Transactional Banking

The Destroyer of Civilization

The Clinton Gift to Society

The Temple of Apollo on the Greek Island of Delos
(First Central Bank)

What Lies Ahead

Armstrong Economics

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Armstrong Economics
Brandywine Plaza West - 1521 Concord Pike - Suite 301
Wilmington DE 19803
USA +1 302 448 8080 Switzerland +41 43 534 6209

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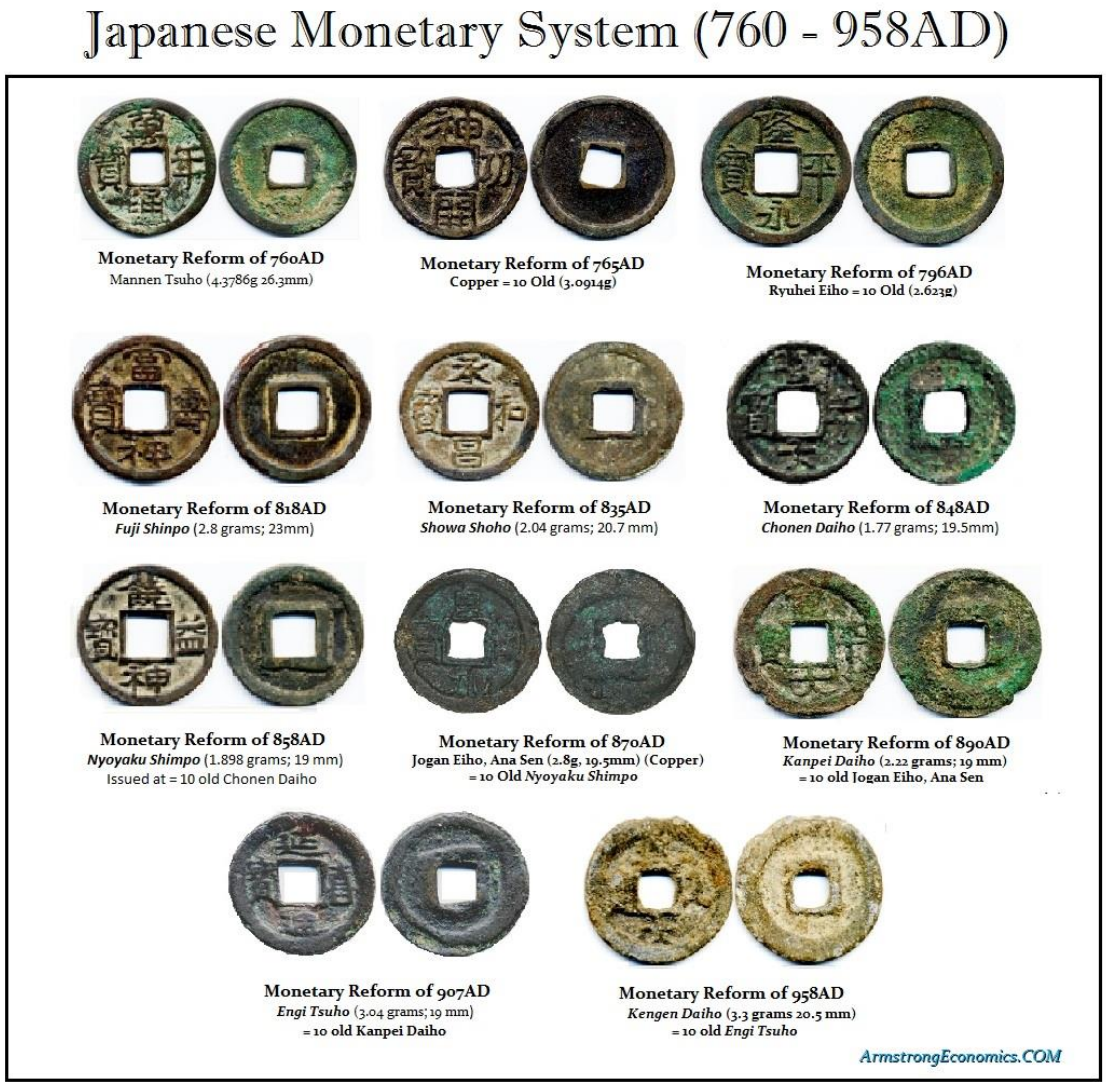
Transactional Banking

SEALING OF THE BANK OF ENGLAND CHARTER. 1694.
SIR JOHN HOUBLON. *Governor.* SIR JOHN SOMERS. *Lord Keeper.* MR. MICHAEL GODFREY *Deputy Governor.*

A lot of people are blaming fractional banking for leveraging up the economy by creating asset inflation. What they totally missed as it shot passed their heads was the change from **Relationship banking,** where at least fractional banking took place, to the metamorphosis into **Transactional banking** that was blessed by the Clinton Administration. Money has always been something that is privately created and accepted. This idea that the creation of

money should solely lie in the hands of government is really communism in drag, which amounts to fiat or the dictating the value and property of money.



Money has **ALWAYS** been private, for it is an agreement between two people in an exchange of goods or services for whatever common item both parties agree to accept in the transaction. That has been everything from seashells and cattle, to bronze, silver, and gold. The people always decide what money is. Even paper

currency cannot circulate without the consent of the people. In Japan, each new emperor issued coins devaluing what was previously issued by a fact of 10. There was no intrinsic commodity value to the coins, just a decree. The net result was that the people refused to accept the coinage and replaced it by using the coinage of China and primarily bags of rice. The emperors of Japan lost the ability to issue coinage for nearly 600 years. Money exists never by decree, but exclusively by the consent of the people.

Consequently, focusing on fractional banking is misguided for it has been around for thousands of years when the Greeks invented it. So why is it only now that this is being touted as a great evil? The answer: it is a diversion with sophistry and not the problem. Fractional banking is taking $1 in deposits and lending it out many times. The new rage is to tout this as the creation of money by banks. Yet banks cannot create this type of money to pay their bills or taxes, because it is not really creating money out of thin air – it is merely leverage.

For evidence that fractional banking is by no means the problem, all we need to do is look at the facility at the Federal Reserve known as **EXCESS RESERVES**. This is where banks can simply deposit cash at the Fed and collect 0.25% interest on demand. This facility holds nearly $2.5 trillion, which is more than 10% of GDP. This means that the banks are **NOT** lending out the money as in this concept of fractional banking.

To understand what we really face and how banking has changed from relationship to transactional, we must first understand its origins. You cannot

approach a topic without first understanding its origin by reducing back to the seed. The financial crisis we face depends upon our understanding of the origin of banking, for if we do not grasp this concept, we cannot achieve the right solution.

Chapter 1. The Origin of Banking

The Temple of Apollo on the Greek Island of Delos
(First Central Bank)

Our greatest problem with trying to comprehend history has been our lack of understanding of how the global economy functions, no less how it evolved. Regardless of whether countries were not in direct contact with each other, such as China and Europe, there was still trade between them through intermediaries. Each still influenced the other even if they were unaware of such influence or the existence of the other. This was true even in Roman times for they were big consumers of Eastern goods without a direct trade agreement with China. However, Marcus Aurelius (161–180 AD) did send

representatives to China. Banking began as investment banking and this was purely relationship banking.

Therefore, the global economy has always been a delicate and complex network that stretches back into ancient times. When we then explore the past with just a basic understanding of this dynamic interlinking of all things, what emerges is a picture similar to a rainforest with billions of species that are all interdependent upon a dynamic complex adaptive network. One species depends upon another, but in turn, both provide links to other species. Take one out and you set off a chain reaction so complex that it may be impossible to calculate the end result.

19th Century BC Contract to make a Future Delivery of Wooden Object & silver

To understand the origins of banking, we must also realize that a host of developments, far beyond the mere invention of coins, are linked to banking. Contracts, laws, and writing all had to develop as part of the economic development of banking. Banking was an emerging consequence of the very idea of civilization, language, the concept of the **future**, and of course writing. All of these things had to develop before banking could emerge. This also includes the idea of **credit** and commerce.

To engage in such commerce, we need the concept of **future**. For example, although dog may understand many words, can it understand the concept of

the **future**, such as the day after tomorrow? Once you have an understanding of the **future**, you can introduce planning and then banking can emerge. People would borrow to get enough seed to grow a crop for the next season. Consequently, the earliest type of contract was a futures contract that is at the core foundation of civilization since without that invention we would still be hunting daily, living in caves, and waking up with the same tasks every day. Without the idea that a future exists, we would be unable to grow crops. The development of contract law was predicated upon recording a futures contract.

The history of banking begins with the first prototypes of banks and merchants from the ancient world. There were clearly merchants who emerged as middle–men. A farmer could grow a crop, but he had to be a salesman to dispose of the crop, and then what would he get in return? Merchants emerged as basic venture capitalists (investment bankers) whom entered into partnerships by providing grain loans to farmers in return for some predefine commodity. The disputes that would arise necessitated the development of contracts. The earliest legal codes, such as Hammurabi (1792–1750 BC), required contracts and witnesses. These were responses to disputes in trade.

We have a wealth of surviving cuneiform tablets that recorded transactions and loans in commerce because of the earliest legal resolution that maintained that an agreement was not recognized unless written with witnesses. Caches of tablets have been recovered since each transaction at that time had to be reduced to writing and was then deposited in the city archive. You could not come in with a contract and claim it preexisted. One such document proved that wood became extremely valuable. A man sold his house but took the door. The wood was worth more than the mudbrick house, which resulted in a dispute.

The Code of Hammurabi Black Basalt Stele - Louvre

Sumerian cuneiform receipt for livestock
Drehem, Sumeria, 2041 BCE

Therefore, investment banking predates all other forms of banking, as well as coinage, by thousands of years. In Eastern Chinese based culture, the social status of commodity traders was considered malicious and questionable, as if they were thieves. They were outcasts who profited from price fluctuations that were not understood.

Eventually, they were singled out for heavy taxation. The fluctuation of commodities within the business cycle necessitated even the birth of contract law.

Therefore, **credit** was invented by merchants, who really began as investment bankers, looking to secure product to sell and to provide a contract to deliver at some agreed upon value of exchange. We find price controls in the legal code of Hammurabi that specified a number of aspects within the economy.

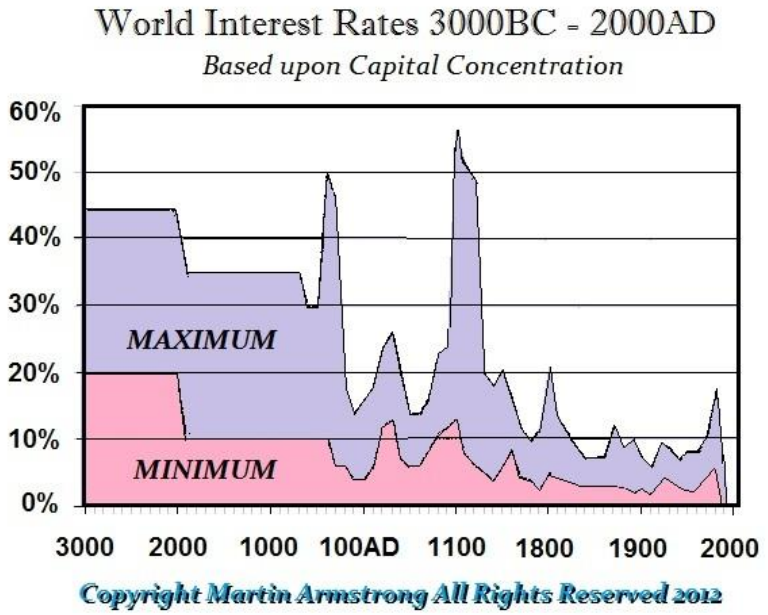
In Hammurabi's legal code, we find direct evidence of commerce between landowners and merchants. For example:

> 48. If anyone owes a debt for a loan, and a storm prostrates the grain, or the harvest fail, or the grain does not grow for lack of water; in that year he need not give his creditor any grain, he washes his debt–tablet in water and pays no rent for this year.
>
> 49. If anyone take money from a merchant, and give the merchant a field tillable for corn or sesame and order him to plant corn or sesame in the field, and to harvest the crop; if the cultivator plant corn or sesame in the field, at the harvest the corn or sesame that is in the field shall belong to the owner of the field and he shall pay corn as rent, for the money he received from the merchant, and the livelihood of the cultivator shall he give to the merchant.
>
> 50. If he give a cultivated corn–field or a cultivated sesame–field, the corn or sesame in the field shall belong to the owner of the field, and he shall return the money to the merchant as rent.

Therefore, in order to draft laws with specific situations in commerce, there had to arise an incident that necessitated that law. Thus, we can infer a tremendous

amount about how the earliest societies evolved. It appears that credit and loans began in the Stone Age once we gave up the hunter–gatherer lifestyle. The realization of the future allowed borrowing against the future to emerge, which is the foundation of debt, credit, and banks.

We know that Hammurabi in his famous legal code regulated interest at 33 1/3% per annum for loans of grain that were repayable in kind (grain). However, loans involving silver by weight, since this predated coins, carried a maximum legal rate of 20% interest annually. Therefore, we can see that there is the beginning of "money" that is distinguished from dealing in kind. Silver by weight became a standard medium of exchange between two other forms of either tangible commodities or labor. We are able to reconstruct the history of interest rates and can see that the earliest period reflects a high level of interest, which must be viewed within the context of investment banking rather than simply lending money from organized banks.



This difference between loans involving commodities at 33 1/3% in kind and those that were purely a medium of exchange at 20% is a very important distinction. What this reflects is more than just risk that the crop could fail. It begins

to show that there is a sense of an emerging trade since the repayment is in a medium of exchange rather than a barter system of grain. In other words, this illustrates a mercantilism aspect that predates even the lending of money within the context of a bank.

This also implicitly gives birth to the concept of **derivatives** insofar as they involve the future sale and purchase (contract) at some later date when the crop comes in. This is truly the birth of derivatives dating way back to Babylonian times. Even after the fall of Rome and the Dark Ages, banking reemerged from the two aspects of merchants dealing in products and the foreign exchange brokers (money changers) as there were many different standards being used among city–states.

Clearly, the idea that banks emerge solely from money changers and pawnbrokers is far too simplistic. When money was tangible coinage, storage and transportation clearly presented problems and introduced varied risks. Money changers seem to have only emerged after 600 BC with numerous city–states issuing coins that differed in weight standard and sometimes quality. Pictured here is a 1/3 Stater with nine countermarks of various money changers who verified that it was real and of proper weight. It is

Northeastern facade (the ascents partly restored) of the ziggurat at Ur

a fallacy to assume that a gold standard would solve all problems for gold coins in circulation would have to be verified with each transaction.

Documentation providing empirical evidence of banking comes from the city of Ur, the birthplace of Abraham. Ur was a city in southern Mesopotamia (Sumer) that evolved from a migration of farmers from the northern region during the copper phase of culture. They were wiped out by a flood that was believed to have been the great flood of Genesis. During the early dynastic period (29th–24th century BC), Ur became the capital of the whole region under Sumerian kings during the 25th century BC. Excavations of tombs from the 26th century BC produced amazing treasures of gold, silver, and bronze alongside precious stones, which shows that these objects were all considered valuable. Kings were buried with their whole entourage of court officials with the intention of continuing to serve their king in the next

Tablet from Ur

world. Such excavations proved the existence of an amazing civilization.

