Partin Pruthi

Professor Bernard J. Hibbitts

Ancient Law Seminar

December 14, 2015

# Financial Regulation in Ancient Greece and Ancient Rome

We rarely think about how money first came into being. It has become so essential and integral to our lives that it is impossible to imagine a world without it. Money is the de-facto standard on how we measure value. As Aristotle once said, human beings are social animals[1]. By our very nature we are designed to live together and share our resources. If we do not do so, we are doomed. Our evolution has been based on the sharing of our talents and resources, whereas our nature has pushed us to expand our social circles from our families to more distant individuals. This has developed the need to quantify our efforts that we shared with others to achieve a level of satisfactory fairness. The mystery of the creation of money as a connotation of value may never be solved; however, it has long been believed[2] that it arose out of necessity. The interdependence of people created the need for a common medium that would denote value. For purposes of efficiency, it was only logical to move from a barter-based system, to a medium where a property such as value is assigned to a smaller, lighter and more transportable thing. Some of the most common and in demand products like grain or cattle were used for barter,[3] since inherently they actually were

[1] Aristotle, *Politics*
[2] *Ibid.*
[3] G Davies, *A history of money: from ancient times to the present day* (1994)

valuable and directly fulfilled one of the most basic needs of human beings –nourishment– thus making cooperation between societies in the form of trade very cumbersome. Since human beings are capable of abstract thought, the concept of money was created.

The concept of money can easily be attributed as one of greatest accomplishments of human beings. It enabled a new form of collaboration that could transcend social circles and make possible the idea of the attribution of value to an inanimate object. This kind of collaboration was also done with writing, and some of the earliest cuneiform tablets suggest that their use was for doing business.[4] Necessity breeds ingenuity, and that pushed human beings to develop writing and coins. This naturally led to the development of debt. Debt, coupled with another one of our survival development skills, the tracking of time, led to interest on borrowed money. Coins, liabilities, assets, and interest make up the basic fundamental elements of what is generally known as finance. The use of these concepts have established the fundamental elements that propelled the evolution of civilization into the modern ages. With them, resources and work can be tracked, stored, and assigned value. Efforts can go into more than just survival.

It is safe to assume that the money existed much earlier than our earliest written evidence. Some of the earliest written evidence of it such as in the Code of Hammurabi, references money as an established concept; as a medium of trade; and as a facilitator of investment. In the code, the eighth law, directly mentions payment and price for the purchase of property. The code, in a number of laws, recognizes corn as a payment medium in addition to money. In addition to that, two types of currencies are acknowledged, that of silver and gold, and a uniform measurement unit, the

[4] N Ferguson, *The Ascent of Money* (2008), page 27.

"mina" acknowledges a standard upon which prices could be established. The most interesting part of the code which creates a much more complete picture of the level of sophistication of the use of money at that time is the one hundredth law, which states "...interest for the money, as much as he has received, he shall give a note therefor, and on the day, when they settle, pay to the merchant."[5]. Understanding the time value of money and providing for it in a law shows that money is not just a measure of value, but a facilitator of business as well. This makes it possible to believe that the use of money had already proliferated and well established itself in society at the time. Centuries later, there is evidence where the use of money in society continues. In the Code of Assura, the laws directly state amounts of lead in weight (*talents* and *minas*), as punishments for certain crimes.[6] Only when we get to more established and more literate societies such as the Greeks, do we come across specific laws concerning money. By that time, there are other laws of financial regulation as well, such as the regulation of interest, leases, debts and valuable assets.

This paper's goal is to analyze the purpose of the emergence of financial regulation. By examining the earliest laws of financial regulation in ancient Greece and ancient Rome, it is possible to see the expansion of money and finance from concepts of trade and collaboration facilitators, to those of power and control. This will be done to the extent that evidence permits, since these periods are from around fifth century BC and to the first and second century AD. The surviving laws are sometimes local ones, especially in ancient Greece, since that area was governed by city states, and does not represent the entire region. This does not mean that the surviving evidence regarding financial regulation at that time cannot establish an understanding of the role and importance that

[5] H. D. Viel, *Code of Hammurabi. English & Akkadian* (2012)
[6] The Assyrian Code, https://legacy.fordham.edu/halsall/ancient/1075assyriancode.asp

finance and financial regulation played at that time. As will be shown, the prevalence of financial regulation in that region and at that time can be assumed because of the evolution that these concepts experienced from one ancient civilization to the next.

Considering that ancient Greece was one of the first societies to develop a centrally regulated coin minting operation, and support that with the financial laws, this paper will examine the ancient Greek laws that established the necessary legal environment for finance to function. These laws come from different regions of Greece and Asia Minor, as they were established by various *poleis*. This will provide an overview of the first stages of the development of financial regulation.

