

De Plena Fide et Fiducia:

A Brief History of the Roman Republic's Monetary System

The sinews of war are limitless money (Cicero 2010, 248).

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Abstract:

This paper examines the Roman Republic's monetary system, investigating the development of endogenous Roman monies and commenting on limited forms of financial intermediation.

Austrian economic theory and method guide this assessment. Attention is given to the primitivist-modernist debate, and the modernist schema is evaluated and internally critiqued.

This paper further provides a political and historical contextualization through which the Republic's monetary system developed and eventually failed. Endogenous and exogenous forces in market shifts are considered in those contexts, with consideration given to any war-time shifts in monetary organization. Analysis concerning Republican policy surveys the debasement of coinage by the state and variance in exchange rates over time. Ultimately, this paper argues that the Roman Republic's monetary organization offers a broad, sophisticated case study surrounding both policy concerns and economic history.

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Part I

The grandeur that was Rome is in many ways an inspiration for the children of the West: high art and culture, statesmanship and writing, and especially military excellence each are associated with the Latin legacy. Roman antiquity, therefore, serves as the font for many modern expositions of philosophy and politics, both in view of the expansive Republic and conservative Empire. Nevertheless, the grandeur of Roman advancements is not often considered in the context of economics: Ekelund and Hébert (2014, 21, 22) rightly note that there was little development of economic theory, arguing that only in the context of law did the Romans offer substantive benefit. Notwithstanding the absence of any analytical advancement to economic science, the Roman economy was far more complex than is often granted, however. Even beyond the development of corporations, Roman economics – particularly monetary policy and banking practices – mirror many modern developments. Although the period of the Roman Republic saw little analytical contribution to monetary theory, the example of Roman monetary policy exhibits not only a government supporting sound money for long periods of time, but also displays the ability of the state to recover from its own self-induced monetary malfeasance.

The central issue of contention that frames this monetary and banking research is the nature of the Roman economy itself and the larger context of ancient economies. Contemporary economic studies in ancient economics generally fall into a division of either primitivists or modernists; as the nomenclature would suggest, the primitivists view ancient economic systems as primitive or underdeveloped, whereas the modernists view the ancient economic systems as

comparable or analogue in varying degrees to modern systems.¹ Regardless of which end of the spectrum one finds oneself on, the causal-realist critique begins from the same starting line as the exploration of economic science: people act, and they act differently. That one could reduce the whole of ancient economic systems to be universally primitive or universally modern is absurd; notwithstanding the general limitations upon human knowledge, various ancient cultures and societies had very different values, geographies, and lifespans – each of these factors contextually build upon individual human action. Thus, it is improper to conclude generalities about co-temporaneous and otherwise comparable economic systems. Even within the history of a particular ancient culture or society, the economic systems across a civilization’s lifespan may not be so neat as to allow a substantive analysis with modern economic models. The individuals of a society, in their own times and with their own subjective wants, drive the development of markets. Each man’s comprehension of order, be he Greek or Roman, ancient or modern, is predicated upon his volitional being before aught else. This precludes any economic analysis which takes a civilization as an organic whole or a mechanized conglomeration of economic agency.

Indeed, for much of the analysis given by modernists to ancient monetary and economic development, the discolored lens of one modern monetary theory or another is too present (de Cecco 1985, 809).² To the further discredit of the modernist disposition, much of the recent

¹ Simply, modernists hold that these ancient economies were similarly organized by economic laws; primitivists argue that ancient economic systems were disorganized and unintegrated, based on status and social rank rather than economic law. In the words of the modernist Peter Temin:

Finley declared that, 'ancient society did not have an economic system which was an enormous conglomeration of interdependent markets'. He drew implicitly on research by Polanyi to oppose the views of Rostovtzeff [who became quickly dismissed (cf. Gwynn 1927)] within the field of ancient history and those of Fogel and Engerman in economic history, but he did not explicitly join their conceptual apparatuses (Temin 2001, 169).

² Fisher’s mathematized Quantity Theory of Money is often the starting point for much analytical work surrounding not only Rome, but nearly every ancient civilization for most modernists (cf. de Cecco 1985, 814; Collins and Walsh 2014, 197; Collins and Walsh 2015, 139; etc.).

economic analysis is done from cold, neo-classical orthodoxy, standards which leave much to be desired; this has led to the supplement of Post-Keynesian method and thought, especially surrounding Roman financials (Collins and Walsh 2015).³ The ancient economy that the modernist sees, looking back through centuries of primitivist darkness, is only the reflection of a modern monetary face, seen at the bottom of a deep well. The Mengerian tradition, however, is not lacking in force on this issue of economic inquiry, although the particular modernist-primitivist debate is often not within the central focus of the praxeological, causal-realist concerns. This is not to say that the Austrians do not take a side – certainly, many in the Mengerian tradition are functional, if not cognizant, modernists; as Huerta de Soto exemplifies well, the Austrians utilize the history available to demonstrate the legal traditions of property and the contractual beginnings of banking in the ancient world. Indeed, Huerta de Soto approaches the economic history of antiquity with a strong demonstration of methodological individualism when considering the development of the economic practices of banking. The analysis undertaken by Huerta de Soto and others, however, is a stark approach from both primitivists and other, more mainstream modernists.

The field of economic inquiry into antiquity is muddled in economic pluralism. Economic pluralism is the abstraction of economic understandings to persist that, against any purity of thought or theoretical dogmatism, economic partisanship – inherent to any recognition of partisanship – is the pursuit of only the partial truth. This is to say, like other forms of pluralism, economic pluralism insists that no one group can be entirely right and any claim to the contrary must itself be wrong. To this end, while the historical facts in question – issues of records or

³ Although both Austrian and Post-Keynesian schools of thought share the distinction of economic heterodoxy, the two remain opposed on fundamental issues. For a more thorough treatment to the differences between the two heterodox schools, see: Gregory M. Dempster, “Austrians and Post Keynesians: The Questions of Ignorance and Uncertainty,” Mises Institute, 1996. <https://mises.org/files/qjae245pdf>.

events – are able to be agreed upon by the historian-economists of the modernist disposition, the rhetorical concerns of understanding these events through the philosophic opinion *qua* assessment are improperly founded. Not only are general historical analyses and even case studies somewhat inappropriate for theoretical reproof, but the dialectical nature necessarily behind the historical analysis prevents a partial truth from standing without contradiction; in the case of economic pluralism paired with studies in antiquity, the substitution for dialectic with rhetoric demarcates the inevitability of otherwise misanthropic conclusions towards the ancients and their economies. Without a diametric form or theory to approach the field, the modernist cause is unable to systematically repel the argumentation of the Finley-Polanyi primitivists. Essentially, the form becomes otiose and perfunctory. Too many voices shouting too many different and often contradictory ideas ultimately undo the modernist cause, and without a purity of thought which is more common to the primitivist disposition, the field of study will no doubt remain in that flux.

Studies in the ancient economy continue, therefore, to express at best only partial truths, and these truths become only fully realized when distilled from the pluralism that produced and diluted them, set in the context of a particular economic consistency. Otherwise, the modernist thesis is a schizophrenic conflagration of competing terms and canons, without any uniformity of theory or data in full. Modernists persist less through what they agree upon in theory and more through whom they disagree with, that is, the primitivists. Like the Conservative Fusionism of the twentieth century, the modernists are a strange collection of idiosyncratists and formalists, not willing to accede to the others within the unstable camp, yet retaining scholastic cohesivity for larger academic purposes. Yet the absence of unified methodology and theoretical underpinnings aside, the modernist cause has continued to achieve important victories, such that

it is now not uncommon to read “[t]he financial system in the early Roman Empire also had some of the attributes of a *modern monetary system*,” (Temin 2001, 178; emphasis added). As the scholarship progresses, the Finley-Polanyi orthodoxy continues to be challenged from both within and without the economic mainstream (cf. Collins and Walsh 2015; Temin 2001; Harris 2006, Huerta de Soto 2020). Nevertheless, a fuller discussion of this debate remains inapposite. The context of this larger historical-economic debate as the necessary foundation established, Rome now becomes subject for discussion.