Capital markets appear to have emerged with urbanized culture. Once people gather in one place, there are always some who earn more wealth than the average person and they begin to lend it to be used by others. Lending appears to have been initially directed at affording farmers the capital to plant crops. As time would pass, a two–tier system of lending would emerge whereby those transactions lending for the production of crops became more of a venture capital business that reflected partnerships to some extent. These transactions would carry a piece of the action where the lending has an interest in the final product. The payment to the lender upon the harvest became known as paying "interest" to satisfy the transactions, and the word "finance" is derived from the concept of a final settlement. This is the birth of mercantilism from which banking historically surfaced. Part of the merchant's business was securing a product for future delivery. This is the birth of what has been called the derivative markets.

Akkad and Sumer in the 2nd millennium BC

Ur became the dominant city of Sumerian culture. It gave birth to written language and exported that invention as well. The farmers who originally settled the region around 4500 BC are typically called Ubaidians, whereas the Sumerians are believed to have migrated there from Anatolia (Turkey) around 3300 BC. The

political structure was something like a republic, but conflicts appear to have led to the evolution of royal power. Eight Sumerian kings are said to have ruled before the great flood. Etana was the first king to unite all 12 cities near 2800 BC. The political infighting made them vulnerable and they were sacked by the Elamites (Persians) around 2530–2450 BC.

The Sumerian King Urukagina reigned for seven years in the city of Lagash sometime around 2375 BC. Urukagina was a usurper and this seems to suggest that there was a huge revolution predicated upon taxation. The previous ruler of Lagash, Lugalanda, was corrupt and controlled by the priesthood who in their ability to predict the movements of the planets may have portrayed themselves as having power over the heavens. Therefore, Urukagina never signed any document as "son of" a former king. His wife Sasa (or Shagshag) was a commoner. This is very interesting for he is known for his legal reforms that were created thanks to the all too familiar political corruption.

Consequently, Urukagina's reforms were directed at the rich, which included the priests who had oppressed the people with religion. They imposed excessive taxes and simply forced people to sell land that they wanted at values well below market. This was a favorite practice upon someone's death where the widow and children were forced to sell their land.

To counteract the priests' claims that they were directed by God, Urukagina claimed he too had been chosen by the God Ningirsu to end the oppression of the poor. Urukagina destroyed much of the old bureaucracy. He ended the priests' influence by cutting their income. He created a state that may have been under the idea of Utopia, but in so doing, he weakened Lagash to the point where it could no longer defend itself, for not enough money was coming to the royal treasury to support a defense.

Urukagina made some very important reforms, such as exempting widows and orphans from any taxation and preventing them from being forced off their property. He also interestingly decreed that the government should pay all funeral expenses for the dead. Funerals of this time were extravagant and included a party atmosphere of food and wine to help the soul reach the other side.

The Sumerian king Urukagina Social Reforms describing also a debt cancellation (ca. 2500-2340)

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However, King Urukagina's reforms also concerned establishing freedom and ending the oppressing law of confiscating property. He decreed that rich men or priests (who were rich) must use silver when purchasing from the poor, and if the poor did not wish to sell then no one could be

compelled to sell something they did not agree to. His exemption of widows and orphans from taxation certainly implies that this was some sort of class uprising or revolution. He states clearly, **"The widow and the orphan were no longer at the mercy of the powerful man".**

Urukagina's reforms had obviously established a much greater level of freedom and equality for the lower classes. He targeted the priesthood by limiting their power. The priests had calculated cycles and could predict an eclipse, using this ability to portray themselves as a divine power capable of making the sun turn dark. He attacked the abuse of loans and debts by imposing laws against usury and cancelling all debts. The Jewish tradition of forgiving debts appears to have emerged as a tradition from the Sumerians.

Urukagina abolished the former custom of polyandry, which is when a woman takes more than one husband, whereas polygamy is when a man takes more than one wife. This appears that perhaps there may have been a shortage of women in Sumerian culture. If a woman took on more than one husband, she was to be stoned with rocks containing a written account of her crime. This seems to have survived into Biblical times when Mary Magdalene was going to be

Sumerian King Lugal-Zage-Si
(c. 2294 - 2270 BC)

stoned. This is the first written evidence addressing penalties for adultery in some form.

This weakness encouraged Lugal–Zage–Si (2294–2270 BC) of Umma to invade Lagash. He was encouraged perhaps by the priests to dispose of power under Urukagina. Nevertheless, Lugal–Zage–Si pursued an expansive policy where he conquered several of the Sumerian city–states, including Kish where he overthrew Ur–Zababa; Lagash where he overthrew Urukagina; Nippur and Larsa; as well as Ur where he established his new capital. He ruled for around 25 or 34 years according to the Sumerian king list

However, Lugal–Zage–Si also did not wish to share power with the priests. He sacked Lagash and burnt all of its holy temples. Urukagina fled to the town of Girsu, which was a possession of Lagash, but did not seem to have fallen to Lugal–Zage–Si since here he simply disappears from history.

King Sargon I
king of Akkad (2334-2279 BC)

After his victory, King Lugal–zaggesi offered a prayer:

May the lands lie peacefully in the meadows. May all mankind thrive like plants and herbs; may the sheepfolds of ″An″ increase; may the people of the Land look upon a fair earth; the good fortune which the gods have decreed for me, may they never alter; and unto eternity may I be the foremost shepherd.

King Lugal–Zage–Si had already united the city–states of Sumer by defeating all of them.

He claimed to rule the lands, not only of the Sumerian city–states, but also those as far west as the Mediterranean Sea. In the city of Kish, Sargon killed the king and became king himself. With Kish as his base, he went on to conquer the other cities. The individual city–states fell easily because they did not like the oppression of Lugal–Zage–Si. Each city hoped to regain its independence without submitting to the new overlord who would become known as the legendary King Sargon I (2334–2279 BC).

Thus, Sargon became king over all of southern Mesopotamia, the first great ruler for whom, rather than Sumerian, the Semitic tongue known as Akkadian was natural from birth. Therefore, the Sumerians were then conquered by the Akkadians and created the first empire to unify Mesopotamia around 2300 BC. His city, Tell Brak, is the missing city of Akkad, which has never been discovered, as is the case with the Tower of Babel.

Nevertheless, the Akkadian Empire therefore controlled Mesopotamia, the Levant, and parts of Iran. The language to emerge as the Akkadian was now written in cuneiform and became a literary language that replaced Sumerian. Akkadian, or Assyro–Babylonian, is the oldest attested written language – the code for the cuneiform writing system. Texts written in Akkadian date back as early as 2800 BC and are considered invaluable to the unraveling of the first human civilizations from Mesopotamia. It is possible that this invention in Akka was adopted by the Sumerians.

After the conquest of **Sargon**, not merely did he create the first empire in Western culture, but he also embarked upon a course of international trade demonstrating that there was from the beginning a **CONTAGION** of ideas.

Personal seals of the Indus Valley in India have been discovered at Ur. Hundreds of clay tablets have also been discovered that document international trade at this early stage. The tablets show the organization of international trade by the "**sea kings**" of Ur who took goods for export to the entrepot at Dilmun (Bahrain) and brought back copper and ivory from the East. This further illustrates the rise of **mercantilism**, which always evolves by necessity and gave rise to credit, banking, and international trade.

The date of Sargon's reign is estimated as beginning at about 2334 BC and the Sumerian King List states he reigned for 56 years, which would bring us to about 2278 BC. Sargon was perhaps the first empire builder, but he lacked an administration to control the empire. This eventually led to a resurgence of competition between the cities of Mesopotamia. Cities competed for trade and between the city–states of Isin and Larsa a cold war emerged where there was peace through an armed standoff. Eventually, Larsa becomes the capital and dominated Ur.

The subsequent dynasty of Sargon I lasted only until about 2150 BC. Nevertheless, they appear to have adopted the policies of the Sumerians concerning the cancellation of debts. Consequently, the debt cancellation practice began in Mesopotamia and can be traced back to 2400 BC extending into 1400 BC. The noted historian on this subject, Michael Hudson, is absolutely correct when he states that general debt cancellation was one of the principal characteristics of Bronze Age societies in Mesopotamia. There were numerous debt cancellations in the Mesopotamian cities which used the words for these debt forgiveness

decrees or cancellations such as ***amargi*** in Lagash (Sumer), ***nig–sisa*** in Ur, ***andurarum*** in Ashur, ***misharum*** in Babylon, ***shudutu*** in Nuzi.

However, the debt cancellations of the Bronze Age can be distinguished as **PRIVATE**. They were not **PUBLIC** debts borrowed from the people that they just never paid back. This was a debt forgiveness within the private sector. We will see this same call for debt cancellation arise in Athens with the fall of Draco (as in Draconian). In Italy, during the civil war that ended the Republic of Rome, the people cheered Julius Caesar and assumed he too would cancel all private debts. He adopted a different resolution of forgiving all past interest and applying that to capital with revaluing property and money to the same purchasing power parity. Clearly, the people were aware of the debt forgiveness ideas in that region.

In Larsa, powerful King Rim–Sin I (1758–1699 BC or 1822–1763 BC) ruled with his sister, En–ane–du, the high priestess of the moon God in Ur who thereby controlled religion and the state. Rim–Sin I was most likely a contemporary of Hammurabi of Babylon. During the year 1788 BC, the king of Larsa issued an edict declaring all loans to be null and void. This **debt cancellation** was becoming tradition. Rim–Sin's reign expanded Larsa to the extent that neighbors were concerned about its growth. This led to king of Isin, the ruler of Ur, and the chief of Babylon, to join forces to campaign against Rim–Sin. However, Rim–Sin was victorious and went on to sack the neighboring city–states, but spared the populations. No further events are recorded for the remaining 30 years of Rim–Sin's reign; rather, he dated all these years from his 1792 BC conquest of Isin.

In 1787 BC, the Babylon King Hammurabi attacked Isin and took it over. In 1764 BC, Hammurabi turned against Rim–Sin, who for the past years had been neutral against Hammurabi. After six months, Larsa fell. Rim–Sin was taken prisoner and died in captivity. Hammurabi (1790–1750 BC) established the dominance of the city of Babylon over the region.

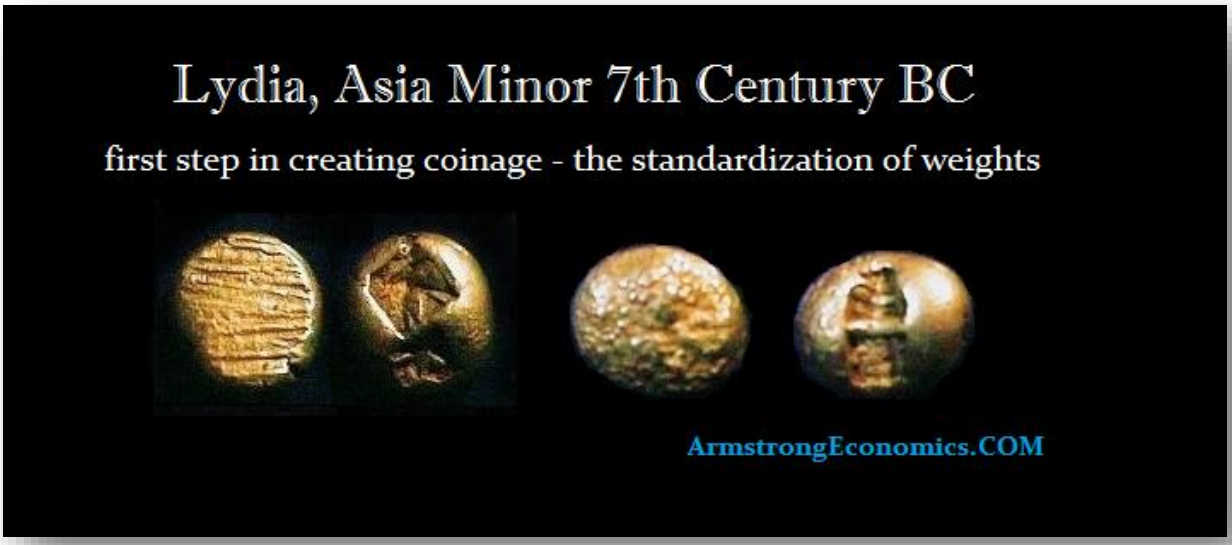
Legal Code of Ur-Nammu
(circa 2100BC)

What is clear is that Hammurabi's legal code is copied to a large extend from the legal codes developed in the Summerian city–states. Ur–Nammu (2047–2030 BC) founded the Sumerian 3rd dynasty of Ur in southern Mesopotamia, following several centuries of Akkadian and Gutian rule. He is now largely remembered today for his legal code, the **Code of Ur–Nammu**, which is the oldest known surviving example in the world. Babylonian law codes absorbed the Sumerian and required **ALL** deals to be in written contract form. Collateral for debt could be land, your person, or your children. Personal slavery for debt was limited to three years. Recent discoveries indicate that Hammurabi's code may have been a copy of an earlier legal code dating back to about 2500 BC. The mere fact that there is a legal code of this nature demonstrates not just the existence of credit in the very distant past, but that there were disputes that required the birth of contract law and a judiciary. The Babylonian legal code that required contracts set in motion practices that we still use today. **Debt cancellation** in Mesopotamia died out

after 1400 BC, but the Jews (keep in mind that Abraham was from the city of Ur) retained it.

As international trade emerged, the merchant class became rich and simultaneously began to emerge as bankers and money changers. Personal seals of the Indus Valley in India have been discovered at in the Sumerian city–state of Ur, which demonstrates that international trade had emerged. Banking emerged as a natural course of events from the trading of merchants (e.g. Shakespeare's *Merchant of Venice*). The fact that the medium of exchange was just lumps of metal, precious stones, or dyes, demonstrates that money has always been something that is agreed upon by the private sector. As precious metals became a medium of exchange, it necessitated weighing the metal and testing its quality for each transaction. This did not require a money changer in the classic sense of foreign exchange brokering until governments got involved in issuing coins after 700 BC. It did require someone who knew the metal, was trustworthy to certify and then weigh the metal to verify the quantity. Only with the development of coins being minted by various states did the field of a money changer become a clearer necessity as a foreign exchange broker.