Moving on to the financial regulation of ancient Rome, it is possible to see the evolution and the expansion of these concepts, and the increased level of sophistication created by the Romans. This period has more surviving evidence considering it is later in time, however that does not mean that there is adequate evidence to precisely determine the financial legal environment at that time. This period saw an expansion of banking, central power with centrally regulated coin minting operations and economic forces destabilizing the status quo.

This journey through finance laws in ancient civilizations will provide us with a deeper understanding of why there was and is a need for us to have financial regulation. Just as the necessity for the laws arose in ancient times, it still continues to be important for our society. Finance is one of the fundamental principles of our society. Its role in our political and economic system is crucial, and it is closely guarded, with heavy and intricate regulation. Still, the current state of financial regulation is a journey that began more than two millennia ago.

**Financial Regulation in Ancient Greece**

Before delving into the laws of finance in ancient Greece (laws regarding interest, commodities, and leases) it is necessary to discuss its most important element: coins. The birthplace of coins as a medium of exchange is known to be Lydia and Ionia, possibly due to the abundant resources of electrum (naturally occurring alloy of gold and silver) in that region. Production difficulties prevented coin production to be uniform in physical shape, and thus they were inscribed. Not to indicate weight, but authenticity. With time, coins gained fairly deep indentations, and they denoted weight and authenticity. Shortly thereafter, they were passed on to Greece.[7]

Similar to the Lydians and Ionians, Greece also had deposits of silver. It took some time, but technological advancements enabled the Greeks to mine it and turn it into silver coins. Up until this time, money had been a limited affair, only available to a limited class of people. They were the first ones to democratize money, and place it in the public's control, for public good.[8] This gave rise to non-privileged individuals becoming successful bankers. Ancient Greece was a time where governments did not rule on a grand central level, but there were small city states. Coins as money were present within the city states, although they were not readily exchangeable between city states.

One of the most fascinating things is that the states of Greece were the first ones to create an agreement for the internationalization of money.[9] The Athens Law on Silver Coinage is one of the first forms of coin regulation on a higher level. They were introduced during the second Delian League (an alliance of Greek city states), with the purpose of strengthening Athenian coins and

---

[7] Davies, *A history of Money: from ancient times to the present day*
[8] N. Angell, *The story of Money* (1929)
[9] I Arnaoutoglou, *Ancient Greek Laws: A Sourcebook* (1998), 57

avoiding counterfeits. Considering coins had existed for many years before this law, it was natural for that kind of protection to have developed. If something that is considered valuable can be made by anyone, then it is no longer be valuable. This law established certain requirements for coins, stating "Attic silver coins are to be accepted [...] silver and has the impress of the *polis*." Any coins without the correct amount of copper or lead were destroyed. In addition to is, this law also regulated the smooth exchange of coins between city states. This was achieved by the presence of individuals known as testers (*dokimastēs* – which were public slaves), which were available in marketplaces to test the coins. The marketplace had tables (*trapezai)* that were literal tables, where various coins were exchanged. An entirely new occupation was created to facilitate the exchange of coins. The source of their salaries was also established in the law; and they were to be provided by the fund of the mint workers. The Greeks went even one step further in this law, and established the supervision of the testers. Of course the law would have been meaningless and unenforceable if it had not had an enforcement mechanism for all the involved parties. Testers that disobeyed the law received lashes. "If the tester does not sit or he does not test according to the law, the public *syllogeis* are to give him fifty lashes with the whip." Magistrates could be indicted and charged with a fine of 500 drachmas. As for the parties actually using the coins, any trader that refused to accept a tested coin would have all the items that he made available for sale that day taken away from him. Considering that this was what could now be considered an 'international' law, the Greeks knew that advertising this law in the region is important. The law provides that for it to be inscribed in stone steles and placed "between the tables."[10] This probably meant in the marketplace where the

[10] Arnaoutoglou, *Ancient Greek Laws: A Sourcebook*, 57

actual trading and coin exchanges happened. Finally, the supremacy of this law was established in the end when a provision was written on it that any decree to the contrary would be brought down by the council.[11] Beyond the exchange of coins, the *trapeza* also functioned as what we would call bankers; providing loans, accepted deposits and served as facilitators of commerce.[12]

Another law regarding coins, evidence of which was found in the city of Gortyn has specific provisions about types of coins to be used. This law came later, towards the end of the third century BC, and we notice at this time a significant change in coins. The law established that bronze coins be accepted instead of silver ones. The law stated that this was decided by the assembly of the Polis. This meant that this was a democratic choice necessary for the public, possibly because of the lack of silver to continue the use of silver coins. Considering that Gortyn (located in Crete) is located somewhat far from mainland Greece, this reason is not an impossibility. Of course, the law also provides fines for anyone refusing to accept bronze coins.[13]

