule from 1664.

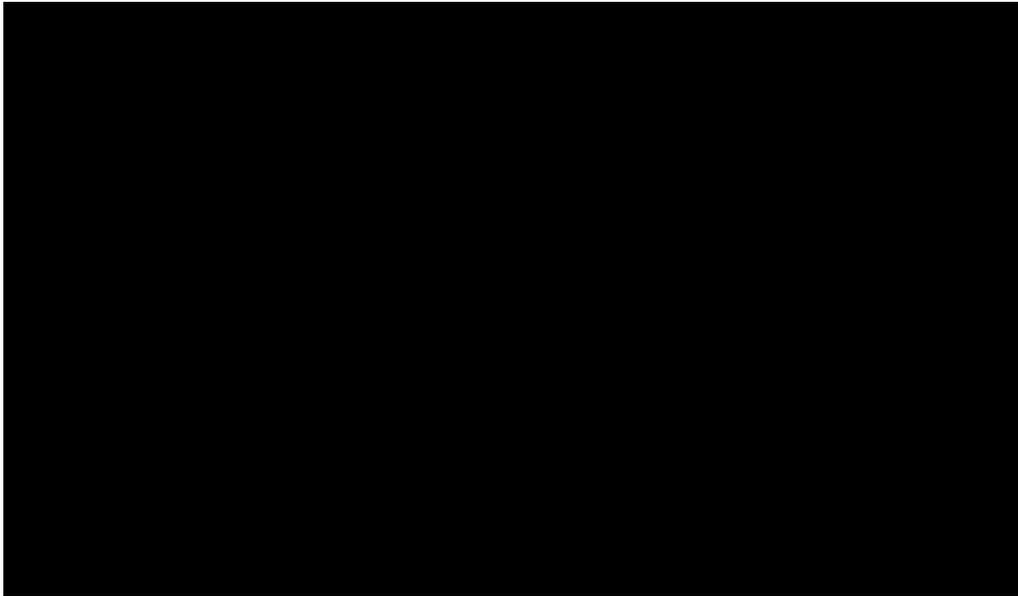
## Rijder of the Republic of the Seven United Provinces, minted in 1763 in Dordrecht



Holland was the most important of the seven provinces of the northern Netherlands. Its economic center was Amsterdam, also called "Venice of the North," since the town was built entirely on stilts. In the year 1622, Amsterdam already had 100,000 inhabitants. Thanks to international trade the city boomed, so that Amsterdam became the first trade metropolis of Europe in the 17th century. Both the Dutch East India and the Dutch West India Company had their seat there.

The United Provinces issued since 1606 the gouden rijder; the gold coin had its name from the design of the rider on the obverse. Initially the value of the gouden rijders ranged from 10 to 11 guilders; in 1749 their price was increased to 14 guilders, a rate that remained effective until 1763.

## The house of Hapsburg



The house of Hapsburg became the most powerful dynasty of all times through targeted power politics and clever political marriages. From 1438 to 1740, all emperors of the Holy Roman Empire were descendents of the Hapsburgs. In the 16th and 17th centuries, they also ruled over the kingdoms of Spain and Portugal, and thus over their oversea territories in America, Asia and Africa.

After the demise of the last male Hapsburg, Emperor Charles VI, in 1740, Charles daughter Maria Theresa and her husband Francis Stephen of Lorraine founded the dynasty of Hapsburg-Lorraine that appointed the emperors again from 1765 to the collapse of the Holy Roman Empire in 1806. The last Roman-German emperor, Francis II, founded the hereditary Austrian Empire that existed until 1918.

Maria Theresa also instituted a coin that was to gain great importance as trade coin in Africa and the Levant in the 18th century. It was the so-called Maria Theresa or Levant taler.