Evidence of mercantilism (trade) among tribes goes back to 10,000 BC since goods from Asia moved to Europe. Mercantilism is clearly something that



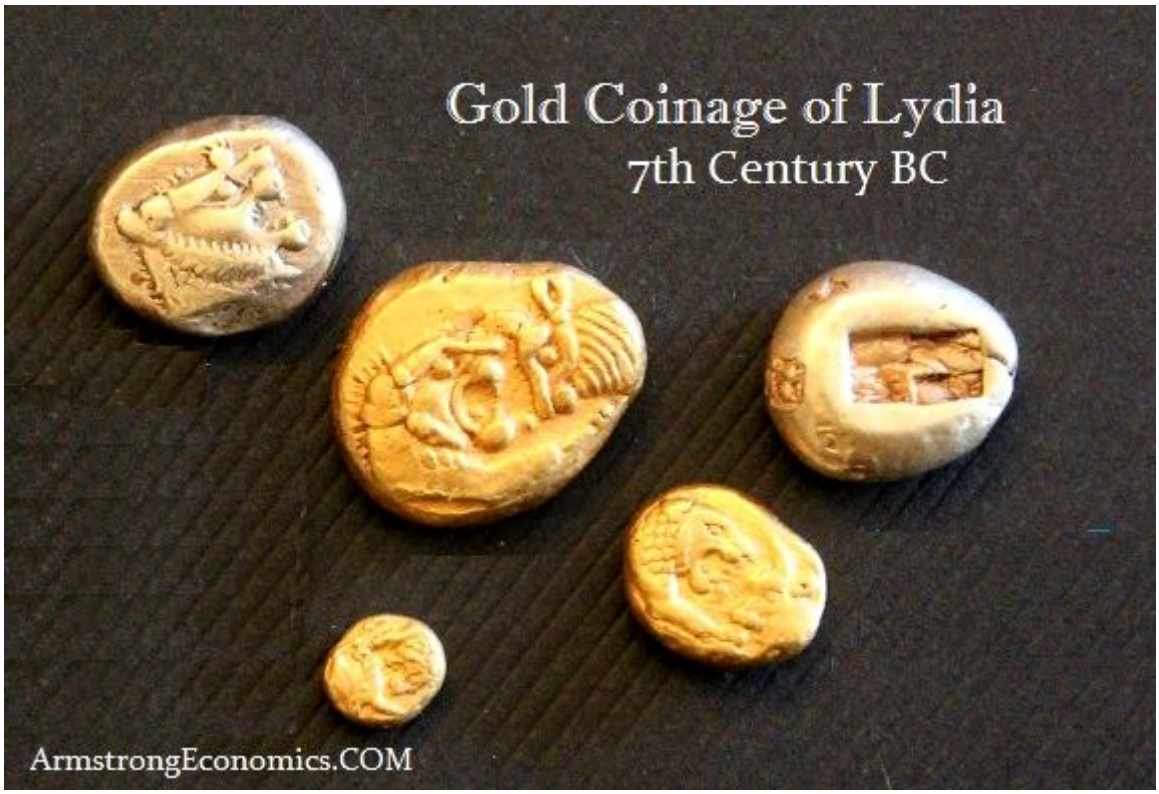
extended very far back in time, and thus among the early Christians this type of conduct in business and trade was absolutely second nature. Credit appears to emerge around 5000 BC and thus we find interest regulated by laws that came in around 2000 BC.

From about 2000 BC, the development of finance was truly worldwide. In China, rice farmers and merchants were conducting forward delivery contracts by selling a crop before harvest. This is what we commonly called derivative markets

or futures markets today. These were indeed the oldest markets that predate bonds or stocks. Farmers were able to lock in a price before planting and merchants were able to secure their product for sale. The same forward sales took place in India under the Laws of Manu. This concept of forward sales was a sort of insurance policy or hedging that still occurs today. Thus, the enumeration of laws in Babylon regulating interest and distinguishing money from forward sales is evidence that what Aristotle in Book I, Chapter XI of ***Politics*** describes perhaps as the earliest attempt to corner a market using options. Thales had purchased the time forward (option) of all the olive presses, thereby controlling the future supply.

International trade existed during the Stone Age and goes back to 9000 BC and evidence of accounting dates back to 8000 BC. These were two vital steps that had to exist before banking and credit could emerge. Thereafter, banking advanced with the introduction of coinage. Coins were first invented in Lydia of Sardes, located in modern Turkey. This is where the idea first appears that a standard weight would facilitate trade and reduce the cumbersome need to weigh the metal for each and every transaction. It is with this invention that we begin to see the more modern development of banking emerge.

Chapter 2. The Evolution of Money & Banking



The invention of coinage clearly accelerated the invention of coinage. As coinage began to appear, with sufficient quantities of metal emerging in modern day Turkey, we find the legend of King Midas who everything he touched turned to gold. This story is not complete fiction, but merely an exaggeration because there were vast quantities of gold discovered in the riverbeds. The city–state of Lydia first began stamping its royal image on the lumps of metal that had first been formed according to a standardized weight

system. The first coin to appear had the head of a lion pictured above in the upper hand corner.

The invention of coinage spread rapidly among the Greek city–states in Anatolia or modern day Turkey. Each city–state issued coins but at different standards of weight and with different designs. This would create the necessity for foreign exchange brokers or money changers. We find the coinage counter stamped by money changers to certify that they tested this coin before.


Athens Decadrachm (c. 465-460 BC) 41.86 grams

With the passage of time, coins would be issued in large denominations to facilitate trade. This emerged in both gold and silver. Pictured here is an Athenian Decadrachm, which is typically found in coastal regions, namely outside of

Greece. Their large denomination was used in foreign trade; the same will be true of gold. Even into the Middle Ages, gold facilitated trade and silver was used for domestic transactions. This gave birth to a two–tiered monetary system geared to facilitate international trade.

Aegina (530-525 BC) Tortoise - Union Jack style punch

Stater (12.57 grams) **Drachm (6.28 grams)**

As coinage began to emerge, the first city–state in Greece to issue coins was Aegina. The Aeginetan stater or didrachm of 12.5 grams was based on a drachma of 6.2 grams. From the weights of some unusually heavy early specimens of Aegina staters coming in over 200 grains, it is possible that the Aeginetic stater may have originally weighed over 200 grains before it was revised. The Bibliotheque Nationale in Paris has a very unique electrum stater. Turtle, rev. Inc. square divided into two parts, weighing 207 grains. Electrum is a natural alloy of silver and gold that emerged in Ionia. This single known specimen struck in electrum suggests trade. The date of this coin cannot be much later than about 700 BC. It is clearly attributed to the class of early electrum money struck on the Phoenician standard. The design type implies it is connected with

Aegina. However, the form of the incuse on the reverse points to an Asiatic origin. Since electrum was not native to Aegina, if this early specimen is indeed from there, it implies that the metal came in trade and the coin was struck, giving rise to the invention of coins in Ionia. The silver staters are clearly the first coins to be struck in Greece. Therefore, it would make sense that the lone example of an electrum state of Aegina design would reflect their contact with the Ionian Greeks of Asia Minor.

Corinthian Silver Staters

AR Stater 525-500BC (8.61 grams) **AR Stater. 375-300BC (8.21g, 22mm)**

The three most important standards of the Ancient Greek monetary system that emerged, adding to Aegina, appeared thereafter in Corinth where the Corinthian standard was based on the stater of 8.6 grams of silver, which was subdivided into three silver drachmas of 2.9 grams. Corinth established colonies whereas Aegina did not. So Corinthian stater became perhaps more widely used.

The third city–state to issue coins was Athens with the attic standard, based on the Athenian drachma of 4.3 grams of silver. Of course, Athens built a great empire and the tetradrachm became the primary core currency after the defeat of the Persians. They also provide the first example of coinage that was massively debased and reduced to bronze silver–plated coins. Athens was near defeat in 404 BC during its war with Sparta.

Christ chasing Monerychangers from the Temple

Athens - AR Tetradrachm
510-505BC (17.35 grams)

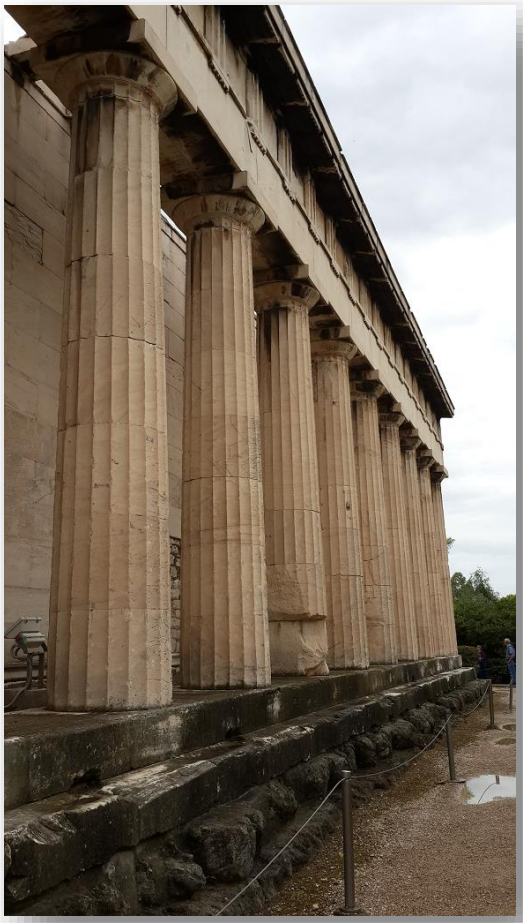
Consequently, the varied monetary standards among city–states in Greece, as well as in Ionia, necessitated the birth of foreign exchange dealers – the money changers. The origins of bankers emerge from the money changers who are largely merchants. They were first called in Ancient Greece by the name of their tables that they used to conduct business in the open Agora which was

a public open space used for assemblies and markets. Money changers would be found in the agora as well as at the temples.

Even in the Biblical story about Jesus going to the temple there are two specific references to two specific trades. In John 2:14, it states: **"And He found in the temple those who sold oxen and sheep and doves, and the moneychangers doing business."** The first trade was the sale of animals for sacrifice to a domestic merchant. The second trade was that of the money changer who was there to exchange coins of different origin, which is now what we call a foreign exchange broker.

Chapter 3. The Birth of Merchant Bankers

While there were moneychangers who were effectively foreign exchange brokers, no doubt they were probably merchants as well. Yet eventually the first real credit developed from the merchant trade. This was the natural course of events from the early development of the futures markets where merchants would contract to buy a crop upon harvest. More likely than not, this class of merchants also began to extend credit to those who purchased whatever it was that they were selling be it grain or wine. This is where banking has always begun, even emerging later from the Dark Ages long after the fall of Rome in 476 AD.



The money changer in Greek was known as a ***kermatistes*** which is rooted in the word for coin being ***kerma.*** The Romans called them ***nummularii*** and bankers in Greek were known as ***trapezitai*** based upon the shape of their trapezoid tables. No

two sides were parallel. This was a sort of flea market atmosphere where their name became directly associated with their tables – ***trapezitai***. The word ***trapeze*** was most likely a slang derivative extending back to bankers insofar as they spun around changing their position while never touching the ground. The Romans called the bankers ***argentarii*** (silver in Latin is *argentum*) distinguishing the two.

In Genesis 23:16 Abraham buys land implying, "**Abraham weighed out the silver for Ephron which he had named in the hearing of the sons of Heth, four hundred shekels of silver, currency of the merchants.**" The phrase "**currency of the merchants**" implies different weight standards. Yet, silver was the common denominator and thus the word for banker in Latin obviously reflects the word silver.

The emergence of money changers was an integral part in the development of civilization because it allowed for international trade. We also find Biblical references to the common use of deeds and contracts. Jeremiah 32:44 states **"Men will buy fields for money, sign deeds and seal them, and take witnesses …"**

Everything we find in Babylonian laws became common throughout the ancient world into Greek and Roman times. What exists today from deeds, mortgages, and foreign exchange, extends back to the earliest of ancient times at the dawn of civilization.

There is also evidence of money transfer in ancient times. This field is often overlooked, but it is here that we have the seeds of international commerce and interbank markets. There is also evidence that the Greeks developed a means of eliminating the risk of traveling with money. Like traveler's checks, a receipt by a money lender/money changer would be issued in one city that could be redeemed in another Greek city. The transportation of money when it was tangible always presented risk. This same problem would emerge during the medieval days. Money transfers have always been a logistical nightmare even in times of war.

The word travel actually stems from the French word *travailler* and is a derivative of *travail,* meaning to torment or trouble. Even in the Middle Ages, this problem of travel to make payment was dangerous. In Roman times there were roads and a far more orderly society, but before and after Rome transporting money was a burden. This gave just cause to the creation of letters of credit, money orders, and transfers in ancient times. All of these instruments became the fundamentals of banking for it involved creating deposit functions.

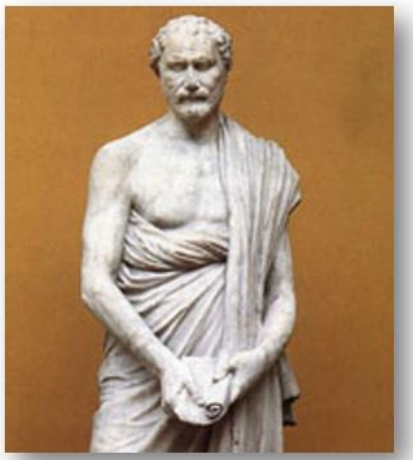
The earliest record of a merchant banker comes from Asia Minor during the 5th century by the name of Pythius. Merchant bankers created credit to sell more products. Their profit margins were typically 40–60% or higher, providing them with a tremendous accumulation of wealth. The richest man in Athens around 371 BC was a money lender and former slave named Pasion, who learned the banking trade from his former masters Antisthenes and Archestratus. Pasion took over the banking business around 400 BC. Profits were generated, of course, by

money lending, but also by extending credit in the commodity field to earn a very substantial portion of the profit – a piece of the action so to speak.

The concept of money itself was starkly different in different regions. To the Babylonians, money was more the relationship between various items all having value. This is why early contracts tend to look at liters of barley. To the Greeks, money was silver rather than gold, and to the Romans it was bronze. To the

Chinese, the concept of money was much more fiat in that it is merely the word of the state. We arrive at a different point entirely when money was viewed as political power rather than tangible assets independent of political power. Thus, we have the first coins being struck at Sardes (Turkey) by Ionian Greeks who took a medium of exchange and stamped their badge of the king to guarantee the weight to facilitate trade by eliminating the need to weigh the metal for each transaction.

Lydia - First Offical State Sponsored Coin



Demosthenes (384-322BC)

In ancient times, the temples became the great bankers. People donated money to their God to buy favor or forgiveness, yet their money went into the treasury. We have documented history of such a financial crisis emerging in 354 BC thanks to Demosthenes (384–322 BC).

The Temple of Athena in Athens kept its donations in the Opisthodomos. The temple was not earning interest on its hoard of cash and that became a temping reservoir of capital. The treasurer agreed to lend the money to personal banking friends who would then pay the treasurer interest that he could then personally put in his pocket. When the banking crisis hit and there was a liquidity problem, the banks could not repay the loans to the temple.

Demosthenes tells us that banking transactions were completely confidential in Athens. He tells us that the rich could "conceal [their] wealth or in order that [t]he[y] might obtain secret returns through the bank."

The banker Aristolochos is said to have taken substantial deposits and owed many a significant amount of funds. The bankers Sosinomos and Timodemos failed with many others and were unable to meet demands for withdrawals.