Part II

When discussing any ancient economy, it is easy to fall into the fallacy that, because governments were so less centralized than any modern example, the economies of ancient societies were far more weighted towards the free market than a command economy. Indeed, Rome presents a unique combination of difficulties when understanding economic characterizations: the length of civilization,⁴ the significant change in geography and demography, and distinct and somewhat opposed forms of government at various times, all under the unified identity of *Romanus*. The burgeoning Republic must be understood (economically) as a whole ’nother animal from the more established Empire. Yet the serious differences between the two overarching periods of Roman history must not serve to overshadow any extant similarities.

The Roman Republic is the more difficult of the two to analyze economically, if only for the fact that so much economic development was nascent until the years preceding the First Punic

⁴ Although this is itself not unique to Rome (the Egyptians, e.g., lasted far longer as a civilization), it compounds with other complexities.

War. It is a testament to the historical uncertainty that the *Cambridge Companion to the Roman Economy* – academic, although introductory – completely ignores the Republic, defining the “Roman economy” instead as the economy of the Roman Empire alone (Scheidel 2012, 1). As Ekelund and Hébert (2014, 21) present, little information is available, except for the two hundred years between 150 B.C. and A.D. 50. This bleak opinion on the historical record may be qualified for a larger period of information, however; numismatic evidence begins at least some hundred-odd years before, and there is a wealth of information for the Imperial period (cf. Bransbourg 2013; Cascio 1981; Jones, 1953; Temin, 2006). Therefore, while there is less economic evidence *in se*, the chronological testimony of the Republic’s growth allows for economic reasoning to participate in the discussion. Nevertheless, The Republic offers substantively less information than the Empire. The historical context of the Republic offers a helpful premise: this was a time of war and rumors of war, of instability in local powers and high degrees of uncertainty. Rome began by no means a dominant power, despite the Republic’s proclivity for conquest and expanse; yet there was no *Pax Romana neque Pax Deorum* to offer society security or confidence. As a largely agrarian society (so the West would remain until the Industrial Revolution), Rome had few and limited markets. What the Republic’s early economy communicates, then, is that which is rooted in the early Republic’s monies and their developments.

Latin etymology provides the necessary foundation for appreciating the development of money in the Republic’s economy: the Latin *pecus*⁵ gave rise to *pecunia*,⁶ which is to say, the

⁵ “Flock,” or “herd.”

⁶ “Money.”

earliest documentation of Latin arbitrage was a reckoning given in terms of animal husbandry,⁷ until the *Aes Rude*⁸ became the first Roman general medium of exchange up to the early third century B.C. (Mattingly 1945, 65; Williams 2007, 172, 173). The *Aes Rude* was initially not even stamped, since the unit's weight was certification in itself. This currency, however, was soon found to be insufficient for the Romans; the martial nature of the Republic and a growing sphere of dominion and influence demanded a more sophisticated and externally accepted form of money.

After a period of warring with the Samnites ended in 289 B.C., the *Aes Signatum* (already extant as a form in the Italian peninsula) officially replaced the impermanent *Aes Rude*. Still on the monometallic bronze-standard, these smelted bars were the product of “the office of *iiiviri*⁹ of the mint,” (Mattingly 1945, 65; Bransbourg 2013, 186). Yet the *Signatum* was impediment to exchange because there was such a variance to the weight of the bars and lack of quality control, and a new currency was necessarily utilized. The *Aes Grave*¹⁰ would thus serve as the last transition to proper Roman coinage. “Bronze had been the monetary metal *par excellence* in central Italy, long before the establishment of coinage. Bronze bars had circulated before Rome issued coins and still circulated afterwards, while the first Roman silver coins...were mostly used outside the core Roman territories,” (Bransbourg 2013, 186). Silver carried far more value per unit than bronze, and silver coinage inherently remained more durable than bronze coins or bars.

With the defeat of Pyrrhus in 269 B.C., the Romans diverged from a monometallic bronze standard, striking the first silver money; as the Republic expanded in might and diplomacy, silver

⁷ Most likely, the exchanges were determined in terms of quantity of sheep or oxen, with some records indicating a standard exchange rate of ten sheep per ox. The exact nature of the exchanges is, for our purposes, irrelevant, as only the market utilization of animals in this more elevated barter system is important.

⁸ Rough or uncoined bronze.

⁹ This designation may best be understood as “the three men,” and is not a proper Latin term, but rather a contraction for the three men appointed to run the mint: *III viri aere argento auro fiando fiundo*.

¹⁰ Heavy (or thick) bronze.

was a far more universally accepted medium of exchange (Bowen 1951, 94; Mattingly 1945, 68). Just as money is the general medium of exchange, so too does it have its secondary and derivative functions; in this historical episode, the Romans also used stamped money as a propaganda piece. With the defeat of Pyrrhus – a war that put quite the economic strain on both the copper supply and Rome herself – the Republic no longer would depend on the minting of other sovereignties like Capua. In issuing the silver *denarius*'s predecessor and other coins¹¹ both at the defeat of the famous despot and only five years before the First Punic War, Rome utilized the coining of silver to send a vainglorious message to the rest of their world: as the coins of Rome were traded and observed, the rest of *Mare Nostrum* would see that Rome had arrived as an international power.

Yet one cannot acidulate the development of money in the Roman context by ascribing monetary genesis to exogenous compulsion upon the market. Within the context of the primitivist-modernist dialogue, the traditional (primitivist) view – a product of historical analysis, rather than historical-economic – held that money was purely the official coin, and therefore exogenous to the market. Finley (1999, 141), in his *Ancient Economy*, writes that money, for the Romans as a whole historical-social unit, was “hard coin, mostly silver.” Cascio (1981, 76) doubles down on this exogenous claim: “money was coinage,” although he would include any coin-substitutes in this contention. The primitivist perspective is foundationally rooted in how the historical view examines the functions of money, best elucidated by Jones and especially Crawford:

¹¹ The silver *denarius* was the ten-piece (X), worth ten *asses*; the silver *quinarius* (V) and the *semis-tertius* or *sestertius* (HS, literally half a third; this was the unit which the Romans used for accounting) served as the five-piece and two-and-a-half-piece, respectively. The *as* (pl., *asses*) was a copper or bronze piece. These coins held equivalency initially by weight, and not a nominal exchange rate. Other coins existed during the Republic, with various degrees of occurrence and minting. The *denarius* was the dominant currency of the West for the next five-hundred years; the classical English abbreviation for the penny (*d*) comes from the universality of the *denarius*.

In Crawford's words, "there is no reason to suppose that [coinage] was ever issued by Rome for any other purpose than to enable the state to make payments, that is, for financial reasons," monetary policy would always have had the sole aim of allowing adequate expenditure, as in the case of debasement, or proper acquisition of income, as in the case of prevention of forgery or enforcement of the official values of the coins, (Cascio 1981, 76).

Inherently, the primitivists therefore misunderstand money.

As Mises theoretically proved through the Regression Theorem, money is endogenous to the market; Roman commodity money was based on marginal utility of that commodity, not whatever the Republic may have declared. A thing can only become money if it were already in use in some function and degree, and the Romans clearly were already using bronze and silver for both ornamental and industrial purposes. It was not, to speak anachronistically, by the *verba Caesaris* that these materials were made money, but by the fact that the market, the people, the individuals engaging in trade and transaction preferred them so. This is clearly evident in the initial rendering of bronze as money, and then, because markets expanded, the inclusion of silver coinage. For the Romans in particular, there is also the supporting etymological evidence of how the Latin renders the terms.

Pecunia is "money," yet this is not entirely synonymous to the *nummus* – or "coin" – that the primitivists insist was unitarily money; *pecunia* is far more broad and encompassing a term than simple *nummus*, indicating that money was more than the common coin. To further augment this argument, one must understand that these ancient governments generally were simply not organized or centralized enough to impress exogenous monies upon the people; rather, the states rode the market wave and literally stamped (or minted) their approval on these hard metal monies. Money is clearly endogenous against the primitivist holding, and the issue of early coinage in the Republic only reiterates this theoretical contention – money is *sui generis*.