Later in time, after Greek city states had scaled down from large Poleis to autonomous cities, there was a confederation-like arrangement between them. As might be expected, trade between them was necessary, and one of the main requirements for trade was coins. By the end of the second century BC, the decree about the use of the Athenian tetradrachm, regulated the use of a particular coin, which would serve as common ground among the Greeks. It states that the Athenian

[11] Arnaoutoglou, *Ancient Greek Laws: A Sourcebook*, 58
[12] E E Cohen, *Athenian Economy & Society - A banking Perspective* (1992), 7
[13] Arnaoutoglou, *Ancient Greek Laws: A Sourcebook*, 59

tetradrachm is to be accepted by all Greeks, and established its exchange rate of it and that of silver drachmas[14].

One particularly interesting law is the Law on Trading in the city of Olbia. This law established the exclusive use of the silver and bronze coins of Olbia, for all transactions. It set an exchange rate for another specific coin, widely used in that area, and also provided a method for the exchange of other coins. The purchase of the coins of Olbia however could only be done at a certain place, the "the stone of the place where the assembly of the people is convened" and anything to the contrary resulted in fines.[15]

There was more emphasis on coins and money in finance than in interest, assets, liabilities or property, because that was the medium of exchange that was the most prominent in society. Other aspects of finance were also regulated by the Greeks. These other finance laws had a more direct social aspect to them. The matters that they regulated ventured more into the sphere of public good and were more socialistic. A couple of such laws were the laws that regulated grain. One of these laws is from mid fourth century BC and evidence of it comes from a lawsuit on a commercial matter. The plaintiff had lent money for a ship exporting wine, and there was a dispute. According to the evidence it seemed to have been illegal to lend money to any vessel that exported goods from Athens, but on the return trip did not bring grain. This points to the fact that although Greece may have had an economy with coins and money, it seemed to have been very concerned with the well-being of its citizens. The other law which comes about two centuries later is the Grain Law. Because

[14] Arnaoutoglou, *Ancient Greek Laws: A Sourcebook*, 60
[15] Ibid., at 44

of Greeks' dependence on grain, this law set out to create a grain fund, by taxing the people and then buying grain with the fund, to distribute later to those that didn't have it. This fund guaranteed grain supply to all citizens during periods of fluctuations in the grain supply. The law was particularly elaborate on the nominations and the election procedures of the fund administrators.[16] These laws were signs that the Greeks were capable of thinking about and regulating commodities. Grain being the most important commodity, laws were to regulate it.

One aspect of finance that historically has been provided for in the laws, even since the time of Hammurabi is interest. The laws of Kadys from the early fourth century BC set the interest rates for public and private loans in Delphi. Unfortunately, the law in its entirety did not survive, and only three from a total of seven surviving columns were legible. Even with them, enough insight is provided for an overview of this aspect of finance. One of the columns set the legal interest rates, and the penalties for not respecting them. Another column sets out the procedure to denounce any transgressor of the law. The third one gave rights to women to borrow and lend, and set out the rules and requirements to do so. Although at first glance may seem very modern, it needs to be pointed out that in this last one there are also provisions that women had to have had the consent of their husbands, and in the absence of husbands, adult sons or other male relatives in order for them to lend.[17] There is other evidence of structured lending in ancient Greek societies although not necessarily laws that regulated it. Traces of it can be found in Photius' writings, where he cites Dioscurides describing Spartans using 'tally-sticks' in their lending, to record their loans, and then burning them after the cancellation of debt. Later there is evidence of a Spartan system for remission

[16] Ibid., at 49
[17] Ibid., at 46

of quasi-public debts. So well was debt understood by the Greeks that, that it was frequently used in politics, whether to cancel or regulate debt, and even used in military tactics. Aeneas Tactius, a military writer advised sieges of cities to be accompanied with the cancellation of debt interest or the principal altogether, in order to gain allegiance of disgruntled debtors. In addition[18] Lending and borrowing are one of the cornerstones of finance, and having the foresight to regulate them is key. This is because this kind of transaction is usually done between a person in a more powerful position able to lend, and a person in a less favorable position, in need of borrowing. At that time, when the concept of companies, and limited liability did not exist, it cannot be said that the limiting of interest rates was for market regulation. Borrowing was probably done to ensure survival, or at most for the continuation of a dignified life style, in less favorable circumstances. Limiting or distributing liability in business ventures by borrowing as a concept was developed much later. Therefore, this law was meant to protect people and not to allow the rich to take advantage of the others. This means that the Greeks were aware of the power that money had, and sought to regulate and limit that power.