With a banking crisis in full bloom, the treasurer was exposed. To try to cover up the scandal, they set fire to the Opisthodomos. Nevertheless, the scheme was

detected and the treasurers of Athena were seized and imprisoned around 377–376 BC.

Aristolochos' bank failed due to real estate prices collapsing. Then the bankers failed; all of their funds and property were seized. What is interesting is that Demosthenes warns his fellow Athenians of the dire consequences for all of Attica should the banker Phormion be forced into bankruptcy. "Don't throw [him] away! Don't allow this piece of filth to bankrupt him!"

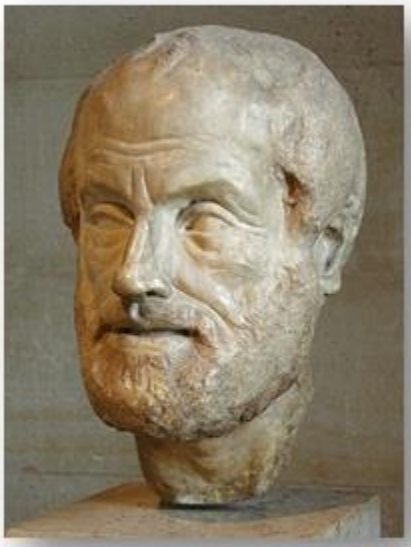
What Demosthenes sees in the midst of one of the earliest banking crisis in recorded history is that the lending of money was clearly a leverage that indeed had supported the entire economy. The drop in real estate in ancient Athens is not unlike that of the 2007 crisis. The deep corruption on the part of the treasurer is something that sets off a public crisis in the collapse of confidence in banking.

Demosthenes does make it clear that the people should be angry with the bankers who failed. Reading between the lines implies that he is trying to counsel the people that they should neither panic nor withdraw their funds from the

Agora - Athens

bankers. They should be justly concerned and outraged by the bankers who have failed, but do not by any means attribute that to all bankers. These words have been repeated countless times in the midst of every panic throughout every century. They are repeated once again today with huge record bailouts. Demosthenes focuses on the individuals and tries to dispel the **CONTAGION** that was then spreading throughout the entire economy. There appears to have been a second period of a bank failure around 336 BC that involved a banker by the name of Herakleides. There are undoubtedly debates over these serious accounts. The 370 BC decade was a major Athenian banking crisis that involved government officials, which should come as no surprise.

Aristotle in his *Politics* argued against the idea of supply and demand insofar as he saw the problem from the demand side disconnected from supply. Aristotle thus saw the problem that demand would rise and fall, and sometimes exceed the supply, without just cause.



Aristotle
(384–322BC)

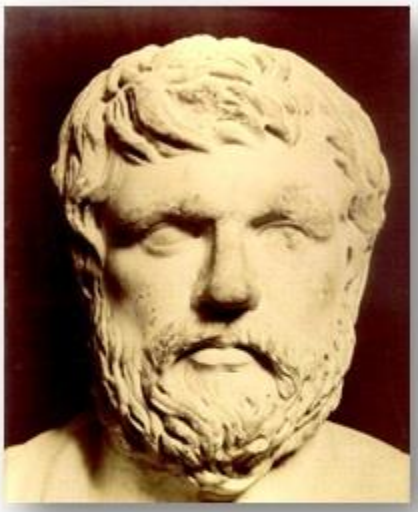
Athens was making a transition from a predominant agrarian society to one of trade that included manufacture and finance. He called this the **"monied mode of acquisition"** that was driving the economy fed by businessmen concerned purely with profit whom he described as **"making money from one another."** The predominant economy was the villa that produced and consumed what it planted. Thus, his *Politics* was describing the changing economy as Athens was rising as an economic power.

Lucius Caecilius Jucundus
(c 20 - 62AD)

The old ***oikos*** was fading. During the 4th century BC, agriculture begun to be raised and sold for cash. Since people could now sell their crops for export, suddenly land prices increased in value. This was one of the earliest bubble events in real estate that naturally resulted in a banking crisis no different from we have seen today. Prices will always rise to reflect **EXPECTED** potential earnings, and then reality sets in. Hence, history repeats because the passions of man simply never change.

Xenophon (430–355 BC) wrote his major work *Oikonomikos* (i.e. how to regulate the household, which equates to economics) touting the virtue of the estate and a self–sufficient system. But by 355 BC, he had reversed himself in his work entitled the *Poroi* that promoted a market economy, encouraged immigration for labor, and to increase the money supply that was raising the living standards of all Athenians.

Lucius Caecilius Jucundus was a merchant banker who lived in Pompeii around 20–62 AD. His house is still standing and can be seen among the ruins of the city of Pompeii. The eruption of Vesuvius in 79 AD partially destroyed the home. The home is renowned for its beauty, for it was large and flanked by merchant stores that he also controlled.



Xenophon
(c. 430 – 354BC)

We know Jucundus was a banker by his bank bookkeeping and wax tablets,

which were receipts recovered during excavation of Pompeii. Jucundus was a type of banker called an *argentarius*, which meant that he acted as a middleman in auctions. The word in Latin for silver is *argentum,* so the term derives from silver meaning he was bought as an agent for silver who would finance the transaction. The Pompeian *argentarius* would pay the vendor for the purchased item at auction and grant the buyer a timeframe in which to repay him. Jucundus was financing goods and slaves for various small businessmen whom had a few months up to one year to repay the loan to the *argentarius*.

House in Pompeii of the Banker Lucius Caecilius Jucundus

Jucundus would receive interest on the loan, as well as a commission (known as a *merces*) for acting as the agent or broker. Some *argentarii*, called *coactores argentarii*, also collected debt money in addition to making arrangements in the auctions, while other *argentarii* were assisted by *coactores* whom collected the debts for them – the muscle so to speak. It is uncertain whether Jucundus was a *cofactor, argentarius,* or simply an *argentarius*.

These tablets have provided detailed transaction information in recording the names of vendors and witnesses to the banking arrangements. The lists of

witnesses also gives some insight into the social structure of Pompeii, since Jucundus had his witnesses sign in order of social status. Jucundus kept many private records of his business transactions on wax tablets, many of which were found in his house in 1875.

Of the 154 tablets discovered, 16 are document contracts between Jucundus and the city of Pompeii; the remaining 137 are receipts from auctions on behalf of third parties. Seventeen of these tablets record loans that he advanced to buyers of auction items. Banking during Roman times is different from modern banking for private individuals, not the major banking firms that exist today, conducted it. Since almost all money lenders in the empire were private individuals, anybody that had any additional capital and wished to lend it out could easily do so. The rate of interest on loans varied in the range of 4–12%.

The tablets were known as *triptychs*; pictured here is of a beautiful woman of Pompeii writing on one. They have three wooden leaves tied together to make six pages. Wax was applied to the inner four pages and the receipt was written on the surfaces. The tablet was then closed and wrapped with a string, over which the witnesses placed their wax seals. This prevented the document itself from being altered, and there was a brief description of the receipt written on the outside for identification purposes.

There are 154 wax tablets from his archive dating between 52–62 AD. These documents recorded the sums paid to those for whom he had sold goods, slaves on credit, and rent on property he owned. Also recorded were his commission payments ranging from 1% to 4% paid in transaction arrangements or as a broker of sorts.

You will notice that the documents ended in 62 AD, yet the eruption of Vesuvius did not take place until 79 AD. Before Vesuvius erupted, a tremendous earthquake hit Pompeii and damaged many buildings. Jucundus' documents end with that earthquake, which was curiously two 8.6–year cycles before the big eruption on 79 AD.

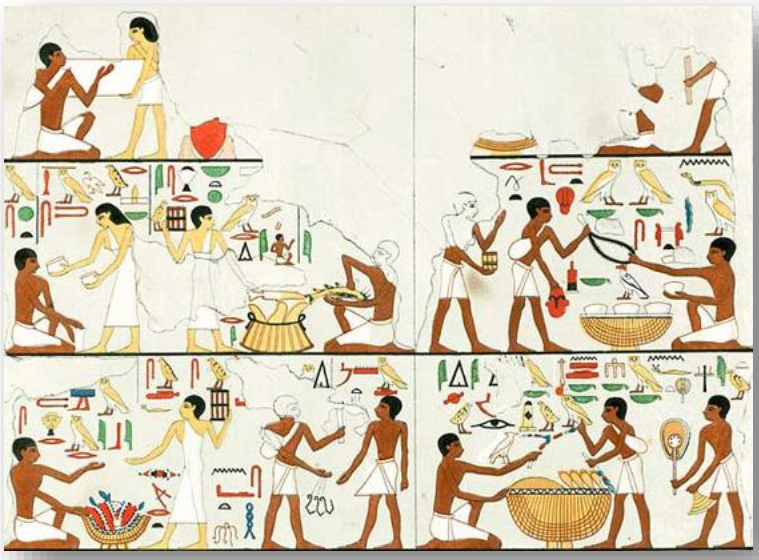
Jucundus was a merchant banker who made a lot of money as a merchant and then put his money to use in lending, financing, and brokering. Most people who seemed to earn great fortunes were always merchants in general. That is where the talent always emerged for trading. People do not understand this ancient trade. There lies the talent to comprehend capital flows and follow the trend of Jerusalem (Matthew 21:12) that demonstrated how widespread the banking industry and foreign exchange dealers had become by the 1st century BC associated with temples.

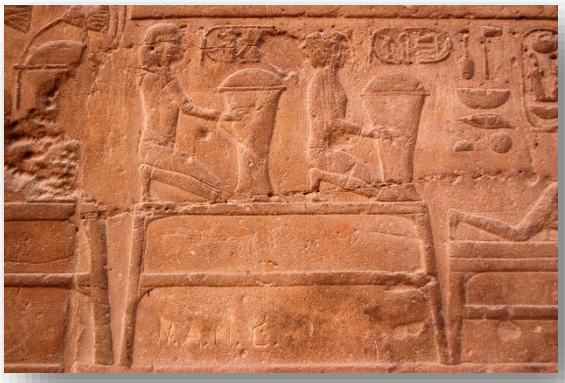
Chapter 4. The First Paper Money of Ancient Egypt

Ptolemy I Soter
(b 367BC; King of Egypt 305-283BC)

Ancient Egypt has long been an interesting example of monetary history. Its economy is fascinating since they did not use coinage until after Alexander the Great conquered Egypt in 334 BC. So how were monetary practices organized in this civilization that had no knowledge of money itself? Was banking even possible without money? We find coinage of Egypt depicting their Greek rulers beginning with Ptolemy I (305–283 BC) who issued gold, silver, and bronze coinage. Egypt was perhaps the first monetary system in the world where a derivative of paper money emerged.

It has often been said that the Egyptian economy was based on barter since there was no official form of money that combined the functions of a unit of account, means of payment or the medium of exchange, and the means to pay taxes more efficiently. Some argue money is also a store of wealth but that is not true since goods and services fluctuate in price expressed in money terms. There are painted scenes that show goods being exchanged in markets, which have given rise to the idea of a barter economy. In this image, vegetables are acquired in return for a fan. However, a good many researchers agree that this kind of scene is hardly representative of the whole commercial system because barter alone would not make it possible. These scenes should, therefore, be interpreted as isolated situations taking place on a local scale.





The Egyptian economy and society was centered upon large–scale production of grain. Like oil is the economy of the Middle East, grain made Egypt fertile and was even the "breadbasket" of Rome. Egypt

was a highly organized society under a centralized administration over which the pharaoh and his bureaucracy ruled. It was the bureaucracy duty to remove any surplus produce harvested and to store it in a granary network throughout the country. This mirrors the Biblical story of Joseph and the pharaoh warning that there would be seven years of plenty and seven years of drought. Storing grain was essential for grain was to be redistributed among the population of craftsmen and workers on major public works projects in the form of a wage ration.


The Code of Hammurabi Black Basalt Stele - Louvre

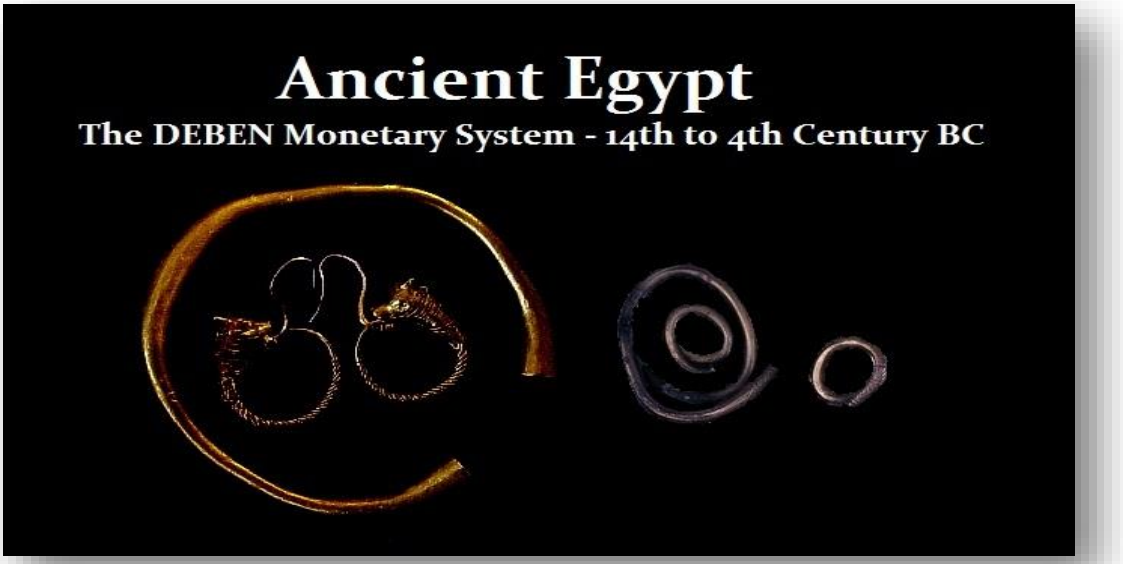
Even if we look at Hammurabi's legal code in Babylon, we come away with the realization that money need not be metals, but any commodity and it can exist purely as a **unit of account** in concept. For example, we may say someone is rich because he is worth $1 million, but there is no currency denominated as $1 million. This becomes a unit of account that forms a monetary concept. Saint Patrick in the 5th century AD upon his arrival in Ireland, found that money was expressed in human slave girls, which was the unit of account. He wrote in his confession, **"I think that I have given away to them no less than the price of fifteen humans."** This passage shows something very important. First, money is not defined as the medium of exchange exclusively, as it also serves the purpose of a unit of account. In fact, this becomes the true function of money even more so than what it is.

Money is a language of value. We think in the currency of our domicile. It is how we measure value in our head. It does matter if we actually make a transaction in terms of money. For example, when we travel to a different country, we then use the currency of that nation to buy and sell. We translate the price quotes in different currency back to the domestic currency of our domicile. If an American goes to Paris, he will convert the price back to dollars. He then makes his judgment based upon the currency conversion. Likewise, a Frenchman will do the same if he then travels to the United States. Money becomes a unit of account that is in fact a language in our head.

Therefore, when we look at the Egyptian economy, we see that there is still a key function of the unit of account in the accounting documents that have survived.