The endogenous nature of money does not, however, neglect the role the state plays in monetary issues. After all, as the historical evidence suggests, repeated warring with various enemies in the early-to-mid 200s B.C. precluded the Republic from not adjusting its own coinage to finance these conflicts. As Anna Schwartz (1973, 244) contrasts, Athens did not tamper with coinage even when the treasury was bare and the military needs were dire – Roman coinage, on the other hand, “far less advanced than that of Greece, had a history of debasement. In the two centuries before the Punic Wars, [Rome] debased its copper coinage.” This narrative is, however, somewhat misleading. Roman money was, outside of war, on an entirely liberal standard, i.e., unadulterated by impurities and minted at full value; furthermore, once a war was concluded in the early Republic, the coinage returned to a full liberal standard (Mattingly 1945, 71-76) – Schwartz’s contention therefore is wrong in both premise and fact. As Bransbourg (2013, 185, 187) notes about Grecian currencies, “[t]he highly fiduciary nature of the Greek bronze coinage effectively insulated it from the fluctuations of the relative prices of bronze and silver, even if its convertibility versus the silver coinage was not necessarily granted outside the jurisdiction that had produced it,” and, “Roman bronze coinage was simply less fiduciary than its Greek counterpart.” Bowen (1951, 95) argues that, “[u]nder the Republic the government was rather punctilious in maintaining the integrity of its [money] and made no departure from the rule except in dire crisis.” Determining Greek coinage as the more stable coinage therefore seems somewhat erroneous, although it remains certainly an economical use of the historical record. Rome’s monetary soundness was – by both absolute and comparable standards – a peculiarity around the ancient Mediterranean. This commitment to sound money rather than stable prices would be the trend, not truly failing until the first century B.C. Yet this consistent policy did not go without challenge.

War is, broadly speaking, that justification which is most easy to allow for debasement of coinage. And so, the Republic debased its currency during times of war. Yet war is also historical and sociological fact, especially when considering antiquity. Whether or not the Republic's warring was justified, the practical realities of their wars demanded one of two financial methods, debasement or taxation, to fund the war effort. From a purely prudential concern, debasement was the more effective policy solution for the Republic to pursue. Taxation would have been problematic in two essential manners: *Primus*, taxation is a more prolonged affair – the Senate and Assembly would have had to deliberate as to a rate, what to tax, and along what means to collect the tax, and then they would have to patiently wait for the tax to go out and the revenue to come in. When examining the immediate concerns of financing a war, taxation seems an effectively poor choice – if a state raises taxes in preparation for war, there are perhaps moral concerns involved, too. *Secundus*, there also would have been the popular concerns; debasement is, in the immediate, a creeping issue of notice – yet it produces immediate results, i.e., the state treasury is made “full.” A tax remains immediately noticeable and unpopular, without those immediate results. Debasement also allowed the immediate redistribution of funds to the war effort, not giving the market time to adapt – the Republic was thus able to capitalize on a market that had not changed to meet the demand for war materials. In this way, the Cantillon Effects of monetary debasement were well utilized to sustain the war effort in a more efficacious manner.¹²

As far as the economic realities are concerned, neither debasement nor taxation is preferable; yet when constrained to those two options, currency debasement – as morally and

¹² The economic consequences of debasement did not pass over the Republic, however, in prolonged conflicts, e.g., the First Punic War. The monetary policy contributed to the dragging depression during the middle years of this war (Mattingly 1945, 74). As history demonstrates, however, governments are rarely concerned with long-term consequences of policies; the Republic's prudence served only to ensure their political goals were met effectively, not to prevent any unintended consequences.

economically terrible as it is – provided effective policy. The concerns for runaway debasement are more than legitimate, but those results are not necessitated should the state engage in debasement. As the Republic historically demonstrates, a state that shows restraint and control is able to effectually direct the effects of debasement. Furthermore, to the moral and economic credit of the Republic, “After the restoration of peace following the years of war against the Samnites, the Etruscans and Pyrrhus, the price of [the *as*], as of other commodities, approached the normal of pre-war times, before the tide of inflation had set in,” (Bowen 1951, 94). Mattingly (1945, 72) convincingly demonstrates that the Republic actively engaged in restoring the currency in value, and this practice of debasement-restoration was the policy of the Republic throughout the early and high Republic. It remains dubious, however, to assume this practice was based in monetary concerns; instead, the conservative nature of the Republic may have played some role in this practice – once the constraints of war were lifted, a conservative Senate may have simply wished to restore the coin to how it was before the periods of debasement, which was coincidentally a fully liberal standard of coinage. Regardless of the Republic’s reasoning for effecting restoration, this practice of restoring sound currency is somewhat historically anomalous, and explains how Rome was able to suffer very little inflation after periods of war.

The Punic Shift

The demarcating shift in Roman monetary policy, however, came in the concurrent swing for Rome’s political future: the Second Punic War (218-201 B.C.). Although for nigh some fifty-odd years had the Republic maintained the somewhat unstable bimetallicism of the bronze-silver coining, the Second Punic War featured a departure from the customary policy. With relation to the Hannibal Barca’s crusade against Rome, Pliny the Elder – writing during the Imperial period – claimed that the *denarius* was valued at sixteen *asses* instead of ten, as the *as* had been reduced

to four ounces, then an uncial from its pre-Punic twelve (Bowen 1951, 95, 96).¹³ However, the Second Punic War offered the immediate shift in monetary policy by briefly adding gold coinage in 217 B.C. to the metallic mix of money metals (Bowen 1951, 96). An experiment in monetary policy, the Senate hoped the introduction of gold coinage would increase the money supply, among other things; the Republic both washed coins to substitute *denarii* and issued, then withdrew, gold coins (Bowen 1951, 96).¹⁴ The government did not have the supply, nor did the populous have the demand, to make the gold coin stay in circulation. In this historic moment, the Republic's currency system nearly collapsed due to both a lack of public confidence in the Italian mints and the confusion of numismatic organization resulting from debasement.

Many of the Italian colonies that still serviced Rome by minting coins did not survive the Carthaginian Crusade, with some colonies even rebelling to Hannibal's side – the mint in Tarentum was nearly controlled by the rebels, though a Roman garrison was able to hold the citadel and therefore the mint remained under the Republic's control, even as certain colonies fell (Mattingly 1945, 68). Nonetheless, the public mints outside of Rome were under jeopardy just as much as Rome was; even with only two rounds of debasement, the excess of the mints precluded any confidence in new coinage, and the confidence in what had been the general medium of exchange waned. To add to the Republic's monetary miseries, the ancients experienced a phenomenon that the Greeks at least were already familiar with: Gresham's Law, the principle that "good" money is driven out by "bad" money (Bowen 1951, 93). Old *asses* quickly slinked into circulation, and the new, debased metals became prominent. The tension between the heavier coins and the lighter coins was only exacerbated when the Republic

¹³ This change from the decimal to a hexadecimal standard demands further attention and will be examined later in this paper.

¹⁴ Although the use of coin washing is indeed economic fraud, it was not political fraud – the attempt was not intended to deceive the public, nor was Rome misled by this action. Rather, the Senate merely used the copper coin with the silver wash as a placeholder, of sorts (Bowen 1951; Mattingly 1945).

established the equitable exchange between the “good” money and the “bad” money. The Republic insisted that coins of the same nominal value carried the same exchange value, regardless of the quality of metal. But the state’s insistence at a thing did not make it so. It was not uncommon for coins of higher quality to thus be shut up in “money hoards” or otherwise utilized less in routine exchange, though this practice ended soon after the war, when the currency was restored.