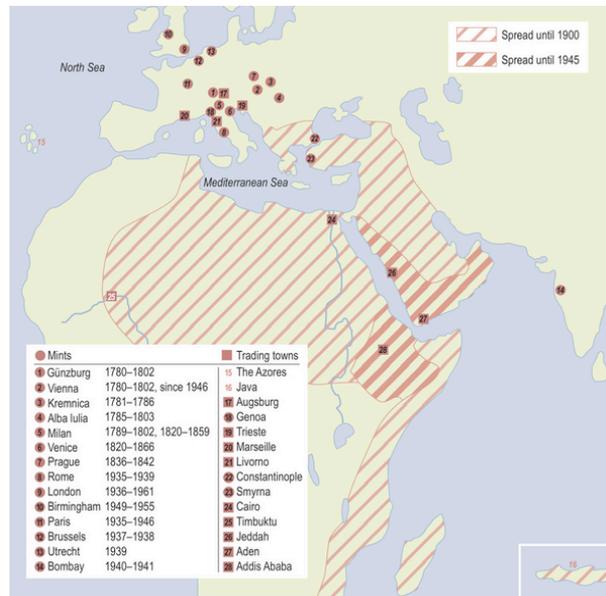
## Maria Theresa taler (restrike) of the Austrian ruler Maria Theresa (1740-1780), minted from 1780 on



According to the course of succession instituted in the Pragmatic Sanction by Emperor Charles VI, his daughter Maria Theresa followed him to the throne after his death in 1740. The regulation led to the War of the Austrian Succession, during which Maria Theresa managed to avoid the impending division of her empire. She was highly popular among her subjects, and ruled for 40 years over a realm that at times stretched from the Austrian Netherlands to Transylvania, and from Silesia to Parma. In the government of her multi-ethnic state Maria Theresa showed the same skill as her contemporary Catherine the Great of Russia.

This Maria Theresa taler was struck in the mint of Günzburg, an Austrian enclave in today's Bavaria. The coin depicts the already aging empress wearing a widow's veil with an especially opulent bust that was perhaps after the fancy of the Orientals. However, the constancy of the fineness and the design of the coin might have added to its popularity. The Maria Theresa taler was one of the most long-lasting silver trade coins of monetary history and also later always showed the year 1780, the year of Maria Theresa's death.