The units of account that existed were known as a *shat*. A legal document dating from around the year 2600 BC provides a glimpse into a judgement illustrating this unit of account conceptual currency standard (not tangible) as early as the Ancient Empire (2750–2150 BC). The document states:

"I acquired this house against payment from scribe Chenti. I paid ten shat for it, namely fabric (worth) three shat; a bed (worth) four shat; material (worth) three shat". To which the defendant declared, **"You made the payments (of ten shat) completely by "conversion" through items representing these values"**.



We find the same basic expression of value of commodities expressed in terms of another in the legal code of Hammurabi. Clearly, the Egyptians used the same system where goods and services were expressed in *shat*. Many Egyptologists have argued that a *shat* was a gold ring used as money with a weight of 7.5 grams. However, none have ever been discovered. It appears that the *shat* was simply this concept of a standard of value. Nevertheless, like ancient China, precious metals most likely served as a medium exchange internationally and not domestically. Nonetheless, the Egyptians did express large sums of money in *debens*, with one *deben* worth 12 *shat* and probably corresponding to 90 grams. So, the *shat* was worth one–twelfth of a *deben,* which is the same system that the Romans adopted with 12 ounces (uncia) to the pound (Troy).

Roman Bronze As - idealized original weight 1 pound

Sure, it is possible that this type of system could have evolved into a two–tier monetary system with domestic transactions in *shat* and international in *deben*. Bretton

Woods was a gold standard, yet in the two–tier system in the USA, gold was only used internationally and not domestically. However, from the reign of Ramesses II the Great in the XIX dynasty (1279–1212 BC) onwards, the *shat* simply vanishes completely from all accounting records. It appears that from then on, all accounting takes place only in *deben* which seems to link with perhaps inflation due to war.

Ramesses II in the XIXth dynasty (1279-1212 BC)

Ramesses II attempted to expand Egypt by invading Amurru, which was an Amorite kingdom located at the territory that spans modern western regions of Syria and northern Lebanon today. He laid siege to Dapur a city in Syria close to the Orontes (probably in the middle valley) north of Nuhašše and southern Tunip. The Egyptian inscriptions describe it as being located in the land of Naharin (Mitanni dominated the region in the 15th century BC) or the land Amurru. Amurru was the main power in the second half of the 14th century and beginning of the 13th century BC that made up northern Syria during the 14th–12th centuries BC. On the other side of Amurru was the Hittite kingdom, and this

brought Egypt into war where find the largest chariot battle in history that took place in Syria.

It was in 1274 BC when the Battle of Kadesh in Syria took place between the Egyptians and Hittites. Ramesses II signed the earliest known peace treaty at the end of the Battle of Kadesh. Ramesses II constructed massive buildings and was engaged in many wars. He was the most likely candidate for the pharaoh during Exodus and it would seems that the Jews would have been able to break free simply as a matter of economics given the state of the economic decline and inflation that appears in the accounting records.

Gold was considered as the tears of the Gods, and moreover, the most zealous servants and warriors received gold chains from the king himself, whom was regarded as a veritable god on Earth, at ceremonies called the "gold reward". Since it was mainly during the 18th and 19th dynasties that this almost metaphysical interpretation developed, this explains why the gold–based currency could never materialize. The administration could not actually allow the association of gold, which was a divine symbolism of the Gods, with an object as common as money to be exchanged in commerce by mere mortals.

Silver was considered the material from which the bones of the Gods were made, and likewise, this too was symbolic of the Gods and was therefore unfit to be used as mere money. It was not until the Greeks and the Ptolemaic sovereigns arrived on Egyptian territory that any real currency was adopted,

modelled along the lines of Greek money, at a time when the Egyptians had distanced themselves more from their religious beliefs as the power of the pharaohs had declined. The conquest of Egypt by the Assyrians in 671 BC demonstrated their weakness. **"I am powerful, I am all–powerful .... I am without equal among all kings."** This was the boast of King Esarhaddon (680–669 BC), who expanded the Assyrian empire to its greatest extent. At the height of his great power in 671 BC, he conquered Egypt in less than a month.

Ramesses II the Great (1279-1212 BC)
Siege to Dapur Amorite kingdom

Therefore, money was grain used in payment for goods and services since life could not be sustained without food. Consequently, it appears that the unit of account was based on weights of gold, silver, and copper, whereby they were measured in units of weight known as *deben* (around 90 grams). This was a conceptual idea of value, as is a millionaire with no actually monetary unit of such a value. Curiously enough, Egypt did not have an easily accessible source of silver, yet the Egyptian word for silver, *hedj*, means something very close to "money".

A Greek or attic talent was 26 kilograms (57 lb), while an Egyptian talent was 27 kilograms (60 lb), and a Babylonian talent was 30.3 kilograms (67 lb). The heavy

common talent, used in New Testament times, was 58.9 kilograms (130 lb). The later Roman talent was 32.3 kilograms (71 lb). This demonstrates while foreign exchange dealers were necessary. It appears that 300 *deben* in Egypt equaled an Egyptian talent.

The Bible tells us that gold and silver were weighed. Clearly, metal was exchanged, as we discussed with the Roman payments of bronze in lumps that required weighing each transaction. These ingots and metal rings date from the fourteenth century BC and were found at el–Amarna. They give us rare archaeological evidence for Egypt's earliest money system. The complete ingots weigh around three *deben* (265–286 grams) and the rings seem to be fractions of the *deben*.

Chapter 5. Money & Banking in China

The earliest form of money in China appears to have been cowry shells about 4500 years ago. Even in the pictorial written language, we find the words for ″goods″, ″monger″, ″buy/sell″, and ″exchange″ that all contain the pictograph for shell. These cowry shells are not known to have completely supplied the medium of exchange. China was highly agrarian based

Qin Dynasty, Shih Huang-ti (246-210 BC)
Ban Liang (1/2 Liang)

and the dominant form of commerce was barter. However, copies of cowry shells have been found in the form of wood, bone, stone, copper, and lead. These are common enough to suggest a wider form of a monetary system was emerging. Even bronze shells were found in the ruins of Yin, which was the old capital of the Shang Dynasty (1675–1046 BC).

It is during the Zhou (Chou) Dynasty (1046–271 BC) that we find the emergence of bronze coinage that was shaped in the form of a knife or spade. It was Ch'in Dynasty (221–206BC) in China with the rule Chao Cheng (Shih huang–ti) (221–210/209BC) who became the first emperor (*huang–ti*) after ending the Warring States Period (475–255 BC) by consolidating China from which it takes its name – the Ch'In Dynasty. It was Shih who abolished all forms of currency and introduced a standardized copper–based coin that was used in his native

province, by the Qin. These were flat, round coins with square holes at the center. Since these coins were of low intrinsic value, they were stringed together typically using 1,000 coins. However, taxes were imposed and were payable in bolts of silk and these coins that were cash at this point in time. However, wages tended to be paid in rations of grain. It was this first emperor who was buried with the 6,000 famous life–sized terra–cotta soldier and horse figures to provide him with an army for the afterlife.

Perhaps as early as 1000 BC, silver made its way up the Silk Road as the Sogdian traders brought their Persian religion to China. ***Zoroastrianism***, the actual use of

silver officially as money whereby it was acceptable for taxes, did not really develop until the Ming Dynasty (1368–1644 AD).

Money in China was not based upon an independent idea of tangible worth. Money was simply a by–product of political power, much like the paper currency systems of today. There was no real backing of gold or silver, rather it was the political faith in the emperor and/or the state. Consequently, Chinese statesmen and philosophers rationalized money to be the artifact of the supreme ruling power. In this way, the control of money was a political power that would enable the state to purchase food to relieve famine. That is not to say that gold did not exist. Rather, the only coins produced from the imperial time were the bronze cash that they were strung together in units of 1,000 cash. The peak in the production is believed to have come around 1073 AD during the Sung (Song) Dynasty (960–1279 AD) reaching 200 million strings (containing 1,000 coins). These coins are found throughout Asia and Japan.

While the invention of paper did not make it out of China until the 3rd century AD, its invention in China was about 500 years before. Merchants began to write contracts and create credit in the same manner, as we will see in Europe after the Dark Ages. These receipts were negotiable and began to circulate among merchants. Such contracts have been discovered during the Tang Dynasty (618–

907 AD). Nevertheless, it was the merchants who adopted contracts and promissory notes that began to be exchanged and were known as *feiqian* (i.e. flying money).

In the West, initial money lenders through operating pawnshops began to lend money upon collateral. From this banking perspective, China's pawnshops also existed. However, here they were provided by the rise of Buddhist monasteries 200–300 AD. Thus, banking also began in China spreading out from the religious temples as it had in Babylon, Greece, and Rome. They extended credit based upon collateral. This included gold and silver, since this was in its raw form and the coinage in China was bronze or at times iron. Private pawnshops appeared in China about 800 AD, and by 1500 AD, they displaced the Buddhist monasteries. There was no national regulation of pawnshops in China until much later during the 18th century when they were entrusted with state funds. This early development of banks in China did not formally take shape until 1850.

Jiaozi - of the Song Dynasty

However, the most important aspect that appeared in China was the development of deposits around 800 AD whereby the development of storage appears during a period when China was divided between north and south, and the latter was a prosperous state. Receipts began to appear at these deposit shops run by merchants.

Paper had already been invented in China, but paper receipts began to emerge in Sichuan by the end of the 10th century. There were also promissory notes that enabled a GIRO type of banking system to emerge whereby one could transfer money between accounts. This began to supplant the need to carry bulky strings of bronze coins (guan).

The government regulated these deposit merchants in the 11th century creating a monopoly of just 16 merchant bankers. How to manage banks and fiat money was not understood and economic chaos forced the government to revoke these monopolies, replacing them with a state banking system known as the Jiaozi Currency Bureau in 1023 AD. Thus, the first official government paper money in history began in 1024 AD. These were called *jiaozi* (exchange bills). The Jin Dynasty (1115–1234 AD) in the north were at war with the Song in the south. They funded their military venture with paper money by adopting that from the Song in the south, but they called their notes *jiaochao* whereby the word *chao* meant "banknote". They carried a warning similar to the American paper currency when it began **"counterfeiters of jiaochao will be beheaded."** The Jun Dynasty eventually fell during the invasion of the Mongols.

The Song Dynasty was founded in the Northern China region during 960 AD and it gradually conquered the southern and

western kingdoms, forming one unified empire over two decades. The Song intended to create one monetary standard by reforming the bronze "cash" coinage. Iron had driven out the old, more valuable, bronze coinage. In 979 AD, the Song developed a plan to restore the bronze currency by requiring that 10% of taxes had to be paid in bronze. They announced each year that it would increase by 10% in hopes to drive out the iron coins. They set off a financial panic whereby the value of iron coinage collapsed by nearly 50%. The premium on bronze coins soared. Within three years, the government was forced to abandon the plan for there was simply too great a shortage of the old bronze coinage. The Sichuan mints were forced to manufacture only iron coins. The exceptionally low intrinsic value of iron coins made them unacceptable even within the various regions of China. Merchants dealing with other regions were forced to exchange iron for bronze coins to facilitate trade. Inflation had soared and it would take 1–5 pounds of iron coins to purchase 1 pound of salt. An ounce of silver was worth 91.25 pounds of iron coins.

The Tang government had originally estimated official depositories to store coins for merchants. They would issue a promissory note or receipt that became known as *feiqian* (flying cash) that could be redeemed in the various provincial capitals. Thus, the failure to develop formal gold and silver coinage in China gave rise to the development of storage and transfer facilities as a necessity in interprovincial trade. Under the Song Dynasty, this system was reestablished under the name *bianqian* (convenient cash).

China was not exempt from fiscal problems or economic revolts due to government mismanagement. In Sichuan during 993 AD, the inflation of the iron

coinage caused by its relentless depreciation led to a rebellion where the capital at Chengdu was captured and held until June 994 AD. The rebels forced the closure of the mints until the government eventually was able to gain control. This interregnum led the merchants to begin to issue their own paper bills that began to be accepted among the population and freely circulated. This was the similar case for the first paper money issued in America, which took place in Canada, and used playing cards because the ship from England failed to arrive on time and forced the local government to create circulating promissory notes written on playing cards.

These privately issued *jiaozi* (exchange bills) led to lawsuits thanks to unscrupulous merchants. By 1005 AD, Zhang Yong, who was the prefect of Chengdu, sought to solve the problem. He petitioned the court to reopen the mints and to introduce a large iron coin, equal to 10 coins, which illustrates the inflation problem. He also sought to introduce two small bronze coins. Zhang also regulated the private paper money that was similar to the financial panic of 1837 in the United States when private banks issued paper money following the same model and ending in the same way – financial collapse. Zhang created the 16 monopolies to issue the *jiaozi* in a standardized size, format, and color. To prevent counterfeits, he introduced a hidden seal that was similar to a watermark. The *jiaozi* were akin to checks, for they did not have a denomination, as that varied and was written on each note in pen. There was a 3% fee to redeem the note for actual coinage. However, Zhang did not limit the issue of *jiaozi*. This issue of the notes tended to follow the seasonal economy with the rice

harvest in the fall and the production of silk that was always in early summer based upon the silk worms.

Zhang's reforms failed due to the lack of any limitation on the issue of the *jiaozi*. By 1014 AD, the weight of the iron coinage was reduced again by 50%. The small iron coins quickly vanished and the larger iron coin was all that remained. This reduction in the iron coinage in weight provided a brief pause in the high levels of inflation until about 1070 AD. The merchants had invested the cash on deposit in real estate comfortable in the fact that the 3% surcharge to redeem the paper *jiaozi* led them to invest the money for their own accounts, as they assumed there would be no redemption. Counterfeiting also took hold and led to a rise in legal disputes; some merchants were forced to close entirely.

By 1016 AD, administrators recommended the government take over the issue of the *jiaozi*. By 1019 AD, the paper money fell to a discount of up to 30% and the prefect ordered a suspension of any new issue. He was replaced in 1023 AD and the notes were once again permitted, but now the government issued the notes. This is when the *jiaozi* became fixed denominations (two in all). The notes had to be redeemed after two years, at which time the 3% fee would be charged. This became a 1.5% annual tax on all money itself. Of course, the excuse was to prevent worn notes from circulating to create a firm control for the state over the amount of *jiaozi* in circulation. The year 1024 AD saw an issue

of nearly 1.9 million guan, but later, a biennial quote was imposed with a fixed issue of 1,256,340 guan.

China clearly migrated toward state banks and regulation faster than what took place in Europe. This appears to be attributed to the distinction between the Eastern beliefs that to be emperor, there was the mandate from Heaven (*Tian ming*) that did not exist in Europe. The East quickly gravitated toward a fiat structure of money whereby its value was simply decreed. In the West, money was seen as intrinsic with the state merely certifying its quality and weight as in ancient times. Therefore, banking in China was markedly different from that in Western Europe. This distinction also allowed China to be the first to invent paper money since the value of an object was seen as justified by the *Tian ming*.