Another aspect of finance that was regulated in Ancient Greece is that of the lease of property. There were a few laws at different times that give us some insight on the way that private and public capital assets were considered. The earliest law or regulation, sometime in the fifth or fourth century BC established rules for the lease of common land. It obligates the lessee to pay rent regularly, to provide a building with a roof, and to preserve existing trees.[19] There was a later law towards the end of the fourth century BC, a law regarding the renting of one of the gardens of

[18] P Millet, *Lending and Borrowing in Ancient Athens (1991)*, 21
[19] Ibid, at 54

Herakles. The garden was considered a somewhat sacred garden, and as it might be expected, there was a concern about cleanliness and upkeep of it by the lessee.[20] A later law in the third century BC concerning the leasing of shopkeeper stalls in the temple of Hera had specific provisions on its use. There were limitations on the purpose of the shops. In addition to that, subletting was forbidden. Of course, provisions regarding disputes were also included.[21] Later in the second century BC, there was a decree ratified by the assembly about the lease of public land. Public fertile land was to be leased, and the lessee kept a percentage of the produce that was cultivated, depending on the type of trees.[22] This gives us the perspective that even in ancient Greece, property was considered an asset, and that it needed to be utilized. Although the laws concerned the lease of public properties, it is not a stretch to consider that the leases of private properties were similarly treated, either by laws that have not survived or by custom.

All of these laws and regulations in ancient Greece provide us with an overview of a basic but somewhat robust financial environment. Considering that these concepts were in their infancy it is interesting to see legal developments following their evolution. Laws on coins, interest, assets, and property enabled an expansion of a vast empire, provided an environment for banking to flourish, and democracy to function. These laws solved problems that most likely arose before their enactment. Naturally for coins, fraud in the form of counterfeiting was a concern, as well as the establishment of a smoothly running economy. For interest, the prevention of abuse by the rich and powerful probably was the catalyst behind its regulation. As for property, it can be assumed that

[20] Ibid, at 55
[21] Ibid, at 52
[22] Ibid, at 56

laws regulating their lease were borne out of logic, to put dormant spaces or fields into use and have them generate income.

**Financial Regulation in Ancient Rome**

Ancient Rome has always been more famous than Greece, from a legal perspective. Roman law was more voluminous and provided a legal compass for many centuries. The Romans developed concepts that were used and are still in use in societies all over the world. This holds true for finance as well. Ancient Rome had much more surviving evidence than ancient Greece, and it is unclear whether the Greeks were as financially developed as the Romans were. Nevertheless, it is clear that ancient Rome's financial environment was very advanced.

In addition to what ancient Greece had, because of Rome's more central system of government, there were developments in finance that made many more things possible. The Romans did not have the need to invent the same things as the Greeks. Because of the colonizations of Greek states, many concepts of finance were borrowed and introduced into the Roman culture as well. Rome has an abundance of surviving laws. Although finance laws make up only a small portion of these laws, the best way to address them in this paper is according to the same method that was used in the previous section; to address each financial concept individually. This way, more emphasis will be put on the concepts and the law makers' intentions when drafting them. This will also shed light on how these concepts changed and evolved with time.

The earliest forms of Roman law are what are known as the Twelve Tables. They were the first laws to unify earlier traditions of law into a coherent and enduring set. They are considered as the “starting point in the history of all law.”[23] The laws in these Twelve Tables, drafted in the fifth century BC (originally ten, with two added later), regulate many issues, even finance. There is no mention of banking, yet they have provisions that pertain to the banking profession, such as a limit on interest and fines for deposits that are not returned.[24] However, one of the basic parts of finance was not regulated: coins. This is not unusual, considering that coins were not widely used at the time and their minting did not start for another century, or they may have deliberately omitted certain matters which were common knowledge.[25] Coinage arrived in Italy from the Greeks, by the colonists, around the sixth century BC. However, they were not uniform, and other physical objects were used as a value denoting medium, such as copper bars, and later bronze bars.[26] When the tables were drafted, a coin made of a mixture of copper and tin bearing an impress of a bull, ram, or boar was used in Italy.[27] This means that the concept of money was very much part of Roman life from its beginning. The tables refer to ‘money’ numerous times. One example is the prohibition of judges from taking money for their decisions. Another one is where interest was regulated, and limits were put on money loans.