The monetary instability of the Second Punic War even compelled Romans to use foreign coins or unstamped metals in transaction to account for the lack of value in domestic coins, and a wide host of substitute coins were briefly introduced into the Roman system (Mattingly 1945; Bransbourg 2013). Interestingly, the Senate did not stop this economic circumlocution with any legal tender law. Due to the uncoincidental Fabian tactics of the Roman dictator Fabian Cunctator, the wealth of the Republic was being more than decimated, although Rome herself was surviving. The collapse of peninsular mints, the high levels of debasement, the uncertainty of future values – all derivatives of the looming Carthaginian threat – proved taxing for the Roman people. Eventually, however, the great Roman hero, Publius Cornelius Scipio Africanus Major, defeated Hannibal and his elephants in Africa. The Second Punic War was thus of significant political weight, yet it also served as an extreme economic moment for the Republic, bringing lasting change.

With the thematic close to the Second Punic War, Rome also introduced an institutional change for the Republic’s monetary system. In a move that crudely anticipated aspects of modern, centralized banking by the state, the Senate created the office of the *triumviri*

monetales,¹⁵ or “the three money guys,”¹⁶ for the purpose of supervising and issuing currency, as well as overseeing public finances (Bowen 1951, 96).¹⁷ The authorized commission, however, lacked any means or tools to assess accurately what the public finances were, let alone the supply of currency; certainly lacking the other-worldly tool of econometrics – and the clumsiness that comes with – “the three money guys” often were somewhat erratic and imprecise in the control of the money supply. Often, the commission would do nothing for stretches of time, only to make sudden increases or decreases seemingly on a whim (Bowen 1951, 96). Because of these institutional arrangements, both the government and the people of the Republic received the frustrating results of their somewhat controlled money supply. The commission never was quite able to completely standardize the minting of the coins, however.

Yet the establishment of the *triumviri monetales* was accompanied with changing the location of the Roman mint to the temple of Juno Moneta.¹⁸ Although this change occurred after Rome established itself once more against Carthage, it further confirms the nature of silver currency in the Roman economy. As has already been labored, the Romans adopted silver currency for the sake of international trade and exchange; however, the identification of silver coining with Juno Moneta provides specific evidence that silver was adopted with no small influence from Carthage itself, not just international pressures in general. As Bowen (1951, 96) provides, Juno was seen as the deity most favorable to the Carthaginians. Since civil and cultic religion was irreducibly interconnected during the Roman tenure, this could have potentially been a means for the state to appease the goddess after Publius Cornelius Scipio Africanus Major walloped Hannibal and his elephants. Yet the effectual result of this choice in location became

¹⁵ Also known as the *tresviri aere argento auro flando feriundo*.

¹⁶ My translation.

¹⁷ The qualified citizenry annually elected this position, like many magisterial positions throughout Roman history.

¹⁸ It is from this title that English receives its word “money.”

that the quality of money was identified with the sacred. Any violation of money was both a civil and religious offense. In the *Lex Cornelia* passed by Sulla and as maintained by later legislation under the Empire, the counterfeiter was held to be equal to the worst offenders of society (Barlow 1980, 218; cf. Boon 1974). The typical offender's punishment would be *damnatio ad bestias* – it would be as if he were a Christian during the height of Roman persecution.

With the complexity of economic shifts resultant from an established Roman supremacy came a whole host of extraneous vicissitudes on land reform, political adjudications, geographical expansion, etc. Although such a discussion of these concerns is unmerited, the historical context of these extreme alterations in Roman life establishes the terrible uncertainty Rome faced for the next hundred years. Thus, it becomes apposite to discuss the modification of the *denarius* in the Roman Republic's economy. The *denarius*, as previously noted, functioned as the ten-piece of silver in the Roman numismatic system, stamped with the figure "X" to indicate its value, much as the one-dollar bill is printed with the "1" in the corners. This was not nominal or fiduciary value, as the actual market exchange for the standardized silver-to-bronze ratio was indeed defined 1:10. Yet the exact dating of this numismatic shift yclept the "retarriffing" is hotly contested. The so-called "retarriffing" of the *denarius* is clearly acknowledged by any Roman scholar, recognized archeologically by the change in stamping: first, X; then XVI; finally, X̄; or a capital X with a long stroke overlay through the center. These stamps were stating the equivalency of the single *denarius* to the sum of *asses*.

Mattingly proposes a two-fold mechanism of numismatic alteration, maintaining that Livius Drusus initiated plating a certain proportion of the *denarius* and the Romans changed the bronze standard from sextantal to uncial, the *as* halved in weight (Buttrey 1957, 57). Yet as Buttrey (1957, 57, 58) notes, this dating of both Livius Drusus earlier than supposed (Mattingly would

have Drusus the father, tribune in 122 B.C., not Drusus the son in 91 B.C., as has been conventionally held) and against the word of Pliny the Elder – several other historical discontinuities present Mattingly’s vision as flawed. The bedrock of the “retarriffing,” hinges on the validity of Pliny’s account and how this interpretation comports with other factors. Critical evaluation of the economic begins with the establishment of the history, and as Williams (2007, 171) demonstrates, Pliny is not necessarily the most reliable source on this matter. And so, scholarship’s more recent consensus is that this economic transition occurred in 141 B.C., not immediately after the Second Punic War (Bransbourg 2013, 181). By pure dialectical concern, one could perceive this change in numismatic organization to be the result of mutating exchange rates announced by an unstable state. However, this concern assumes a debasing in the coinage itself; Buttrey (1957, 58) argues that this “retarriffing” was in fact only an accounting issue. Indeed, as the Roman custom of nearly liberal coinage indicates, debasement was unwarranted without a crisis; the cynic perhaps may doubt the conviction of the Republic to abide by this principle, but the historical record demonstrates consistency at this point in the Roman narrative.

Rather than understand the bimetallism of Rome in analogy to modern Europe, viz. Great Britain in the 18th Century, Bransbourg (2013, 184, 185) draws significant parallels to the state of numismatic affairs in the Middle Ages, where bimetallism was an abstract idea and currencies were not numerically defined in nominal terms. Within a bimetallic standard based on weight, coins can hold relative value to each other, and thus could be defined however the market necessitated they be defined in a fluctuating continuum. However, the floating exchange rates are a havoc when not attached to a singular metallic standard – there is no fixity of weight or definition, and the market must then each day re-hash what the coins in the pocket will be relatively worth. Often, one metal becomes somewhat overvalued, as the market asymptotically

and naturally moves to a single monetary metal. The Republic, however, did not have to worry about fiat money, and thus the worst concerns surrounding bimetallic floating exchange rates become mitigated.

In defining their coins in set values that reflected the market structures at the time of initial minting, the Republic touched on the natural instability of bimetallicism that plagued Europe in the modern period. As Bransbourg (2013, 187) notes, “[t]wo value linked by a fixed relationship are sensitive to relative changes in metal prices, whether these metals are gold and silver or silver and bronze.” Although bimetallic standards behind state-minted coinage are indeed helpful for several economic and political regulations upon the state, the long-term fixed exchange rates cannot be seen as a natural end of the economic order – the issue is exacerbated under the instability inherent to the bimetallic standard. Thus, the initial relationship between the *denarius* and the *as* was not an interminable one. At the time the first bronze was coined, Roman *asses* were much thicker and heavier. Especially since the Second Punic War, although throughout the whole record, Roman *asses* had flattened, so to speak, to various degrees.¹⁹ It is inevident to conclude that exogenous forces were the impetus behind this numismatic reorganization; rather, although exogenous forces recognizably played a role, such was complementary to the endogenous realities of market changes – Rome’s economy, not her government, compelled this change in exchange rates. As a matter of accounting, the Senate evaluated the market realities: silver had increased in value. In course of right – although belated – action, the Republic did “not create a new situation, it recognized a situation that already existed...the denarius...was already being traded in the market against 16 [*asses*].... [The retarriffing] was not inflationary since it

¹⁹ The reasoning for this depends on the growing prevalence of the *denarius* as the choice coin, and so the *as* in the uncial became increasingly relegated to local and diminutive transactions. The divisibility of the *as* was its greatest strength, and what nearly reduced it to a hefty oblivion. What began as a liberal coin was continually being divided and reduced even beyond the uncial, such that it eventually measured a third of an ounce during the Twilight of the Republic.

did not create new values nor increase the money in circulation,” (Buttrey 1957, 63). As may be adduced thus far, against the vogue of retrospective economic ideology, the change in numismatic valuation could not have been even partially a fiat declaration – the Romans may have been ignorant of the economic laws that governed their market interactions, but naïveté does not preclude those laws from governing.