We begin to see state issued paper money by the 1005–1024 AD period, which was a monetary reform not much different from the collapse of the private bank note in the United States that burst into the panic of 1837. Inflation soared and the state began to now restrict the supply of money and assumed its control.

Perhaps because the first five emperors of China are mythical creatures, we have a distinct difference in the thinking process that may also explain why money in China tended to be based on political power rather than the intrinsic value of the coin itself. The first emperor, Fu His, was the product of a miraculous birth as a divine being with a serpent's body during the 29th century BC. He is credited in an uncertain manner to have invented writing, domesticated animals, taught people civilization (i.e. how to fish, hunt, and cook). He also is said to have invented marriage and instituted sacrifice to heaven. If the emperor is

the creator of life and civilization, then his issue of money is seen differently than in Western culture where a king merely stamps the image of the city or himself upon a coin. The only object to have a practical tangible value was that of silk.

The striking difference in the thinking process between East and West has often been called the "Needham Question" after Joseph Needham and his work on China, science, and civilization. Others have called it the great divergence; Kenneth Pommeranz attributed it to geographical determinism. I see it more as a perception of who is God, for in Japan the emperor had to renounce his divinity at the end of World War II. Nevertheless, from the earliest of times, the concept of money in China was strikingly different and led to the adoption of paper money more than 700 years before such ideas emerged in European culture.

Fu His The First Mythical Emperor
(29th Century BC – The Great Bright One)

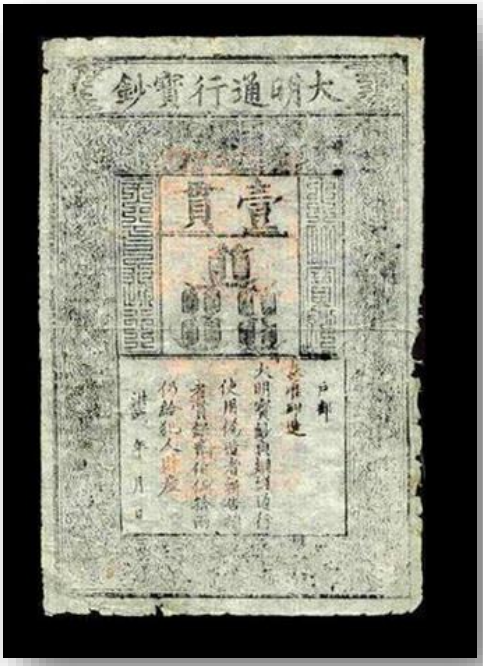
Interestingly enough, pawnshops also emerged in China, but not until the spread of Buddhism. L. S. Yang, who produced the seminal work of Chinese pawnshops, demonstrates that they were linked to religion at the monasteries. They did not charge interest and were seen as a charity to help the poor. We see the same in the Middle Ages when Christian monks tried to set up pawnshops and charged no interest to service the poor in competition with the Jews. Once again, we have the development of religion and banking quite similar to Babylon and Greek banking functions emerging in the temples.

In Babylon, grain appeared as the medium of exchange for wages prior to the invention of coinage around 600 BC. By 120 BC, wages were expressed in coin. For example, scholars (astronomers) would earn between 60 and 120 shekels of silver (120–240 silver drachms or 500 to 1,000 grams). In China, wages were paid in grain. Clearly, there are practical ways of effecting goals but human nature will lead to similar results. We will see in the Middle Ages a two–tier monetary systems where international trade emerges in gold where wages to workers will be in silver with two separate monetary systems.

Silvia provided identical interest rates in Ancient China with those in Babylon ranging between 33.33% and 20% annually. There does appear to be a credit crisis emerging in China; at the end of the 1st century BC there was a reform of the credit markets. The government began providing free loans for funerals and did provide loans to the poor at 36% annually. As Silvia has pointed out in his classic work *History of Interest Rates*, the interest rate of 36% existed implicitly since it was "**philanthropic, prevailing rates must have been higher.**"

Genghis Khan invaded China in 1211 AD. By 1215 AD, he conquered the new Jin capital at Beijing. The Jin then

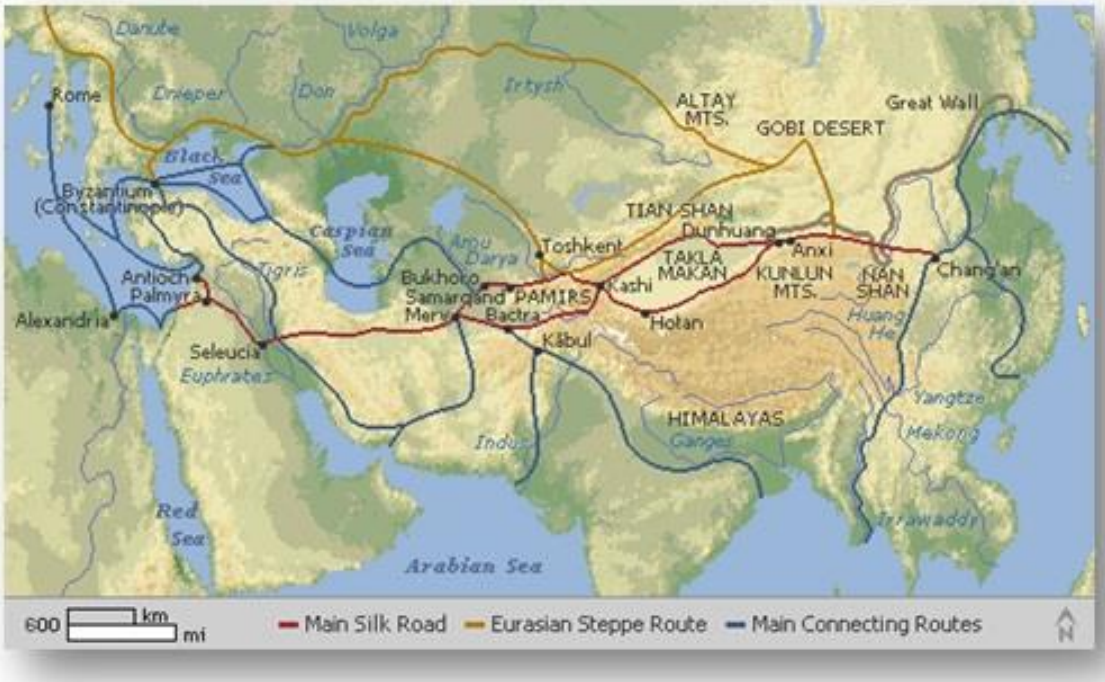
fled to the old Song capital of Kaifeng and were forced to issue paper currency to pay for the defense known as *baojuan* (treasure certificates). The Jin managed to survive for about 20 years, but their monetary system was reduced to poverty. The Mongols finally exterminated the Jin Dynasty in 1234 AD. A classic example of social chaos with the change in government comes from China – the first country to invent paper currency. When the Mongols invaded China under Genghis Khan and established the Yuan Dynasty, his successor Kublai Khan was forced to honor the paper money that was in circulation. If he did not, the economy he wanted to rule would collapse.



The Mongols did not possess a formal monetary system for they never issued coins of their own. Here is a coin of Genghis Khan, which is an Islamic imitation. This coin is inscribed "Great Khans. temp. Chingiz (Genghis)

ISLAMIC, Mongols Great Khans Chingiz (Genghis) (AH 602-624 / AD 1206-1227)
AV Dinar (27mm, 5.62 g, 6h). Ghazna (Ghazni) mint. Dated AH 618 (AD 1221/2)
Kalima and name of Abbasid caliph in four lines, floral ornament above and to left;
Umayyad "Second Symbol" (al-Quran Sura 9:33) in outer margin
Name and titles of Chingiz Khan in four lines, floral ornament

to Möngke. AH 602–624/AD 1226–1227". It is an Islamic Gold (AV) Dinar (34mm, 4.63 grams) of an uncertain (possibly Dihistan) mint. This demonstrates that his issue of coinage was not for domestic use but for trade.



The Mongols conquered China and maintained the Chinese paper monetary system that was in circulation and used that as the monetary base rather than coins. To a large extent, the Mongols conquered the Silk Road of trade much as the Romans destroyed Carthage and took over their sea trade. The Mongols also destroyed the Rus (Russians) in Kiev, Ukraine, and when they rose again it was from Moscow. They attempted to invade Japan twice but their fleet was destroyed in storms and that became known as the Divine

Wind that protected Japan – hence the Kamikaze (神風) pilots (Divine Wind) of World War II.

China never developed precious metals as currency. They accepted gold and silver in trade for silk, but they never issued such coins until modern times. The sycee were a type of silver or gold ingot currency used in China until the 20th century. The name derives from the Cantonese word meaning ″fine silk″ and were obtained in trade.

Chapter 6. The Birth of Central Banks & Giro Banking

The Temple of Apollo on the Greek Island of Delos
(First Central Bank)

Banking spread throughout the ancient world emerging in virtually every city of the West as well as the East. In Athens, as in most cities, banking had been conducted exclusively on a cash basis. The first offshore banking industry seems to have emerged in the tiny and remote island of Delos. The Temple of Apollo on Delos is the best-known first central bank of the ancient world. Its wealth attracted the attention of the Ptolemies, who used it as one of their central banks and made Delos the capital of the island league they controlled. Its claim as the birthplace of Apollo gave Delos a strong religious

identity that lasted all the way until Byzantine times in Christianity. In an era when religious festivals were economic engines that attracted thousands of pilgrims and generated healthy economic growth, Delos stood strong at the center of the wealthiest commercial centers and benefited greatly. The gift to Apollo created a vast treasury at the temple and that money soon began to provide the foundation for a central bank.

There was a democratic system whereby elected magistrates would supervise the local temple bank and its profitability. This would later provide the model for Rome and indeed other city–states began to establish their own banks in competition such as Athens.

Here the islanders of Delos had little natural resources. Their two greatest assets were the natural harbor and the wealthy temple of Apollo as gifts poured in from all over the ancient world. In Delos, cash transactions were replaced by an actual system of credit receipts and payments. Accounts were maintained for individual clients who could send instructions to make payment to another's account. After the Persian wars that started in 478 BC, Delos hosted the treasury of the Delian League before it was moved to the Athenian Acropolis much to the displeasure of many members of the alliance.

Phillip V of Macedon
(b 238; 221-179BC)

By the end of the 4th century BC, the Hellenic kingdom of Macedonia became the island's protector, and the

Delian population doubled with many citizens of other cities settling on the island to take advantage of its position as a strong commercial center. The banking industry was so profitable on Delos that they were able to further their prominence by awarding golden crowns to honor such Hellenistic rulers as Eumenes of Pergamum, Prusias of Bithynia, and Philip V and Perseus of Macedonia.

However, after the Roman conquest of Greece, the Athenians dominated the island once again and promptly removed all Delians, replacing them with poor Athenians who received pastures on the island by lot. The island continued to enjoy wealth and fame, which led its population to increase. Due to the rise of Rome, Delos' competitors were eliminated – namely Carthage and Corinth. This allowed the tiny island to prosper in its banking industry thus providing a model system for the Romans to imitate.

The tables utilized by the money changing trade were trapezium in shape and usually marked with a series of lines and squares used in calculations. They were found set up in the Agora in Athens pictured here. This is the origin of the word *trapezitai* – the name used for Greek bankers. The word "bank" owes its heritage to the Italian word *banca,* meaning bench or counter.

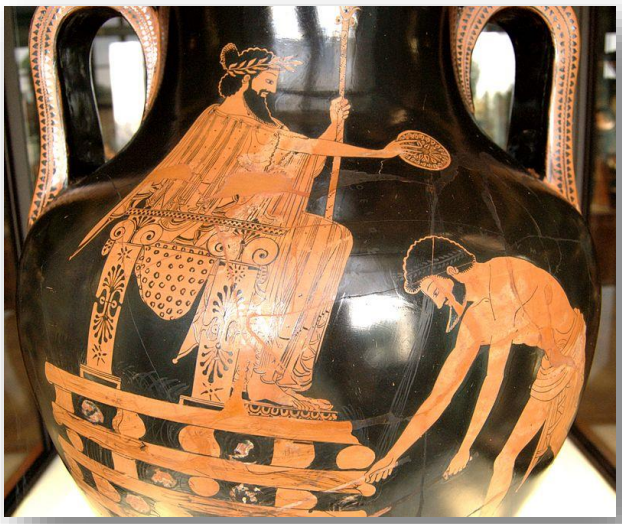
Unquestionably, banking has come a long way since the Babylonians first invented it to serve the basic function of a monetary system – the transfer of wealth in conducting commerce among individuals that created the economy as well as the collection of taxes funding government.

Indeed, the Greek system of banking through the temples formed what is known as a ″giro bank″ in that money could be transferred from one account to another. Rather than paying interest for deposits and lending money out, this system became a place of secure deposits. Delos became the prominent banking center of the ancient Greek world. Money could be stored there and instructions (what we would call a check) transferred money from one account to another, which greatly saved the risk of transportation. Indeed, this is how gold was stored at the New York Federal Reserve under Bretton Woods where the gold of one nation could be move to the next cage to pay another. This is a ″giro bank″.

The Egyptians were the breadbasket of the ancient world. Once Egypt fell to the Greeks, the banking system was organized in the form of grain storage. Thus, money could also be transferred in a ″giro″ arrangement between accounts without having to physically move grain between two parties.

Delphi - Greece

The Romans tended to absorb the technology of those they conquered. When the Romans conquered Greece, they too absorbed the banking system created by the Greeks. Indeed, the passions of man never change from century to century. The one unifying trend behind banking is the fact that money and religion tended to always go together. People have always donated money to their Gods throughout every century to buy forgiveness for their sins. The temples were always the central banks of the ancient world.



Delphi was the first Greek bank/temple of size and the wealthiest. Delphi certainly reached this status even prior to Homer. The temple became a central bank providing capital and storage. The Dorian Invasion took place 1100–1000 BC where they conquered the Peloponnese. This is when the Greeks were forced to flee to modern Turkey becoming the Ionian Greek culture. The famous king of Lydia invented coinage Croesus (595–546 BC). According to Herodotus, he reigned for fourteen years from 560 BC until his defeat by the Persian king Cyrus the Great in 546 BC. Croesus was renowned for his wealth and the historians Herodotus and Pausanias noted Croesus' gifts were preserved at Delphi.

Croesus was the last of the Ionian kings who stood against the increasing Persian power in Anatolia. He began preparing a campaign against Cyrus the Great of

Persia, whose heirs Darius and Xerces would eventually invade Greece giving rise to the Battle of Marathon.

Temple of Apollo - Delos

Croesus consulted the Delphic oracle and the oracle of Amphiaraus to inquire whether he should pursue this campaign against the Persians. The oracles answered, with the very typical ambiguity, that if Croesus attacked the Persians he would destroy a great empire. This would become one of the most famous oracular statements from Delphi ever delivered. However, they also advised him to find out which Greek state was most powerful and to ally himself with them. Croesus formed an alliance with Sparta in addition to those he had with Amasis II of Egypt and Nabonidus of Babylonia. He then launched his campaign against the Persian Empire in 547 BC but the battle was inconclusive. Normally, the tradition was to disband one's armies for the winter. Cyrus did not follow this tradition and instead launched a secret attack on Croesus in Sardis, capturing him in his capitol city. The ambiguity of the Oracle of Delphi became clear that the powerful empire destroyed by the war was Croesus' own.