Money in Roman texts is not limited to coins. Roman jurists discussed about *Pecunia* in much broader terms than just coins or cash. The word ‘pecunia’ which originated from the word ‘*pecus*’ (cattle),[28] later also meaning property, according to the Roman jurists (Iulius Paulus for legal

[23] F Goodwin, *The XII Tables* (1886), 5
[24] C Barlow, *Bankers, Moneylenders and interest rates in the Roman Republic*, (1978), 31
[25] A Johnson, et al*., Ancient Roman Statutes* (2003), 9
[26] D Hollander, *Money in the late Roman Republic* (2007), 15
[27] Goodwin, *The XII Tables*, 49
[28] P Einzig, *Primitive Money* (1949), 225

purposes attempted to define money[29]), meant not only coinage, but *omnes res* (everything)[30], from coins, to property, to cattle. This suggests that the Roman economy was based on more than just a common currency. Other forms of payment were part of Roman value transactions.[31]

Before moving on and in order to get a better understanding of Roman regulation (or lack thereof) of money and finance, it is necessary to explain the development of coinage in Rome. The Greek idea of having a regulated bimetallic coin for finance and the economy never fully caught on in the Roman Republic and early Empire. Full monetization never occurred and taxes were collected in various forms. Small villages and private estates tended to avoid the marketplace by being self-sufficient.[32] Silver and gold coins long existed in surrounding nations of Rome, they were easily obtainable by the Romans, although they were used as commodities and stored as bullion rather than currency.[33] On the central level, the government was much more reliant on coins. Once coin production ideas were adopted by the Romans, most government operations were done with silver coins. Because of the undemocratic government structure, minting of silver and gold was centrally controlled, therefore coin production was at the behest of the emperor. The main and most significant expenditure was the army, and the wages were paid in coins. The idea of public debt did not exist, and spending fluctuations were addressed with reserves or increased coin production.[34] Private banking in Rome imitated that in Greece, and there was no need for a central accounting system for the government. Roman expansion in the east, coupled with welfare payments and

---

[29] S. V. Reden, *Money in Classical Antiquity* (2010), 6
[30] Hollander, *Money in the late Roman Republic*, 5-6
[31] Ibid, at 7
[32] R Duncan-Jones, *Money and government in the Roman Empire*, (1994), 3-4
[33] Angell, *The story of Money*, 115
[34] Duncan-Jones, *Money and government in the Roman Empire*, 3-4

subsidies put a strain on Rome's finances which led to gradual debasement of the various Roman coins. This had dire consequences on the Empire.[35] The fall of the Roman empire itself may have been due to Rome's dwindling natural resources of gold, however there is much debate if currency policy or the lack of it also contributed.[36]

Turning to coin regulation, there are many references to it in Roman law. There are several instances in Roman law where they are addressed specifically. One of the earliest laws that has direct reference to coins is the Antonian Law on the Autonomy of Greater Termessus (~70BC), which gave the people of Termessus the right to mint their own coins.[37] Another mention of coins is on the Code of Regulations of an Idiologus (150|161 AD), which forbids the change of money into smaller coins for more than they are worth (this was to empower Alexandrian coinage, and restrict imperial money).

Although the production of coins in terms of weight, composition size and branding was not regulated by law (or no such law has survived time), they seem to refer to coins by name and these coins are generally accepted as the only ones in circulation. Roman laws frequently mention (usually when specifying monetary fines) 'as', 'sesterces' and 'denarius'[38], Roman currencies that were introduced and circulated in Rome at various times. The circulation of coins during the years 200 BC – 200 AD increased tenfold.[39] This means that there was a concentrated effort on coin minting and regulation by the government at this time, which is evidenced by the Regulations for Mines, a

---

35 Davies, *A history of money: from ancient times to the present day*, 88-96
36 Angell, *The story of Money*, 118
37 Johnson, *Ancient Roman Statutes*, 74
38 Ibid
39 U Malmendier, *Law and Finance "at the Origin"* (2008)

document in the second century AD that established mining claims in the mines of Southern Portugal. These regulations divorced the management of mine operations from the government and gave proprietary rights to claimants who wanted to operate the mine, splitting the mining yield with the government.[40] In addition to this, the financial system of Rome was decentralized. Governors and communities were allowed to mint their own coins, but the government was not limited to transactions only in coins. It taxed each zone with the assets most readily available to them.[41] This could be why there was no need for strict rules in the production and control of coinage. The government was flexible in its interpretation of the concept of money as a medium of exchange.