Although this explains the economic rationale behind the change in exchange values among the *denarius* and the *as*, Bransbourg (2013, 220) notes that such a one-dimensional economic analysis does not account for the rise of the *sestertius*. Indeed, since Bransbourg accounts for the coinage reform in a historical unit hitherto the Social War (91-87 B.C.), his view imagines the *sestertius* as a “shadow unit of account.” The *sestertius* as a coin had not been minted since the Second Punic War, and would not again be newly minted until the Social War – yet beginning in the 150s B.C., it suddenly and rather forcefully became the unit of account (Bransbourg 2013, 220). Bransbourg (2013, 221) also considers a legal by-product for the *sestertius*’s rise to coinage prominence:

Denominating a contract or a financial commitment in *denarii* could have been considered binding as far as the form of payment was concerned, since Roman legal practice distinguished between the various monetary media. Using the *sestertius*, a ghost coinage linked to the *denarius*, explicitly allowed the involved parties to link their contract to the value of the silver coinage without having to commit to the actual type of coins that would be provided. Any coinage would settle it, as long as prevalent exchange rates at the time were used. This provided some genuine additional flexibility to the way financial transactions were conducted, allowing the buyer to provide the most readily available coinage while avoiding possible exchange fees between one form of coinage and another.

Thus, it remains evident that the “retarriffing” of the *denarius* provided elasticity to the Roman contractual system as well; since the *sestertius* was silver as well, it provided the necessary companion piece to the *denarius* that bronze pieces of any value could not. The *sestertius* eased the nature of commercial transactions, allowing for a more efficient monetary

system by having the unit of account be of derivative value of the common coin. In “retarriffing” the *denarius*, not only did the Republic recognize market forces at play, but also rectified the limitations of a bimetallic standard. From this effort, the financial intermediations of Rome would not be hampered by relativistic monies, although varied and creative for the next few decades beyond this “retarriffing.” Until the period of Sulla’s dictatorship, bronze and silver would interplay in constant and irregular exchange rates due to the expected price flux of metals – yet this variety in rates enforced the Roman conviction of full liberal standards in coinage (Bransbourg 2013, 222). Crises of monetary nature would persist, but the government’s reaction to market changes indicated a disposition to favor more (albeit hardly total) economic freedom than not. Rome accurately anticipated these fluxes through of the “retarriffing” and utilization of the silver *sestertius* in accounting, and weathered the economic and political uncertainty of the times well.

Banking and Monetary Interaction during the Late Republic

The earliest references to the financial intermediation through Roman banks appear often through the Latin playwrights Plautus and Terence of the third and second centuries B.C.; however, Roman banks were not nearly as well-documented as Greek banks (Huerta de Soto 2020, 53; Harris 2006, 16). Although the origin of institutionalized banking in the Republic is therefore uncertain, the financial institution of deposit banking had developed well-enough to be established and engrained in social fabric by the time of the Late Republic. Did Rome ever have the advanced banking practices which modernists claim? When framed in the context of the twenty-first century banking system, the answer is not a positive one. Certainly, the absence of

effectual clearing systems, let alone central banking or other modern institutions in banking,²⁰ delimits a difference between banking modern and in antiquity. However, when reframed to consider the larger historical narrative of banking developments, the answer becomes a resolute positive. Certainly, comparison can easily be made to banking from the fifteenth through eighteenth centuries (Harris 2006, 8). Although the Empire did indeed have a more developed and organized banking system than the Republic, the Republic provided the foundational developments of the Empire's banking system.

The basis for nature of Roman banking begins in understanding the legal-etymological roots. The *argentarii* were the principal bankers of the Roman world, anticipating the role and function of a modern, commercial banker in some respects. Strikingly, the word bears the root *argentum*, or "silver." In this, one can see that early bankers dealt with the holding and intermediating of things relating to silver (the *denarius et al.*). Indeed, the bankers were either private individuals or firms who specialized in silver coinage, and as the legal development of the Roman *societas*²¹ matured from the second century B.C. to the fourth century A.D., banks would almost exclusively move towards joint-ventures rather than rely on a single individual's equity (de Ligt 2007, 15-21; Huerta de Soto 2020, 56-58). In the context of Roman banking, there is no evidence to suggest private bankers (individual or *societas*) effectively issued private currency; yet the regulations upon banks were fairly limited, centering on the honoring of property rights and the security entrusted in deposit holdings. After all, it was not a single class or group that utilized banking in the Roman world; rather than leave it only to the aristocratic

²⁰ As Huerta de Soto notes concerning central banking in Rome,

Ptolemaic centralized banking has some influence on the Roman Empire: a curious fact is that Dio Cassius, in his well-known Maecenas speech, advocates the creation of a Roman government bank which would offer loans to everyone (especially landowners) at reasonable interest rates. The bank would draw its capital from earnings on all state-owned property. Dio Cassius's (sic) proposal was never put into practice (Huerta de Soto 2020, 53).

²¹ "Partnership," or "association," in the context of business and contractual agreements.

citizens of Rome, banking was a ubiquitous institution. Yet the legal issues surrounding deposit banking continue to vex scholarship.

The conception surrounding deposit banking is a largely complicated by issue of definitions, and so clear terminology shall be defined before further discussion continues. The two types of classical contracts, the *commodatum* and the *mutuum*, frame the discussion. The *commodatum* is the more simplistic contract in which the lender entrusts the commodatary a specific item – e.g., a Rembrandt – for a set term. The item loaned must itself be returned, as *commodatum* contracts rely on the non-fungible nature of the lent good. Thus, this form of legal contract is not a concern for most banking interests. *Mutuum* loans are the far more essential – and far more debated – contract within banking, however, and the modernist conflict is implosive surrounding the constitution of legal and proper *mutuum*. Generally, the *mutuum* “refers to the contract by which [a lender] ...entrusts [the mutuary] ...a certain quantity of fungible goods,” (Huerta de Soto 2020, 2). Also part of the *mutuum* contract is the establishment of interest on the loan, since the loan of fungible goods entails exchanging present goods for future goods; *tantundem*²² refers then to the goods which the borrower is so obliged to return the fungibles in equal quantity of the equal quality (Huerta de Soto 2020, 2, 3). But these are only loan contracts particular to the Republican period and therefore only represent one half of the banking apparatus of the Roman *argentarii*. The other contract in *argentarii* banking, i.e., the deposit contract is where the depositor entrusts the depositary with a moveable good to be kept, available on demand at any moment – this is the *depositum* (Huerta de Soto 2020, 4). The *depositum* or *depositum regulare* of the Republic was thus a sealed banking instrument, i.e., a bailment. Definitionally, the ethical and legal nature of deposit banking – although not necessarily the

²² “Of just the same value and amount,” my translation.

practical reality – demands that the depositary maintain the *tantundem* for the depositor in full (Bagus, Howden, and Gabriel 2017, 373). This sealed deposit may be seen somewhat analogous to the safe deposit box in the vault.