## The spread of the Maria Theresa taler

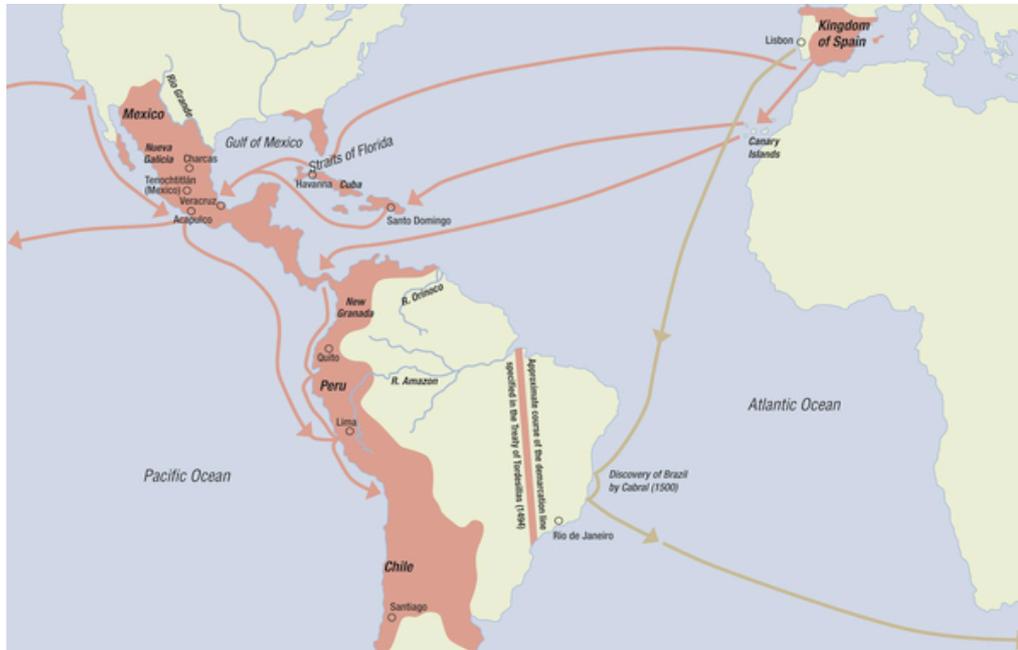


Today's small landlocked state of Austria is hardly considered capable of having any influence on other continents. Yet on the one hand the colonial power Spain was once upon a time ruled by Hapsburg kings. And on the other hand, the harbor town of Trieste belonged to Austria from 1381 to 1918 (with brief interruptions); Trieste was almost as well located in the eastern Mediterranean as Venice.

Through coffee trade the Maria Theresa taler underwent a significant circulation. The need for trade with the East was so great that in 1783 the Austrian Court Chamber ordered that the taler with the image of the empress should continue to be minted, even though Maria Theresa had died in 1780. As late as 1927, over 15 million talers were exported to Arabia from Vienna – all bearing the date of 1780. In Venice, Tuscany and Prussia those talers were already copied in the 18th century. From 1935, they were also produced in Rome, Paris, London and Brussels. To pay the troops in East Africa and the partisans in Ethiopia, the British even minted the Maria Theresa taler in Bombay in 1940.

Its area of circulation was thus huge. Arab merchants spread the coin throughout the whole Ottoman Empire, in North Africa, but also as far as the Azores and to the center of Africa, to Niger, Chad and Sudan as well as along the east coast to Zanzibar and Mozambique. In the 20th century, this taler still dominated the money in circulation in the Arabian Peninsula. In Ethiopia the Maria Theresa taler was the country's official currency until the Italian occupation in 1936. And the main mint of Vienna sells such talers up to this day.

## The Spanish colonization of America



The Spanish following Christopher Columbus to America could have met an advanced culture with an excellent knowledge of astronomy and mathematics. Yet they preferred to destroy this culture and to force the Indians, as they wrongly called them, to convert to Catholicism. The Aztec empire of Montezuma with his 200,000 warriors was conquered by the Spanish conquistador Hernando Cortez with only 500 men from 1519 to 1521. Cortez achieved this victory with 14 cannons and 24 horsemen, thereby introducing the horse to the Americas.

The peso or real de a ocho was the trade coin of early modern times. Its Spanish name (in English: weight) had its origin in the silver lumps of the same weight that the Spanish used as means of payment in America before the opening of mints. The coin worth 8 reales approximately corresponded to the German taler.

Pesos were minted from 1536 in Mexico, the first mint on American soil. With the exploitation of the silver mines of Peru, the issue of pesos took on gigantic dimensions. Between 1537 and 1888, 3 billion pesos are said to have been struck in Mexico alone. The coins, also known as pillar dollars, were circulating all over the world.

## Doubloon of 8 escudos of the new Spanish viceroy Philip V (1700-1746), minted in 1737 in Lima



Since the possession of unminted precious metals was forbidden in the Spanish colonies of the New World, the owners of silver and gold mines had their metal minted into crude coins. Those pieces were called pirate or ship pesos, because their images and inscriptions were mostly undistinguishable, and people therefore believed that they had been struck on board of the silver ships that brought precious metals from America to Europe. These silver fleets always sailed in large groups for fear of pirates; they shipped up to 15 million silver coins to Spain every year. The ship pesos were the most important raw materials for coinage throughout Europe.

Most ship pesos were from silver, but some were also from gold, as this coin shows. Common to all those coins is the relatively careless mint, because they were mass coinage.

## The spread of the Spanish peso



The Spanish peso, the real de a ocho, was issued in large scale by Charles V as king of Spain. The name "peso" is said to have derived from the fact that the Spanish used silver lumps of a certain weight as means of payment before introducing coins in their American colonies. Those silver lumps were called pesos. To coin the silver from the mountains of Mexico, the first Spanish mint was opened there in 1535.