There is evidence of commodities and other financial instruments used in Rome in addition to barter and coins. In addition to bullion, the Romans were adept at using banking concepts to exchange large sums of money, without the movement of coins. Gold or silver bullion was used in private and public transactions. While there may not be any concrete evidence of bullion used in private transactions, the writings of Cicero point to the use of bullion, especially gold in long-distance commerce. As for public transactions, there are records where the government collected tax, or paid contractors in gold or silver bullion.[42] One of the main purposes of bullion was as a medium of storage of wealth. Rome had a treasury and stored vast amounts of bullion. Although because of higher level of monetization in Italy, the use of gold for this purpose was less prevalent than in other places (such as Spain or Romania).[43] The financial instruments that had no physical value, but were used to transfer money between parties were *permutationes, syngraphae, partes,*

---

[40] Johnson, *Ancient Roman Statutes*, 177
[41] Hollander, *Money in the late Roman Republic*, 102-103
[42] Hollander, *Money in the late Roman Republic*, 32-33
[43] Ibid, at 34-45

and *nomina*. The first one, *permutationes,* was a method used to transfer large sums of money over long distances. Instead of transporting vast sums of coins, *permutationes* were used.[44] There is only speculation as to the actual functioning of this, and there is no evidence of institutions or processes that were available to make these transactions happen. *Syngraphae* were contracts or debt instruments that were used to signify debt[45]. *Partes* were shares in companies. By the time of Cicero, the concept of companies had started to exist (although not in the form we know today), and transactions in their shares were used to transfer value or money. The *soceitas publicanorum* is arguably the first incarnation of the modern corporation, with representation by one person, continuity with the death of a partner, external financing by *partes* (shares), and rights and obligations.[46] As for *nomina*, it is a much more straightforward transaction. The *nomina* was an entry in an account book of a banker. Instead of relying on actual coin money to make payments, and because of problems with liquidity in the Roman economy, the Romans just used their *nomina* to transfer money. This increased the volume of the money, based on the money that was in circulation. A kind of paper currency was created.[47] All of these ingenious solutions to problems of money transfers were invented by the Romans, yet there is no evidence of their regulation. There may have been rules about this, although that is somewhat unlikely considering that "Roman private law did not undergo systematic codification until the beginning of the sixth century AD."[48]

[44] Ibid, at 40-43
[45] Ibid, at 44-48
[46] Malmendier, *Law and Finance "at the Origin"*, 14-15
[47] Barlow, *Bankers, Moneylenders and interest rates in the Roman Republic*
[48] Malmendier, *Law and Finance "at the Origin"*, 7

Similar to Greece, there was a lot of regulatory emphasis on grain in ancient Rome. Because of its use in everyday life, it supplanted coinage in the marketplace when it came to payments. Grain was used by farmers to pay laborers, for taxation, for lending, and even formed soldiers' salaries.[49] Grain was specifically mentioned in the Twelve Tables. Grain was so important that in the Twelve Tables, the conscious destroying of a stack of grain is punished by being burned to death.[50] Laws found regarding grain are also of the same nature as those of the Greeks. The Law of Caesar on Municipalities (44 BC) was concerned with regulations on the distribution of grain to the less fortunate. In general, this was a welfare-like law, where people having more than certain thresholds of amount of land were disqualified.[51] Later in 93 AD, there was an edict limiting the maximum price of grain, and grain hoarding, because of widespread famine in Asia Minor.[52] These laws show that the Roman society was highly dependent on grain, and as a commodity grain was sometimes used in exchanges instead of money.

Moving on to another part of finance, interest. Money lending was a big part of the Roman banking business, and Rome had various periods in its history where interest was regulated, limited, or there were no limits at all. Banking was very advanced in Rome. It was available from the beginning as mentioned above, and it evolved with time enabling bankers and their clients to achieve a system where vast amounts of value could be stored and transferred with ease. The twelve tables laid down a maximum of interest at one hundred percent per year, with penalties for those that exceeded that limit. In later years interest was forbidden altogether. Later, there is evidence of

---

[49] Hollander, *Money in the late Roman Republic*, 60-62
[50] Johnson, *Ancient Roman Statutes*, 11
[51] Johnson, et al., *Ancient Roman Statutes*, 93-94
[52] Ibid, at 161

a limit of interest to twelve percent per year.[53] What is also interesting is that the concept of compound interest is also mentioned in the letters of Cicero,[54] which points to a more advanced approach to lending than in previous years. Lending, or in general a debt of money is usually secured by various securities, such as mortgages.[55] The earliest concept of a security for debt is in the Icilian Law on the Noninterruption of a Plebeian Tribune's Speech (from 492 BC), where anyone saying anything to the contrary, or interrupting a speech of a plebeian tribune shall be fined, and shall give a surety until full payment. Otherwise, he is punished by death and his property is confiscated.[56] Sureties have been provided for in other laws through time, such as the Acilian law on the right to Recovery of Property Officially Extorted. However, they are specifically mentioned as securities of a loan in the Law of Caesar on Municipalities.[57] This shows that, historically, lending money by the rich was not totally based on power or trust, but rather had a similar process as it does today, by pledging something valuable, such as property or another asset.