Post-Keynesian modernists maintain that the *mutuum* should follow in the juridic conception of the modern bank deposit – a consumption loan, whereby the property rights of money are transferred to the person “borrowing” the money, (Collins and Walsh 2014, 180, 191). Yet this anachronistic insistence on the part of the Post-Keynesians is itself somewhat misleading. In the very least, it is a confusion between loans and deposits. Without fair treatment to the larger historical development of banking through the Roman whole, the Post-Keynesian understanding of Roman banking hinges upon understanding the economic system as somewhat static across the centuries, or at least as necessarily developing stability through historical precedents (cf. Collings and Walsh 2014). Indeed, the historical-analytical foundations of ambiguous legal developments from the Imperial era are used as a justification for banking practices noted long before the Roman Empire was conceivable (Collins and Walsh 2014, 187-192). Unfortunately, legal and economic history is not so co-temporaneous as to insist that Republican and Imperial banking practices were *pari passu* occurrences, or that the latter was necessarily predicated on the former.

The historical record may only be so determined as to accord then with the actual legal and economic circumstances in which the events providing insight occurred – one cannot, therefore, make the insistent claim that because the lawgiver Ulpian or the *Corpus Iuris Civilis* of Justinian argued for something, the late Republic or even early Empire must have also maintained its legality or essential, foundational workings. Indeed, as Collins and Walsh (2014,

186) admit, there is significant debate and speculation surrounding the *depositum irregulare*²³ and its relationship with *mutuum*, both in the Republican and Imperial periods of Roman history. Yet the debate must be rooted in economic definitions and definite historical realities. Speculative scholarship often leads awry, and thus we must remain rooted in the facts of history and the truths of theories.

The prevalence of deposit banking across classes is, although denied by some, healthily established by the economic anarchy caused by the crisis of early first century B.C. from poor banking practices (cf. Collins and Walsh 2014, 192-202; Barlow 1980; Crawford 1968).²⁴ Regardless of the legality of fractional reserve banking during the Roman period (cf. Huerta de Soto 2020, Collins and Walsh 2014), it remains evident that the banking apparatus of Rome during this time certainly utilized fractional reserve banking as a standard operating procedure. In what should be a cutting historical precedent against the practice, Rome paid dearly for fraud in the first two decades of the Republic's last century. Largely mirroring the political and social

²³ Collins and Walsh define the "irregular deposit" as a deposit of money where legal ownership of the deposit is transferred from the owner (*dominium*) to the banker, and the banker is obliged to then repay a *tantundem*, with or without interest (2014, 186, 187). However, this clearly confuses what a deposit is *in se*. Huerta de Soto convincingly articulates, a more nuanced understanding of the "irregular deposit" within the legal-theoretical concern:

The only difference between the deposit of fungible goods and the regular deposit, or deposit of specific goods, is that when the former takes place, the goods deposited become in discernibly mix with others of the same type and quality...Due to this indistinguishable mixture of different deposited units of the same type of quality, one might consider that the "ownership" of the deposited good is transferred in the case of the deposit fungible goods...In no case will he receive the same specific units handed over...because they have become indistinguishably mixed with the rest of the goods held by the depositary (2020, 5).

As footnote 5 elucidates further on the matter,

[A]nother adequate solution to our problem is to consider that in the irregular deposit there is no true transference of ownership, but rather that the concept of ownership refers abstractly to the *tantundem*...and as such always remains in favor of the depositor and is not transferred (Huerta de Soto 2020, 5).

Fractional reserve banking thus complicates the whole matter of ownership and availability of goods, i.e., monies. In the fractional reserve system, both depositor and depositary have the (nominal) claim of ownership upon the money and both claim the availability of the money for use. This muddles the property claims of every party involved, and preserves only the opportunity for disaster (cf. Bagus, Howden, and Gabriel 2017, 377).

²⁴ The issue of fractional reserve banking, the basis for this crisis, is well illustrated in modern media by season 6, episode 9 ("The Secretary") of the TV show *Seinfeld*. In the episode, Jerry takes his jacket and mother's fur coat to the dry cleaner's to be cleaned and kept on demand, yet later sees the dry cleaner wearing his jacket. Outraged at the dry cleaner (depositary) wearing the jacket sent to be cleaned (the deposit), Jerry (the depositor) demands his clothes back; yet the cleaner's wife is out wearing the coat, and is analogously in violation of the Golden Rule of banking and therefore "insolvent." To avoid having to declare his insolvency, the cleaner insists Jerry first provide the absent claims ticket to reclaim his deposit, and the episode proceeds. The questionable and unethical nature of fractional reserve banking is evident even in this modern media piece.

unrest of the times, the economic situation of the first century B.C. demonstrates the pragmatic rejection of the Republic's foundational ideals of the balanced state and public thing; the first century before Christ was indeed the last century for the Republic because – in addition to political upheaval – there was no longer the sense of commitment to the generally sound economics of Republic Past. Uncertainty and change came to Rome not just through new law, but new economic crises.

As C. T. Barlow (1980, 202) notes, the finances of Rome during this crisis fall into two phases of monetary and banking uncertainty – 92 B.C. to 88 B.C. and 87 B.C. to 80 B.C. In the former, the context is driven by economic legislation in the 90s and the Social War; Barlow (1980, 202) argues the division for the latter spotlights two civil wars and the Cinnan government. During this first phase of the economic crisis, the Social War was the central government expenditure through means of the army, as the Republic expanded to nineteen legions in 90 B.C., thirty-two in 89 B.C., and seventeen in 88 B.C. (Barlow 1980, 204). In order to fund this military expansion and other proposals for the stability and continuing security of the Republic, Livius Drusus the son attempted to legislate a silver coinage of reduced intrinsic value by plating silver onto iron coins (Barlow 1980, 203; Crawford 1968, 1). However, as Crawford (1968, 1) elucidates, the one line of evidence for this measure actually proves the counterpoint: “*Lege Cornelia (tenetur qui) vultu principum signatum monetam praeter adulterinam reprobaverit. A plated coin was always moneta adulterine.*”²⁵ Thus, instead of going into effect, Livius Drusus' attempt at debasement was invalidated and any plated coins found around this

²⁵ “According to the Sullan Law (which is held), it would have rejected the money stamped with the face of leaders beyond counterfeit.” (My translation).

time were forgeries (Crawford 1968, 2). Furthermore, there is no numismatic evidence in the official *denarii* produced around 91 B.C. to indicate debasement.

Rather, the Roman Republic was still committed to fully sound silver coinage, and would not authorize debasement of coinage in order to accomplish the necessity of war – the Rome of the Social War was a far richer state than that of the Second Punic War. In place of violating the quality of the coin, the Republic instead found other means to fuel the war machine. Initially, the Republic was able to fund the creation of new legions through the surplus of the state, both in coin and unstamped bullion; however, this surplus soon proved an insufficient means for prosecuting the Social War (Barlow 1980, 205). Barlow (1980, 205), citing work by Crawford, points out that coin production increased by almost two-thousand per cent over the first two years of the war, and then significantly reduced to only be about six times the original level by the end of the war; thus, the claims of coin debasement by Drusus are not implausible, albeit devoid of truth. The Senate – running low on revenue and high on expenses – still preserved the soundness of the Roman money. The first means of extraordinary state income came from the *sanctius aerarium*, Rome’s emergency treasury funded by a five per cent tax on manumission²⁶ and used to fund wars exclusively against the Gauls (Barlow 1980, 206). Through this policy, although the Senate decided to empty their coffers against future Gauls, Rome was able to prosecute the war without burdening the populous with more taxes. The government was also able to raise revenue through the sale of public properties on the Capitoline Hill, and small streams of revenue came from the bounty of conquest (Barlow 1980, 206). Thus, Rome did

²⁶ Manumission is the act of a slave buying his own freedom from his master with *peculium*, i.e., the money belonging inherently to the slave which the master cannot claim. A new freedman was called *libertus* (*liberta f.*) and granted citizenship with limited rights. His children would enjoy full rights as citizens.

indeed increase the money supply to fund the war machine, although this practice was limited to the duration of the war and without any corruption of the coinage.