Mints soon opened also in Lima, Peru, and Potosí, Bolivia. The peso minted there bore the Spanish coat of arms or the two Pillars of Heracles with Charles V's motto "PLUS ULTRA" (Further beyond), and between the pillars two globes with the eastern and the western hemisphere respectively.

The peso became the main currency on the entire American continent. In North America it was called Spanish or Mexican dollar. When America introduced its first banknotes in 1785, they were equivalent to Spanish dollars, and with the Coinage Act of 1792, the Spanish dollar was made the legal tender of the United States. In Canada, after the collapse of French rule in 1763, the Spanish dollar was the most frequently used coin, too. Also in East Asia, pesos were popular and widely used, the Mexican peso being the main trade coin of China until the 19th century. It was called yuan in Chinese, meaning "round coin." The Japanese adopted the Chinese yuan and altered it into the yen when they introduced their own currency in 1871.

## The Napoleonic empire



Napoleon attempted to establish his power throughout Europe by using family politics, as if he were a medieval feudal lord. He made his brother Louis Bonaparte king of Holland in 1806, while his brother Joseph became king of Spain. Brother Jerome Bonaparte was given the kingdom of Westphalia in 1807, and sister Marie Caroline Murat-Bonaparte became queen of Naples in 1808. 16 German princes, amongst them the kings of Württemberg and Bavaria, allowed Napoleon to unite them in the Rhine Bund. And when the Continental System against England was not observed – especially in Holland, Dalmatia and the Papal States – Napoleon declared these territories simply as French possessions.

## 5 francs of the French emperor Napoleon I (1804-1814), minted in 1810



The franc was introduced with the French Revolution in 1795 bringing order into the currency system. Up until then the livre was the French monetary system having been adapted from the Charles' pound and was divided into 20 shillings to 12 deniers each. The livre tournouis, however, suffered from depreciation and thus was replaced by the franc, divided into 100 centimes.

The franc played an important role in the 19th century, for example in the Latin Monetary Union, but was eventually replaced by the English pound.

## The British Empire



As with the first industrial revolution, England was leader of imperialism for many years. As a naval power it based its empire on relatively small but strategically important places like Gibraltar, Malta, Aden, the Cap Colony, Singapore, Hong Kong, or the Falklands, rather than conquering large territories. Since the Pax Romana of antiquity, one could finally speak of a new peacetime between 1815 and 1914, the Pax Britannica. This was something neither Papal, German, Spanish nor French attempts for world supremacy had ever accomplished.

## Sovereign undated of the English queen Elizabeth I (1558-1603), minted about 1583



Under the reign of Elizabeth I England, which in those times counted a population of only 4 million inhabitants, grew into a trading and maritime power and began to play an important role on the world political stage. For instance, in 1584 the first English colony was founded in America – named Virginia after the unmarried queen –, and in 1592 the Levant Trading Company and in 1600 the British East India Company were set up. When in 1587 Philip II of Spain used the execution of Scottish queen Mary Stuart, a Catholic, as a pretext for going to war at sea against Elizabeth with his allegedly invincible Armada, England's fleet turned out to be superior.

Here Elizabeth I is depicted on a sovereign. The coin, which was given its name from the picture of the first ruler majestically enthroned on its obverse, was introduced under Henry VII as early as 1489. It was originally worth 20 shillings of 12 pence each, i.e. it had the value of the pound sterling with 240 pence.