Leases in Rome began with the property rights established in the Twelve Tables. The concept of servitudes serves as the predecessor of leasing property. To have had that concept, a prerequisite was to have had the notion of having rights on a property, and then being able to assign some of them to someone else. In contrast to what we understand as property rights in leases today, the Romans treated them as 'obligations.' Tenancy was a contract of letting and hiring, thereby giving no 'real' right to the tenant.[58] As it is seen in the acknowledged Gracchan reforms in the Agrarian

---

[53] J Crook, *Law and Life of Rome* (1967), 212
[54] Johnson, *Ancient Roman Statutes*, 82
[55] Crook, *Law and Life of Rome*, 244
[56] Johnson, *Ancient Roman Statutes*, 8
[57] Ibid, at 96
[58] Crook, *Law and Life of Rome*, 153

Law (111 BC), the Romans considered property, especially land, as a revenue generating asset. Gracchus attempted to use the law to limit the amount of public land one person could control. He injected a public good aspect to agrarian law, in order to enable Italians that had and were living in cities to use land to generate income. Of course, this was done by leasing the land to them. Therefore, the Romans, similar to the Greeks, used dormant property, and leased it. Lease payments were also used by the Romans to transfer money. Cicero used the income of some of his rented properties to pay Atticus, who had given money to Cicero's son.[59] This shows that leases were considered more than just payment for the use of property. They were investments.

When it comes to finances, it is unclear whether the Romans developed such concepts themselves or merely adopted them from practices learned from their conquests. As can be seen on the development of coins throughout the ages, the Romans began with large and cumbersome copper bars, moved to copper coins, then were introduced to silver coins from the Greeks which they adopted in their own minting as well, and then used gold coins as an attempt to curve devaluation of Roman coins due to their debasement.[60] From Cicero's accounts noted above, there are significant financial and banking innovations among the Romans that helped them be more efficient in transactions of larger sums over farther distances. From a regulatory standpoint, a law of Caesar (46-44 BC) relating to credit gives us a glimpse of its development. In that time, the elite were the ones that gave out loans. Monetary property was regarded as wealth only when it was used to earn interest, and the wealth of the elite was measured by the value of their property and the

---

[59] Hollander, *Money in the late Roman Republic*, 43
[60] Angell, *The story of Money*, 109-15

amount of debt claims that they had (rather than the amount of cash). This law provided that loans should not be any more than a third of a senator's property situated (and registered) in Italy.[61]

The Romans pushed finance forward and developed novel ways of transferring money. Whether they actually had laws regulating coins or not is unknown, although there is substantial evidence of transactions involving coins and other forms of monetary transactions. The Romans were less strict in their transactions and they interchangeably used coins, bullion or other assets that were easily transferrable in their course of business. Later, banking evolved and vast sums were transferred by shifting debt from one person to the other. Also, the importance of a regulated interest rate is clear among the Roman laws. Ancient Rome definitely had an advanced financial system, whether it was fully regulated with laws, or orders from powerful men.

**Conclusion**

Money today is an important part of our lives, so much so, that it is difficult to imagine a functioning world without it. Finance in general, enables our society to function and achieve a level of cooperation on a global scale. Every financial invention has catapulted our economy and has pushed society further. These financial concepts invented by ancient societies seem basic to us now, yet they were revolutionary then. Whether it is simple transactions, or wealth management, it is astounding just to think, on a fundamental level, about all the concepts that people have come up with to create and exchange value.

[61] Reden, *Money in Classical Antiquity*, 98

Greece, being a more democratic society than Rome had more laws about fundamental things, such as coins. It also had laws about interest, grain, and property. The Greeks were the first ones to create silver and gold coins, and define them as official. Methods of exchange with other coins were set up, testing to avoid counterfeiting, and of course harsh but fair consequences for the disobedience of the laws related to coins. Interest rates were regulated, allowing the use of excess money to generate even more money. Life was much more difficult back then, and there were concerns about food availability, therefore not everything could be solved with money, unlike today where most of the world lives in a system where all kinds of resources are readily available upon payment. Therefore, the Greeks had specific laws about grain, in order to secure its availability for the cities. In addition to supplementing their coin transactions with commodities such as grain, the Greeks also used their properties as money generating investments by leasing it. The Greeks had laws for leases as well as laws for the leasing of public property, so that property that was not used, or did not create value would be leased to someone that would use it.