Sullan controversy after the Social War concluded ensured that the state's treasury would constantly be burdened, however. After his first march on Rome and defeat of Marius, Sulla and his legions left for Asia and the cost of the campaigns in the East kept government expenditures high (Barlow 1980, 206). Yet between Sulla's departure and return to Rome, the tyrannical Cinna was able to seize power – in the four years of his consulship, Cinna and his co-consul Carbo exhausted the state's sources of revenue. In preparation for Sulla's return, Cinna preemptively prepared his military machinations, but left the government financially weak, and this contributed to its collapse (Barlow 1980, 210-212). Upon Sulla's second march on Rome, he was able to restore a tepid financial stability to the state.

Yet during Cinna's consulship, the economic crisis was further exacerbated by poor banking practices, on top of the already unstable monetary situation. The year 85 B.C. saw the great aggravation in two issues. Certain bankers in the Republic were granted a dispensation of ten years to repay their creditors and debtors, a case implying bank runs and insolvency (Collins and Walsh 2014, 192; Harris 2006, 11). The fractional reserve banking that caused the insolvency clearly did not just begin two years prior when Cinna assumed power; rather, the economic instability caused by the Social War and its conclusion only revealed the rot of banking abuses. Because of the lack of economic integration across the Republic, this banking crisis did not spell the doom and depression for the Republic – the consequences were limited by geography, although those pockets affected by the insolvency did suffer grievously enough even if the state compelled bankers to repay their losses in ten years.

However, that the state and larger society expected that these deposits be refunded in full is telling. If fractional reserve banking were truly a permissible institutional feature of Republican banking, then there should not have been the legal burden (or dispensation) that bankers should repay those who were defrauded over ten years. Indeed, if fractional reserve banking were licit, then the depositor would be presented with the opportunity for interest on the account with the cost of risk. At a surmised thirty per cent reserve rate, Roman banking was marginally more sound than modern fractional reserve banks, and they still failed (Collins and Walsh 2014, 192). In the legality hypothesis, there would be no legal recourse for depositors against a depository if the parties all consented to fraudulent banking practices. The historical record provides a strict account, however, which does not accord with a legality hypothesis; rather, because the Republic gave those certain bankers a dispensation of ten years to repay what they owed, one can recognize that poor banking practices, though evidently utilized, were not legal during the Republican period. Furthermore, that the crisis was limited by geography shows a limited implementation of the practice, unlikely if legal. Unfortunately, the illegality of the act clearly failed functionally to prohibit the exercise thereof, although the state did ensure depositors would eventually receive recompense. Unlike the modern era of banking, the state did not license banks to defraud their customers. Yet Cinna did ensure the entire Republic would suffer from his poor economic policy.

Rome issued the first legal tender act in its history through the edict of *tribunis plebis* Gratidianus in 85 B.C. (Cascio 1981, 77; Crawford 1968, 4). The Roman state, Crawford (1968, 3) argues, was always prepared to exchange silver and bronze at official rates, although Cascio (1981, 77) argues this is itself not enough to explain the law and “it is difficult to suppose that the relationship between... the *denarius* and *as* was ever a matter of uncertainty for a long time

after the Edict of Gratidianus.” The legal tender law was, in effect, not an attempt to monopolize the currency being exchanged in the market, but rather, to affirm the nominal exchange rate over the market exchange rate of that currency being exchanged. Since the Social War, Rome’s economy was disordered and filled with uncertainty. Much like the concerns leading to the retarriffing of the *denarius*, the market exchange rate between silver and bronze was not standardized in accord with the nominal or official rate – as a result of the widening differences between nominal and real exchanges, the Cinnan government determined to order the market to take the *denarius* as sixteen *asses* (the face values of the coins), nothing more, nothing less. Those who did not comply would this be penalized for rejecting the state currency not as an issue of currency competition or counterfeit, but as an issue purely of fiduciary and nominal value. As is known from Cascio (1981, 78):

The *denarius* is worth 18 *assaria* at Pergamum and Ephesus, but only 16 *asses* at Rome and in the West, probably in part because the additional value attributed to the *denarius* produces a profit for the town and a remuneration for the service rendered by the [bankers] in dealing with small change, in part because of the general acceptability of the *denarius*, in contrast with the local bronze denominations.

Other locales utilized various but comparable exchange rates among the bronze coins and *denarii*. During the Social War, the Senate had transitioned the *as* from the uncial to the half-uncial standard, while keeping the official sixteen-to-one exchange ratio; although the fineness of the metal remained, the various markets within the Republic recognized the official exchange rate (once an act of realignment with market values) was no longer reflective of the economic evaluations (Crawford 1968, 3, 4). Thus, between the Social War and the Edict of Gratidianus, various geographies and markets within the Republic came to exchange the *as* and local bronze denominations with the *denarius* at rates outside the prescribed sextantal limit. Curiously, then, this legal tender law was itself not the government’s move to fiduciary media, but the finalization

of that transition. The *as* no longer could retain its position in the market, yet Rome ignored the economic realities for the sake of “exchange stability.”

The material soundness of the coin was not insulted by this edict; however, the action by the plebian tribune is a mirror darkly of the Senate’s “retarrifing” over fifty years prior. Rather than accord the state to market realities, Rome now attempted to impress the state upon market by instituting *poena* and *iudicium* against speculators. This unfortunate turn in the Roman government was motivated by – at least on the surface – good intentions: between 86 and 85 B.C., *nummus* was constantly being tossed about and the *denarius* was unstable, per Cicero (Crawford 1968, 1; Barlow 1980, 218). This has been interpreted that the whole monetary system (including credit) was in such violent upheaval, there was no settled exchange rate in the major geographies of trade. Where Rome erred, however, was in attempting to expedite the clearing of exchange rates, and demanded that the whole Republic play pretend with exchange values. In no disregardable concern, the economic status of the state allowed Cinna and his government to increase the money among the Roman *populi* while also maintaining the material soundness of the coin for the benefit of public image. In this, Cinna clearly hoped to reap the benefits of having more money to fight Sulla, mistaken as he was. While not legally reinforced by Sulla, the edict and principle of *fiducia* was ironically complemented by his *Lex Cornelia* – the state rightly punished criminals for putting coins of less-than-nominal value into circulation, wrongly doing the very same thing themselves. Rome officially had the fiduciary coin.

The episode of fiduciary experimentation was just the beginning of the Republic’s increases in the money supply during these years of turmoil. Twice more throughout the twilight of the Republic did monetary crisis and banking issues nearly cripple Roman society. As Cascio (1981, 85) notes, both the conspiracy of Catiline and the reign of Julius Caesar marked periods of

financial crisis. Having noted earlier that banking was used across class lines, the universalized impact of these economic crises can be ascertained through the interconnectedness of the regional economies. Credit had become a central facet of Roman banking and financial system as the Republic became more established in the ancient world; the exchange of property, “distance lending,” and other common coinless transactions all relied on *nomina* (Harris 2006, 3, 5-9, 24). The Roman government rarely interfered in the actual money supply, often allowing credit systems to spring up in place of minting more coinage (Barlow 1980, 212). This general economic and monetary policy of controlled minting entailed that if the extant coinage in circulation was sufficient for the government to pay for its expenses through revenue, then no new minting would occur – a stable money supply meant stable, not inflating at a certain percentage annually. This historic lineage of policy by Rome only emphasizes the Cinnan government as the acme of both interference and instability. Between the classic blunder of becoming involved in a land war in Asia and significant changes to the money system through social response to political instability, the credit system and coin supply had declined, reaching a stable, albeit smaller, level after Sulla retired the dictatorship.

As a result of this monetary contraction, however, it should be no surprise that the credit system soon rebounded to accommodate the lower levels of coinage in circulation. The further sophistication of the credit system was also a recovery of both land values and *fides* in Roman markets, largely owed to the political stabilization of the Sullan regime. Yet as a result of the growth of the credit system across all classes, private debts developed their own markets. A whole legal process of *delegatio*²⁷ developed, where the buyer transferred the *nomen* owed to

²⁷ “Assignment,” that is, the delegation of liability.

him to the seller; it remains theoretically possible (although there is no evidence of such occurring until the second century A.D.) that there was thus a money multiplier effect through serial *delegatio* (Harris 2006, 15). The assertion of John Maynard Keynes, that the ancients were more than reluctant to lend, is therefore patently untrue when one examines the Late Republic (Harris 2006, 15). Rather, the Late Republic actually enjoyed what the Keynesians might term a high liquidity preference – and the resultant desire to spend before anything was saved unfortunately contributed to these debt crises.