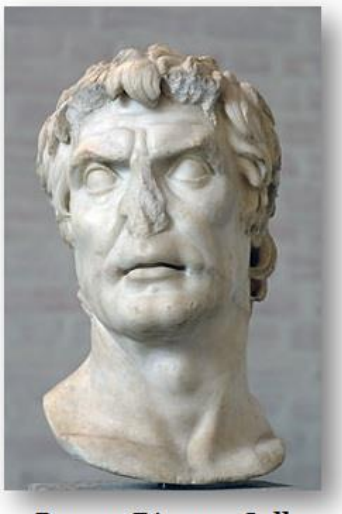
It was the Ionian Greeks who established the Temple of Apollo at Delos during the 6th century BC after their flight from Greece as a result of the Dorian

invasion. The island once had temples dedicated to Apollo (the Artemission), Leto (the Letoon), Artemis, Hera (the Heraion), Zeus, Athena, Hercules, and Asclepius. However, the Temple of Apollo housed a 26 foot (8 meter) high statue of Apollo made of wood covered in gold since this was believed to be the island which was his birthplace. There was also a temple dedicated to the twelve Olympian Gods (the Dodekatheon). References to Delos appear in the Odyssey.

The Ionian Greeks established the Temple of Apollo and this became the central bank of the ancient world. Money could be stored there under the God's protection and transferred between accounts, creating GIRO banking, which meant that the money never left the temple and was merely transferred between two accounts. The temple at Olympia also rose as a banking center following the Dorian invasion. However, the temples did **NOT** pay interest on deposits. Instead, they provided a place of safekeeping.

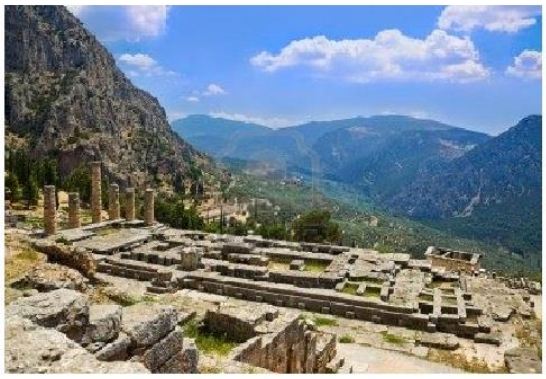
It was Xenophon (431–350 BC) who gives us the word "**economics**" from the title of his book ***Oikonomikos*** (how to regulate the household) and was a student of Socrates. He had proposed a public corporation for a bank that would be formed by shares subscribed to by all the Athenian people. Commerce was seen as more important than even agriculture. Xenophon proposed a public bank that would lend at interest to expand the economy. He proposed that the profits would be used to pay for public works.

Asia Minor had become a Roman province in 133 BC. The First Mithradatic War forced the citizens of Asia Minor into debt when the Roman Dictator Sulla (138–78 BC) plundered the region and fined the cities. He cleaned out the ancient temples at Delphi and Olympia, carrying back vast hoards of gold to Rome. He also drove the cities into poverty forcing them to borrow to mortgage their lands to pay the fines. By impoverishing Asia Minor, he set off a capital flow through money lending back to the same region. In 67 BC, the senate was under some pressure to forbid provincials to even borrow in Rome and applied the 12% legal limit on interest to Asia Minor. This was obviously ignored by Brutus' loan at 48% in 56–50 BC to Asia Minor.



Roman Dictator Sulla (138-78BC)

The Greek temples that had been the central banks of the ancient world ceased to exist in that capacity replaced now by Rome. The bank robbers in ancient times were really those who plundered the various temples. When Alexander the Great (356–323 BC) conquered Persia/Babylon in 325 BC, the gold and silver seized was then coined and increased the money supply about seven–fold throughout the ancient world.



Temple of Delphi

Temple of Olympia Zeus

It was the Roman Dictator Sulla who not merely plundered the Greek temples at Delphi and Olympia, but he also raised the legal rate of interest in Rome from 8 1/3% to 12% in 88 BC because he had impoverished the Greeks and then demanded higher rates of interest. At this point in time, there were no national debts. States funded themselves with taxes and plunder. During the Second Punic War (218–201 BC) between Rome and Carthage, the plunder was so great that the citizens of the city of Rome became tax–free and there were huge tax refunds. At this time women became tax–exempt, and to avoid taxes men began to title property under their wives' names. In 169 BC, this trend became so widespread that the new laws forbade a man to will as much as half of his property to women.

Juno

Consequently, the central banks of the ancient world were formed by the priests since people would donate money to the temples to buy forgiveness and favor with the gods. Thus, the temples became rich. The priests in Babylon lent money at 6.25% annually, which was dirt cheap and

Juno Moneta Reverse
ÆFollis Maximianus (284-305AD)

considered pious. The **Temple of Arbela** (732–625 BC) in Assyria lent money at 25%. The same is true of Delphi and the Temple of Delos. Banking, like mathematics, truly appears to have become widespread among the various religious temples. Even the Romans minted their coins in the Temple of Juno. Yet, at the core of this, the credit required a sense of the future that implied planning for tomorrow.

Even in Rome, the coins were minted at the Temple of Juno. A sacred flock of geese were kept there and in 387 BC, a marauding Gallic tribe swept down from the Po River valley (Northern Europe French region) and sacked Rome, extracting a heavy ransom in gold. As the legend goes, the Gauls attempted to invade the city quietly but frightened the sacred flock of geese that made a lot of noise. This alerted the Romans to the surprise attack giving us the word *monere* in Latin that means to warn. The Temple of Juno then became popularly known as the Temple of Juno Moneta. Since this is where the coins were minted, we now arrive at the word ***"MONEY"*** that springs from the origin of this legend and place that was an ancient mint. Our terms such as capital flow now arrives from the Latin word *currere* meaning to run or to flow**,** and this is where the money flowed from, giving us the word **CURRENCY,** meaning the flow of money. This is why **Juno Moneta** is pictured on Roman coins holding the balance scales in one hand and a cornucopia in the other, symbolizing endless bounty or wealth.

Augustus (27BC - 14AD)

The canon Usurarum of Lyon II in 1214 AD extended the condemnations of bankers to aliens as well. Finally, at the **Council of Vienna** canon 15 extended these penalties to those who authorized usury or protected such persons. Although money lenders were linked to the worst of all evildoers, this would emerge after the Dark Ages in response to the rebirth of commerce on a grand scale.

Basilica of St. John Lateran, Rome
(where the Popes lived before the Vatican)

During the reign of Augustus (27 BC–14 AD) in Rome, there was a public loan bank, but not subscribed to by individual members of society. This public bank provided loans to the poor without interest and was funded by the confiscation of property from those alleged to be criminals, which would include political dissents as well. Collateral was required at twice the amount being borrowed. These types of public banks aided the purchases of land.

Trajan. AD 98-117
AU Aureus (18mm, 7.18 g)
Rome mint. Struck 111AD Trajan extending right hand towards boy and girl

Nerva (AD 96—98)
Roman Æ Sestertius (34mm, 22.18 g) struck at the mint of Rome (97 AD)
legend: "PLEBEI VRB[ANA]E FRVMENTO CONSTITVTO" surrounding a modius filled with poppy and six grain ears demonstrating welfare for the poor (plebs)

There were efforts within Rome to assist the poor. Here we have a Roman Sesterius issued in 97 AD depicting welfare for the poor with free grain issued by the Roman Emperor Nerva (96–98 AD). Perhaps this gesture was politically motivated since Nerva was a distinguished lawyer who served as Consul with Vespasian in 71 AD and with Domitian in 90 AD. Upon the assassination of Domitian, Nerva was immediately offered the throne. He was then proclaimed

emperor by the senate. Nerva was already 66–years–old at the time he took the throne. His successor, Trajan (98–117 AD), formalized this welfare program by creating a government bank. The Roman state was lending money secured by land and the interest earned was used to then support the poor children known as the *alimenta*. Trajan issued his coinage announcing this program for the benefit of poor children, which involved banking profits.

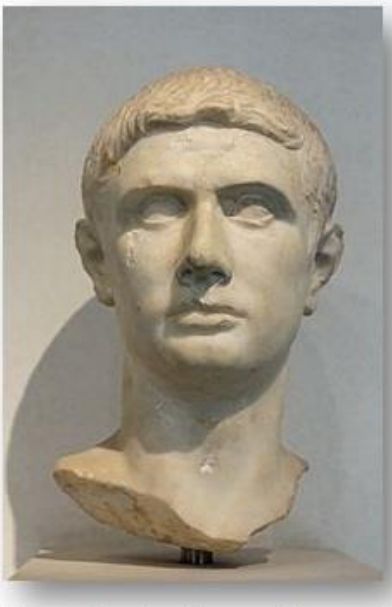
Indeed, we find similar arrangements in colonial America where land banks were established. They too would lend money on land and used the interest to fund public projects. Land banks loaned paper money to citizens who put up collateral in the form of some sort of real estate, such as farmland or houses in town. Borrowers ran the risk of forfeit their property in the event of default. These land banks were public institutions, not private, and enjoyed reputations for extending the terms for debtors in difficulty. They were invented as a means to provide liquidity when coinage was scarce.

Nevertheless, we have a good record of interest rates extending back to Babylonian times because the abuse in charging interest has always been a major problem. For example, Paul Volcker raised interest rates to insane levels going into 1981 to stop inflation. To do so, he removed the usury laws and never returned them. Therefore, today we have excessively high interest rates on creditcards because they never returned the rates following 1981.

During the 3rd century AD, the Persians are known to have dealt in letters of credit that are clearly an extension of the Babylonian clay tablets, except now they are drafted on paper. Even by the reign of the Byzantine Emperor Justinian I (527– 565 AD), his legal code reduced the legal limit on interest from 12–12.5% down to 4–8% varying on the type of loan. Commodity loans paid in kind could charge 12% and this is reflecting more of a venture capital type of market. In Thrace, commodity loans in kind were allowed at 12.5% while loans of money were restricted to 4.5%. One must read between the lines to see that this is a vibrant mercantile economy as distinguished from plain moneylending.

In Roman times, they were lending to Greeks in Asia Minor as an emerging market. Cicero (106–43 BC) wrote that anytime there was news of a disaster in Asia, a financial panic would be unleashed in the Roman forum down the Via Sacra, which was the Roman Wall Street of its day. Asia Minor was the emerging market at that time. The Romans regulated credit in the famous **Twelve Tables** dating back to around 450 BC. This code followed that of Hammurabi. Interest was limited to 8.5% per annum. Personal slavery for debt was permitted, but the

physical care of the slave was protected by law. Debtors get 30 days to pay off debt, otherwise creditor was free to seize the debtor.



Marcus Junius Brutus (85 –42 BC)

The history of interest rates during the Roman Empire show that rates declined by about 50% in 347 BC and became briefly outlawed in 342 BC. Interest rates climbed back to 8 1/3% level going into 340 BC and then jumped to 12% in 88 BC. This reflects only the legal rate by law. Nevertheless, banking outside of temples was considered a dishonorable profession. Even the Israelites did not allow lending at interest, but that was limited to fellow Jews. The Persians, as late as 450 BC, also considered men who engaged in bank lending at interest dishonorable.

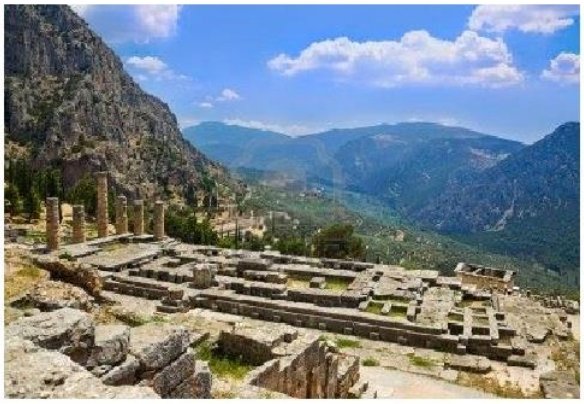
Even during the late Roman Republican period when the legal rate of interest was 12%, Marcus Junius Brutus (85–42 BC) lent money at 48% to the City of Salamis Cappadocia (Turkey) showing that he regarded the legal rate to be confined to Rome, not the Provinces. Yet, it was Brutus' co–conspirator behind the assassination of Julius Caesar (100–44 BC) at the age of 66. Cato the Younger (95–46 BC) who said of bankers:

> "In preference of farming one might seek gain by commerce on the seas, were it not so perilous, and money lending, if it were honorable ••• How much worse the money lender was considered by our forefathers than the thief ••• "

In the New Testament at Matthew XXV, a man about to travel gives three servants various quantities of 5 talents, 2 talents, and the third 1 talent. The servant is given 5 doubled the money as did the servant given 2 talents. The third simply buried the money fearing to invest it. He states**: "So you ought to have deposited my money with the bankers, and at my coming I would have received back my own with interest."** This statement reflects that indeed there were bankers paying interest on deposits.

At the same time, money lending during ancient times was by no means seen as an honorable profession. Even in recent times, bankers are regarded as someone who lends you an umbrella when the sun is shining, but demands its return when it starts to rain. The love–hate relationship goes back a very long time and is unlikely to change in the next 6,000 years. During the panic of 1869 in New York, they were dragged bankers out and hanging them on the streets.

In ancient Greece, it was said that a former slave by the name of Phormio became a banker and quickly rose to be the richest man in all of Athens. This was clear grounds for the envy of others and contributed greatly toward the image of bankers where they have often been among the most hated within society. This was the fate suffered by John Pierpont Morgan (1837–1913 AD) and his son who was simply known as Jack rather than Junior (1867–1943 AD). Even Andrew Mellon (1855– 1937 AD) was vilified.



Temple of Delphi

Temple of Olympia Zeus

Throughout ancient times, there was no ban on banking nor upon the earning of interest. The concept of usury did exist insofar as there were legal limits placed upon the rate of interest. But the concept of usury being any rate of interest began to emerge at 1000 AD. The Second Lateran Council in 1139 condemned usury as "ignominious". The Third Lateran Council in 1179 provided the excommunication of money lenders, denial of being buried in a Christian graveyard, and they would not be accepted in commerce. The canon Usurarum of Lyon II in 1214 AD extended the condemnations to aliens as well. Finally, at the Council of Vienna, canon 15 extended these penalties to those who authorized usury or protected such persons. Although money lenders were linked to the worst of all evildoers, this would emerge after the Dark Ages in response to the rebirth of commerce on a grand scale.

Central banks became imperatiuve and emerged as a vital component that enabled the development of civilization as they facilitated the clearing of transactions among banks and among nations.

What has been greatly misunderstood is that government has far too often interfered with the operation of banks for political purposes or for self–interest. Once government tasted the luxury of being able to borrow money without having to wait for its tax revenues or legal persecutions to obtain money at all costs, the manipulations were set in motion. As Adam Smith once said:

> They are themselves always, and without any exception, the greatest spendthrifts in society. Let them look well after their own expense, and they may safely trust private people with theirs. If their own extravagance does not ruin the state, that of the subject never will.