The Romans had a different system of government. Therefore, their laws were somewhat different from the Greeks. They benefited from the Greeks' financial innovations by adapting them to their system and then using and developing them further. Although, no specific laws have been discovered for the regulation of coin minting, production or testing. This does not mean that such rules did not exist. Coin production increased throughout the time of the Roman Republic and Roman Empire, and coin use played a significant role in the development of the Rome. They were not limited, however, to only the use of coins in their transactions. The Romans also used commodities such as grain as the Greeks had, however, they also used gold and silver bullion in everyday transactions as well. In addition to this, concepts were developed to transfer large sums of money over large distances that did not involve the transportation of coins. Their banking system and the use of transferring debt from one person to another increased efficiency of everyone in Rome. The powers of lenders, such as bankers, was recognized, and the Romans were aware that it was necessary for it to be regulated. This was achieved by limiting interest rates to reasonable amounts. As for property, Rome was the first to develop property rights, and give the world concepts that are still in use today. The Romans even used their property in financial transactions, where rent money could be assigned to someone else to settle a debt.

There is only one logical foundation for the development of finance in ancient times, and that was trust. Coins were not the first inanimate objects to be invented to denote value. It is safe to assume that when one person transferred a useless object to another, to signify that it was valuable or it meant something, both of these people had to trust each other and believe that each of them would honor their agreement. The agreement on the meaning that the object was valuable. Over time, such objects were replaced with metal objects. Metal was useful, however, the coin was almost always less valuable than the actual metal that was used to produce it. Even with silver or gold, beyond ornamental uses, it virtually had no practical use. Yet this concept of assigning value and easily transferring it by denoting it with a certain form of object of a certain composition was created. It was used and benefits were had by its use; however it was open to manipulation. This prompted regulation by either legislation or control of production, which in turn ensured the continuation and stability of the economy and it safeguarded further innovation in finance.

Since the beginning of finance in the ancient world, even millennia later there have been almost no new concepts in finance, until the previous decade. The existing financial concepts from ancient Greece and Rome have been developed further, and with technology have now taken new forms; however, in essence they remain the same. Money has various forms, (metal, paper, or is in a digital system of transactions), and its production is controlled by a central authority (a government). Lending is still the same, requiring security, and has set and (regulated) limited interest rates. Shares in companies are traded. By the end of the twentieth century the last financial development was an amalgamation of all these concepts by derivatives, where value was derived from financial instruments and was traded as an asset or liability. In the beginning of the twenty first century, a new concept of finance was created, and now we find history repeating itself. With the use of technology we have developed a virtual currency. A monetary connotation that expresses value, which is not centrally produced or controlled, has a public ledger and all transactions are public, and which transcends country borders. Bitcoin and other virtual currencies are now in the same position that coins were many centuries ago. It began with trust, where one person on a computer transferred something even less than an inanimate object, computer code, to another person, and they agreed that it signified value. The very existence of it is dependent on the will (and equipment) of the users. As its use increased, and an economy formed around it. We are now seeing the first instances of regulation regarding virtual currencies, because they present a new concept, a new take on value. This is a brave new financial world.

**Bibliography**


Andreau, J. (1999). *Banking and Business in the Roman World.* Cambridge: Cambridge University Press.

Angell, N. (1929). *The Story of Money.* Garden City: Garden City Publishing Company, Inc.

Arnaoutoglou, I. (1998). *Ancient Greek Laws: A Sourcebook.* London: Routledge.

Barlow, C. T. (1978). *Bankers, Moneylenders and Interest Rates in the Roman Republic.* ProQuest Dissertations Publishing.

Cohen, E. E. (1992). *Athenian economy and society: a banking perspective.* Princeton: Princeton University Press.

Crook, J. A. (1967). *Law and life of Rome.* Ithaca: Cornell University Press.

Davies, G. (1997). *A History of Money: From ancient Times to the Present Day.* Cardiff: University of Wales Press.

Duncan-Jones, R. (1994). *Money and government in the Roman Empire.* Cambridge: Cambridge University Press.

Einzig, P. (1966). *Primitive money in its ethnological, historical, and economic aspects.* Pergamon Press.

Goodwin, F. (1886). *The XII Tables.* London: Stevens and Sons.

Hollander, D. B. (2007). *Money in the Late Roman Republic.* Boston: Leiden.

Johnson, A. C., Coleman-Norton, P. R., Bourne, F. C., & Pharr, C. (2003). *Ancient Roman Statutes: A Translation With Introduction, Commentary, Glossary, and Index.* Clark: The Lawbook Exchange, Ltd.

Katsari, C. (2011). *The Roman Monetary System.* Cambridge: Cambridge University Press.

Malmendier, U. (2009). Law and Finance, "at the origin". *Journal of Economic Literature*, 653-675.

Millet, P. (1991). *Lending and borrowing in ancient Athens.* Cambridge: Cambridge University Press.

Viel, H.-D. (2011). *The New Complete Code of Hammurabi.* University Press of America.

Von Reden, S. (2010). *Money in Classical Antiquity (Key Themes in Ancient History).* Cambridge: Cambridge University Press.