Another crisis in the Late Republic, the conspiracy of Catiline was fueled by the social unrest of high debt, among other things. For years, the Senate or the Plebian Assembly had limited interest on *nomina* or enacted limited debt-reduction acts; however, these government actions were purposefully narrow, and calls for an abolition of debt (and revolution) among the plebians offered the *populares* the political edge over the *optimates*. But the conditions which Catiline abused in his own quest for power were not unique to this crisis (Collins and Walsh 2015, 131). During Julius Caesar's dictatorship, a significant debt crisis emerged, leading to the first standardized minting of gold coinage – the *aureus*, which would become standard in the Imperial period – in hope that increases in the money supply would ameliorate the issue. Within five years of the issuance, the money supply increased by almost fifty per cent (Collins and Walsh 2015, 146, 147).

As Cascio (1981, 85) notes, Ciceronian contemporaries were aware of a connection between the quantity of money, interest rates, and land prices: this was the “‘law of Bodin,’ the basis of the modern ‘quantity theory of money,’” Post-Keynesian analysis blames the debt crises on a lack of liquidity, though this remains a colorful distraction. Instead, one may see that as reservation demand increased among the Roman people – in no small part due to the risk of

relying on credit and other clearing systems, the risk of civil war, and general uncertainty – even as the state continued to enforce easy credit and increased minting. The result, recognizably, was widespread inflation. As the money supply of Rome increased in conjunction with the increases in total demand to hold money, the purchasing power of money in the Roman system was severely impeded. Thus, the price structure increased, inversely to the purchasing power of money. Food prices and rent, among other things, rose considerably and the 40s B.C. were a period of stagflation (Collins and Walsh 2015, 147).

Julius Caesar utilized legislative power to further frustrate market clearances and equilibriums; through measures on hoarding and land investment, Caesar arguably induced the larger economic crisis that spanned his dictatorship. By demanding that citizens invest a minimum (perhaps as much as 50% of capital) in Italian land and limiting money holdings to fifteen-thousand gold or silver coins, Caesar effectively clotheslined the economy while civil war prolonged uncertainty and economic instability. It is possible that these measures also included a ceiling on interest rates, although the Senate had passed such a limit at twelve per cent already in 51 B.C. (Collins and Walsh 2015, 152, 158). Arguably, Caesar was hoping to unfreeze credit markets with his measure limiting how much money one could hold; by limiting the physical coinage that a citizen could hold, Caesar gave stimulus to the less-than-reliable credit system (Harris 2006, 4). This measure was problematic on two levels: from a policy perspective, it had limited enforcement, for the law did not include informers; from the economic perspective, this gave an artificial increase in the credit market. In the midst of civil war, credit was unreliable as a means of payment, whereas the specie of coins provided certainty – especially when the Republic still did not engage in debasement. Thinking that an increase in the money supply would grease the wheels of the economy, Caesar must have been utterly disappointed at the

abysmal failures of his policies to improve the economic conditions, although Post-Keynesian though holds that the measures were not strong enough to fix the debt crises (Collins and Walsh 2015, 159-161; Cascio 1981, 86). Tiberius revived these laws with greater legal force, and the similar crisis of 33 A.D. ensued.

What should be so shocking about the economic situation of Late Republic is not the departure of the government from (relatively) sound monetary policy, but rather that the economy was not hampered by limits on the money supply. As Harris (2006, 24) notes, when the state limited minting, the shortage of money failed to impede economic growth. It must be conceded, the monetary situation in the Republic was not as pure at the end as it was at the beginning. That the state should gradually reduce the value of currency is the historical normality. The case remains, however, that even though the Romans engaged in fiduciary monies and inflation, this was not the result of inflation *qua* debasement, but the unstable commitment to and nature of bimetallism and government opportunism. The Republic therefore offers a long period of an economy utilizing as-close-to-pure coinage for almost the entire period, the Punic Wars notwithstanding.

Part III

Based upon the nature of Roman economics present during the Republican period, it may be clearly adduced that Rome's monetary systems were far more sophisticated than primitivist dogma allows. The theoretical non-understandings aside, the constraints of real economic laws and consequences were manifest in the Roman policy surrounding money. The state continued to play a role in the money supply, minting only as much as was necessitated by public expenditures – even this was a controlled and conservative policy, as long periods without

money increases were common. Certainly, the Romans did not adopt a money supply that was totally responsive to market pressures. But neither did the Republic attempt an interminable *media via* approach to economic controls on the market. Rather, the Roman government as a historical unit was receptive to market changes, attempting to prudentially navigate the complexities of economic policies without the ability to lean upon a developed economic science. For the focus of the Republican period, it was the quality of money over quantity. There was no dual mandate to guide the Roman monetary system, yet the Republican period saw sound money as the political rule, rather than exception. The inklings of a quantity theory of money present in the Ciceronian age did not lead to a goal for stable prices any more so than the *triumviri monetales* successfully engaged in cyclical, inflationary booms. The Romans, for all their limited understandings of economics, were often able to maintain obedience to those economic laws.

Malfeasance in the money systems, to the detriment of the Republic, became common, however, in the last century of its Mediterranean custodianship. The political capital that quick solutions provide came to outweigh the Republic's custom of sound money and controlled debts. Banking became unstable through unethical and perhaps illegal practices at several points, the government interfered with credit systems and substantively increased the money supply, and unpaid debts ran wild under extreme inflation and eventual stagflation; these were singular issues of the time, concurrent with frequent government controls and civil war. As a result of the initially poor choices which allowed for these issues, the state grew to have an increasing role in the monetary system. The last century of the Republic is a witness to a two-fold decline in the political system and the popular conception of the Republic. Yet as much as it may be correct to understand the fall of the Republic as a failure of the political system and the decline in the

political citizenry, the evidence evinces that certain economic failures and uncertainties also played a significant role in destabilizing ordered liberty of Roman society. The history of the Republic is layered in sound monetary policies that emphasized economic prudence and conservative exercises by the government. These were centuries of conquest and expansion, where a sound money system was essential for the economic and political development of the Republic. Yet it was the abandonment of those policies that prepared the reorganization of the Republic into the first Roman Empire. The monetary system only became unstable and failed once the government failed to halt their own interferences with money structures. The endogenous successes of the Roman monetary system could only be undone by the exogenous impositions of the state, in whatever organizational model the Romans formed.

It serves only as an ironic testimony to the grandeur that was Rome, that Augustus and his new Empire learned from the mistakes of the waning Republic (merely for the mistakes of the past to be repeated by his own imperial successors). The grievous divergence in Roman monetary policy from systemic soundness to systematic stability was at last reconciled in the person and policy of the *Princeps Civitatis*. Or, to frame it another way, in a bizarre twist of economic history, the total abandonment of the Roman monetary tradition during and after the Social War was now eclipsed and negated by a more centralized state and the heir of Julius Caesar. Although still hardly a free market, the coinage was restored to its full purity and weight, and the gold *aureus* became the currency standard. The reliable and fully liberal money with which the Roman narrative began returned with full faith and credit, within the supposed stronghold of economic regulation, the Imperial system. The limited and purely legal role of the Roman government in the money matters was ensured. Even as future emperors would slovenly chip away at the restored monetary soundness of Rome, the reclamation of a robust monetary

structure by the Emperor Augustus was perhaps as close to a free monetary order as a state could achieve. From the Second Punic War to the retarrifing of the *denarius* to the introduction of fiduciary media by Cinna and more havoc-causing controls under Julius Caesar, it seems that, within the record and testimony of the Roman Republic's history, the policy *mos maiorum* had at least triumphed temporarily over the actions of monetary debasement and credit expansion through the first emperor of Rome. *Ave, Caesar.*

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