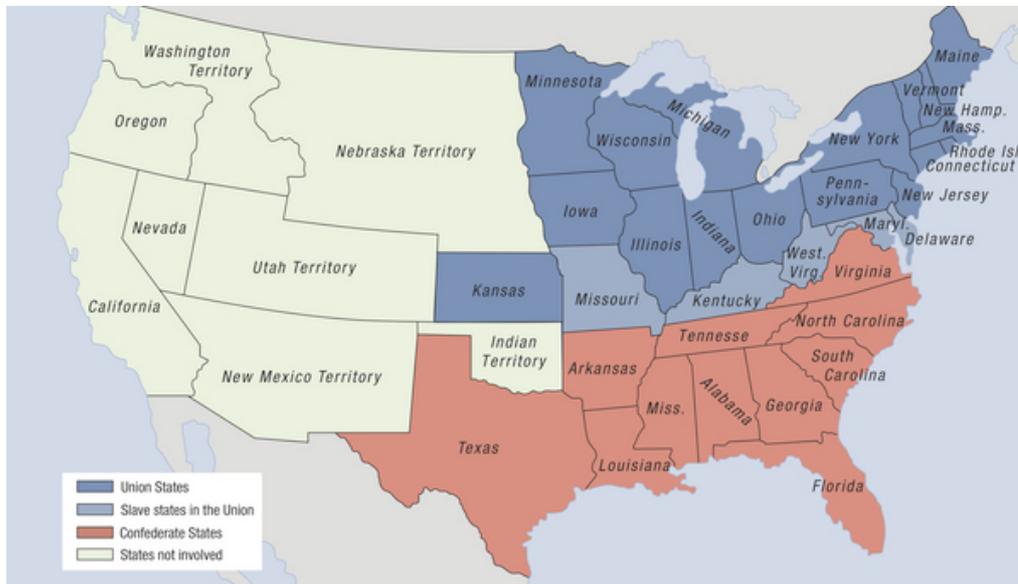
## Sovereign of the British king George III (1760-1820), minted in 1817



The Coinage Act of 1816 gave the British coinage system the form in which, thanks to Britain's role as leading world economy, it was to become the most important world currency system until the beginning of the First World War (1914). Apart from minor changes in design, the British currency system remained stable and unaltered. It was based on a gold coin, the sovereign, that was issued in large amounts. The sovereign's value corresponded to that of the former pound.

The image showed Saint George as dragon killer, a work of the Italian engraver Benedetto Pistrucci who was highly regarded on the British court. The motif of Saint George is very popular until this day; it appears on many of the newer English gold coins as well as on the silver crowns.

## The development of the United States of America



In the eastern part of the United States existed a flourishing industry around 1850, in spite of strong competition from England. The states in the south, on the other hand, still adhered to traditional production techniques and worked their plantations with colored slaves. It was among Abraham Lincoln's goals to free those slaves when he was elected American president in 1861. In the American Civil War between the eastern and the southern states which began in the same year and waged until 1865, other matters became more important, however. To give the state the power to enact common laws, the Union had to be bestowed with more power. The industrialized states also expected more protectionism for their goods by the Union. Yet this was against the interests of the southern states and their trade with England. The southern states (the so-called Confederates) thus wanted to be confederated rather than united.

## 20 dollar of the United States of America, minted in 1908 in Philadelphia



The United States of America liberated themselves from British rule in 1776. A few years later, in 1792, America introduced a proper currency that differed in many ways from the English pound sterling. The new American coins were called dollars after the German talers, yet their weight and fineness was geared to the Spanish-Mexican peso. The dollar sign possibly derived from a symbol used for the peso in the commercial books of the time: from "piece of 8" (for "real de a ocho") over "P 8" to \$. As yet, the dollar has remained the most important world currency. Many currencies were modeled after it, for instance those of Canada, Australia, or New Zealand.

This 20-dollar gold coin from 1908 is a masterpiece, designed by the sculptor Augustus Saint-Gaudens. It was introduced by President Roosevelt, who was a great enthusiast of ancient Greek coins, and in circulation from 1907 to 1933.

## Economic unity in Europe and the chance for the euro



At the threshold of the 3rd millennium, Europe has got the opportunity to reorganize its currency system. The advantages – economic upswing, strong political and economic cooperation – are obvious. Yet, the potential is enormous: the number of people in countries using the euro is larger than the number of US citizens. Thus the euro could help the political and economic integration of Europe.