Chapter 7. The End of Relationship Banking & the Dawn of Transactional Banking

June 16, Franklin D. Roosevelt Signs Glass-Steagall (1933 Banking Act)

Clinton Repeals Glass Steagall Allowing 2007 Mortgage Crisis To Unfold
The Gramm–Leach–Bliley Act (the Financial Services Modernization Act of 1999)
(Pub.L. 106-102, 113 Stat. 1338, enacted November 12, 1999)

Relationship banking has been replaced with transactional banking thanks to the Clinton Administration's repeal of Glass–Steagall. Bill and Hillary Clinton repealed Glass–Steagall and opened the door to crazy bank proprietary trading that produced the 2007–2009 crisis from which the world economy has never fully recovered.

The Clintons sold out to Goldman Sachs and put an end to relationship banking, which gave rise to transactional banking that has completely changed how banking was done for centuries. Now, banks make loans without a relationship and quickly sell the loan to some third party. There is no relationship left between the banker and the borrower, which became highlighted during the 2007–2009 crash as no one really knew who had mortgages on any individual property.

Demostenes (385–322 BC), famed orator for his Philippics, engaged in what was regarded as a dishonorable trade. He lent a *talanton* (talent 6,000 drachms) to the city of Oreos at 12% secured by future public tax revenue. Yes, a "talent" was the scales used to weight money with the two trays meaning "balance" which evolved into personal "talent" by which you are weighed. Demostenes tells us unsecured loans became very common upon confidence.

When J. P. Morgan testified before Congress, the ruthless prosecutor, Samuel Unitermyer (1858–1940 AD), who did not understand banking, interrogated him. The question was blunt showing he did not understand relationship banking.

UNTERMYER: Is not commercial credit based primarily upon money or property?

MORGAN: No sir. The first thing is character.

UNTERMYER: Before money or property?

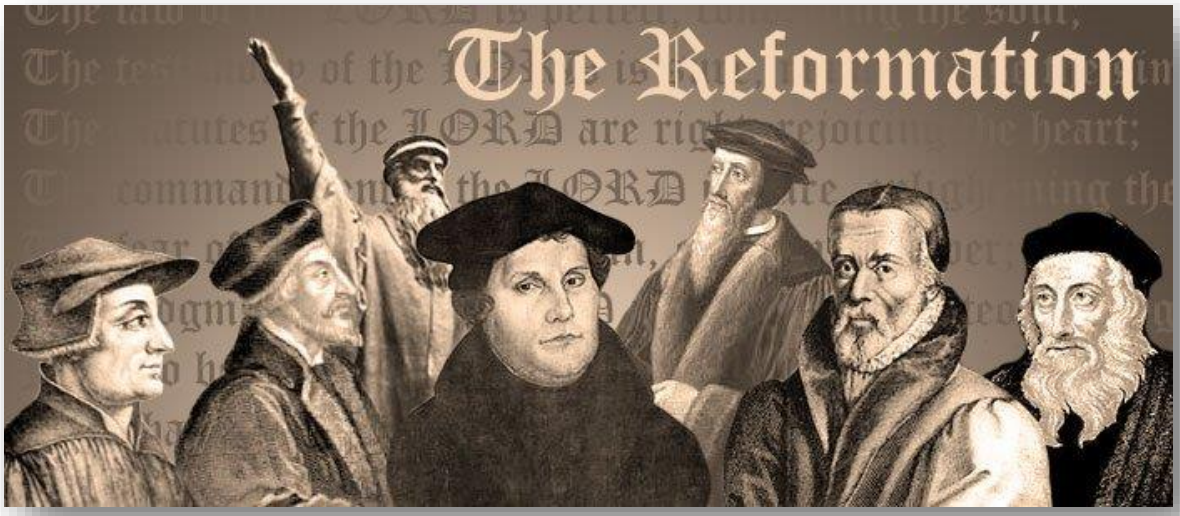
MORGAN: Before money or anything else. Money cannot but it … a man I do not trust could not get money from me on all the bonds in Christendom.

Robert Edward Rubin (born 1938)
American lawyer & CEO or Goldman Sachs
70th US Sec. of the Treasury (1995-1999)

Clinton appointed Robert Rubin (b. 1938), former Chairman of Goldman Sachs, as the 70th Secretary of the Treasury. He resigned as soon as he steered Clinton to repeal Glass–Steagall, opening the door to financial hell and what is now transactional banking. Goldman Sachs always contributed to both Republicans and Democrats to ensure it would always have influence. When Bush Jr. took office, he too appointed a former Chairman of Goldman Sachs as Secretary of Treasury, named Hank Paulson who protected Goldman Sachs during the financial crisis of 2007–2009 unleashed by Rubin and the repeal of Glass–Steagall. This single act of 1999 repealing Glass–Steagall of the Clinton Administration changed financial history and has been the seed of our destruction.

For centuries, banking made sense because it was relationship banking predicated upon contracts that necessitated the creation of contracts. Banking during the medieval period in Europe, which emerged in France and England, was relationship banking. Banking and credit began as transactions between two people. All the legal codes defined the agreements and required written contracts. This relationship between two people formed the core of banking.

The banking industry remained largely tempered and controlled in Europe. The Jews occupied the banking business and Christians and Muslims were forbidden to earn interest. Interest was being crafted as fees and futures contracts above current spot values, which were in reality the interest costs. Lending money for interest was strictly forbidden due to the Sin of Usury prior to the Protestant reformation. The one bit of knowledge that had been handed down from ancient times was how the over use of credit caused the collapse of the state. As such, the Sin of Usury held that demanding interest to be paid from an individual in need was taking advantage of his situation.



The line that divides the medieval period and that of the birth of capitalism is the Protestant reformation. Take away the religious slogans and the political corruption that emerged within the Church (the king appointed friends as bishops to control the people), and what you are left with is the economic reasons for the rebellion. Behind the scenes there were Christians who could care

less about religion, but just wanted to freely engage in banking without risk of excommunication.

Prior to the reformation, the Jewish community had exclusively conducted banking. Their religion was the only one in the west that did not deem lending money to be a sin. Catholics, who engaged in lending for interest, ran the risk of being excommunicated from the church. The Protestants used this restriction as evidence that the Pope was the Anti–Christ, suggesting that he was attempting to control the people by prohibiting the buying or selling on credit, similar to the warnings in Revelations.

Of course, this was an extreme interpretation of the Bible, but it served a political purpose. Economics credits the birth of capitalism with the reformation because in the Protestant regions of Europe Christians moved head first into banking. Eventually, the Sins of Usury gave way even among the Catholic nations. However, to this date high rates of interest are generally considered to be illegal and deemed to be usury.

The Banker and His Wife - Oil on wood
Musée des Beaux-Arts, Valenciennes

Prior to the Protestant reformation, banking in the middle ages centered largely on the goldsmiths. This tradesman group accepted deposits and issued receipts in return. This effectively created the rebirth of banking in the Middle Ages similar to that which had existed in Babylonian times. The above illustration shows a scale with specific weights for gold coins from around Europe. This demonstrates that trade, and the need for foreign exchange and banking, became widespread enough that professional tool kits found a prosperous market among the growing profession of banking. Prior to the reformation, the Dutch emerged as a great financial center prior to Britain.

With the "Glorious Revolution" in Britain in 1688 AD during the reign of William and Mary, an experienced Scottish goldsmith, William Paterson, operating in

London proposed to Parliament his idea of a national bank. It was initially rejected and Paterson later wrote, **"Others said this project came from Holland and therefore would not hear of it, since we had too many Dutch things."** Apparently, Parliament rejected the idea because the bank would issue notes against a $1 million pound loan from the government and the proposal called for the notes to be deemed legal tender. Within two or three years, Paterson was back at it again. This time he omitted any mention of bank notes being issued and the plan passed, thus giving birth to the Bank of England.

Sir William Paterson
(1658 - 1719)

The distinction between bank notes and deposit receipts issued by goldsmiths was a simple one. A receipt for a deposit was transformed into a bank note if the receipt was payable to the "bearer" rather than an account. Therefore, the Paterson's Bank of England cleverly created the circulating notes by de facto since its receipts were payable to the "bearer" thereby creating circulating "bank notes" when there was no provision for such an instrument.

Between the reformation and the default of the national debt on the part of Spain, which destroyed the Italian bankers, the banking industry prospered in northern Europe. However, with the rise of the British Empire, the banking center

Banking Panic 1297-1298

migrated to London. To this day, London has remained as the primary financial center within Europe.

As with all things in life, the development of the banking industry has had its side effects. The process of providing credit allowed leverage to be reintroduced into the modern world. While leverage allows an individual to purchase items today using tomorrow's future earnings, it also tends to create greater levels of inflation. Throughout the monetary history of the world, leverage has provided through the means of credit the boom and the bust effect within the economy. With it, the business cycle inevitably over–expands and over–contracts aid largely by credit. The greater the amount of credit, the higher the volatility within the monetary system. Nonetheless, the absence of banking and credit discourages human interaction and thus acts an impediment to economic and social growth. Too much debt and credit runs the risk of destroying the very foundations of civilization as witnessed by the fall of Athens and Rome. If there is one lesson to learn from history, it is the need for moderation in both directions of the economic pendulum.

This need to store wealth greatly increased the ability to borrow, thus allowing the foundations of modern day credit to emerge. The development of the banking industry was a milestone in the evolution of civilization. Both the banking

industry and the monetary system fostered interaction among the peoples of the world, thus allowing international trade. This new age of monetary interaction is the foundation of civilization. This is what governments are destroying today by hunting for money. They are destroying the links within commerce that created civilization, dangerously pointing us in a contracting mode headed into the abyss.

William Jefferson Clinton (born 1946)
42nd President of the United States (1993 - 2001)

This is what the Clintons did to destroy. They allowed banks to depart from this age–old establishment of relationship banking with one–on–one lending and have embarked on the securitization of debt to simply resell loans to someone else by removing the binding element that created civilization – relationships.

We need to refocus the public's attention to this new Clinton banking development that is post–1993, for no president has ever swept so much power into the hands of the bankers than the Clintons have. Today we have Goldman Sachs who has pursued political control no different from all the famous merchant bankers before them. They ignore the reality that Glass–Steagall was imposed because more than 9,000 banks failed during the 1930s. It is estimated that 4,000 banks failed during the year of 1933 alone. These failures had one

common theme: they were speculating and trading or had too much capital parked at a banked that traded.

Interstate banking was prohibited in 1927 under the **McFadden Act**. The act sought to give national banks competitive equality with state–chartered banks by letting national banks branch to the extent permitted by state law. The McFadden Act specifically prohibited interstate branching by allowing each national bank to branch only within the state in which it was situated.

The interstate banking prohibition of the provision of the McFadden Act was then repealed by the **Riegle–Neal Interstate Banking and Branching Efficiency Act** of 1994, which then declared that state law continued to control intrastate branching, or branching within a state's borders, for both state and national banks not outside the state. Clearly, the Clinton Administration altered the entire banking structure. The Clintons repealed every safeguard that had been put in place through the experience of the Great Depression.

Louis Thomas McFadden
(1876 – 1936)

However, it was the **Bank Holding Company Act** of 1956 (12 U.S.C. § 1841, et seq.) that regulated the actions of bank holding companies. Originally, the Federal Reserve Board of Governors had to approve the establishment of a bank holding company and prohibited bank holding companies headquartered in one state from acquiring a bank in another state. The law was intended to regulate and control banks that had formed bank holding companies in order to

own both banking and non–banking businesses circumventing Glass–Steagall. The law generally prohibited a bank holding company from engaging in most non–banking activities or acquiring voting securities of certain companies that were not banks.

The **Bank Holding Company Act** was also repealed by the Clintons under the **Riegle–Neal Interstate Banking and Branching Efficiency Act** of 1994 (IBBEA). The IBBEA then allowed interstate mergers between **"adequately capitalized and managed banks, subject to concentration limits, state laws and Community Reinvestment Act (CRA) evaluations."** Other restrictions that prohibited bank holding companies from owning other financial institutions were all repealed in 1999 by **Gramm–Leach–Bliley Act,** which ended Glass–Steagall. In the United States, financial holding companies continue to be prohibited from owning non–financial corporations in contrast to Japan and continental Europe where this arrangement is common.

Private equity firms, which solicit funds but are **not** classified as banks, and are thus outside the Federal Deposit Insurance Corporation (FDIC), may now acquire large ownership positions in a number of non–bank corporations. However, private equity firms can now profitably invest in banks by injecting reasonable capital, engaging experienced, professional bank management, and prudently investing the bank's funds in loans and other investments that make economic sense. The Clintons have opened Pandora's box entirely.

Goldman Sach's US Secretaries of the Treasury

Robert Edward Rubin (born 1938)
70th US Secretary of the Treasury during the Clinton administration
(Was at Goldman Sachs for 26 years before entering government)

Henry Merritt "Hank" Paulson, Jr. (born 1946)
74th United States Secretary of the Treasury
(He had served as the Chairman and Chief Executive Officer of Goldman Sachs which he joined in 1974)

It certainly appears that the entire purpose of Glass–Steagall separating banks, brokers, and insurance, was the last straw to be repealed. It was former Chairman of Goldman Sachs, Robert Rubin, who worked from inside the Clinton Administration to repeal that restraint in 1999 which directly created the 2007 economic crisis. Rubin cut the chains that bound the bankers and opened the gates to hell by blending trading, banking, and insurance, which caused the bailout of AIG from which the world economy has still not recovered. He resigned shortly after.

Robert Rubin of Goldman Sachs sold the idea of transactional banking, claiming it would make the banks stronger, for they would generate the loans, but then package them and sell them to someone else (e.g. 2007). This was the pitch to repeal Glass Steagall in 1999. If the banks didn't have these loans on their books,

then they would not have the risk when the business cycle turned down. That meant the end of relationship banking as well as **end of fractional banking** since loans were no longer maintained on the bank's books but were "securitized" and sold to others.

The banks would rather trade with your money (repeal of the Volcker Rule) than lend money out to create jobs as in **relationship banking** (Fractional Banking). So they have no problem if the people demand that the credit decisions be handed to government because, from their perspective, they do not give a shit. This is now about trading; not lending.

Of course, the small regional banks will be wiped out in this manner. The big banks that profit from proprietary trading are the ones behind this disinformation. End fractional banking and you will not solve any problems; instead, you're more likely to make matters worse. If we do not deal with the real issue—the wrongful repeal of Glass–Steagall—then we are only going to make the future darker instead of more secure.

This transformation from the historical relationship banking to transactional banking undermines civilization itself. This is at the heart of everything that is turning society down and moving in the anti–civilization direction that, at the extreme, ends in only a **Mad Max** event. Julius Caesar said, "divide and conquer." That is very true. Transactional banking divides society and eliminates the relationship that furthers civilization. This is becoming all about quarterly performance with the view **hell with the long–term**.