

MONEY, CAPITALISM AND LOAN BANKING WITH A 100 PER CENT RESERVE RATIO IN 6TH-CENTURY BC BABYLONIA

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1. Introduction

The legal nature of the irregular money deposit contract, the necessary duty of care and safekeeping it entails, and the economic consequences arising from its breach have been one of the central concerns of the Austrian School of Economics.

Theorists such as **Ludwig von Mises** (1912), **Murray Rothbard** (1962) and **Jesús Huerta de Soto** (1998) argued that a breach of the duty of safekeeping (when institutions use their clients' deposits to grant loans or make investments) constitutes the ultimate root cause of economic cycles. These authors further considered that such a ratio constituted an inexcusable ethical and legal requirement, derived from the very principle of private property. From this perspective, the only way to preserve monetary stability and legal certainty would be to implement a **100 per cent reserve ratio**, so that demand deposits are fully backed by liquid reserves.

From this perspective, the problem of fractional reserve banking is not merely a technical issue of bank management, but rather relates to the legal nature of contracts and the intertemporal coordination of the market. Austrian criticism maintains that a demand deposit entails an obligation of safekeeping and immediate

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availability, whilst a loan involves the temporary transfer of the availability of the asset lent. The confusion between these two concepts alters the structure of property rights, introduces systematic mismatches between enforceable obligations and illiquid assets, and allows for an expansion of credit not backed by prior savings. For this reason, the defence of a 100 per cent cash ratio should not be understood merely as a proposal for financial prudence, but as an institutional consequence of the principle of private property and the requirement of contractual compliance (Mises, 1912 [2012]; Rothbard, 1962; Huerta de Soto, 1998).

In contemporary economic thought, the defence of a 100 per cent cash ratio is not exclusive to the Austrian School. Since the so-called 'Chicago Plan', formulated in the context of the Great Depression in the United States by authors such as Henry Simons (1936), and later taken up by Milton Friedman (1948), it has been justified primarily on grounds of macroeconomic efficiency and price-level stability.

However, this thesis has been criticised by authors such as Huber (2013), and even within the Austrian School itself. Juan Ramón Rallo (2019), for example, has highlighted the practical and conceptual difficulties of maintaining a banking system with full reserves in a modern economy, arguing that the lending of deposited funds, provided it is carried out transparently and on a voluntary basis does not necessarily imply fraud or generate structural instability, whilst the inability of a rigidly constant money supply to cope with fluctuations in the demand for liquidity constitutes a serious economic problem.¹

In this context, the historical experience of pre-modern institutions that operated *de facto* with very high reserve ratios takes on particular relevance for the current debate on the various possible architectures of the banking system. The debate, therefore, is not merely theoretical, but refers to the historical possibility of financial institutions operating with a full reserve ratio, that is, without resorting to the creation of additional fiat money.

It is not, therefore, a matter of mechanically projecting contemporary banking categories onto ancient societies, but rather of

¹ See Bagus 2014 and 2023 for a rebuttal of the arguments put forward by Huber and Rallo.

using economic history as a field for institutional comparison. If a monetised, mercantile and legally sophisticated economy was able to establish mechanisms for safekeeping, lending, clearing and the transfer of rights without resorting to the appropriation of demand deposits, then the modern debate on full reserve ceases to be a mere abstract normative construct. This historical case allows us to examine whether the separation between deposits and credit—regarded by Huerta de Soto as a condition for monetary stability and legal certainty—can also be observed in pre-modern contexts where the law of obligations and contractual trust played a central role.

In this regard, economic history offers an example of extraordinary interest from a surprisingly remote period: the **House of Egibi**, one of the most influential families of bankers and businessmen of the Neo-Babylonian and Achaemenid periods (c. 612–484 BC). This family is documented across five generations, up to the archival hiatus associated with the Babylonian revolts against Xerxes in 484 BC, an episode that marked a turning point in the private records of numerous urban Babylonian families (Waerzeggers 2003/2004). Their archive comprises more than 1,700 cuneiform tablets and has been analysed by scholars such as Wunsch (2000), Abraham (2004) and Jursa (2010), amongst others.²

The Egibi household engaged in financial, commercial and agricultural activities within a highly sophisticated institutional framework, and the available evidence suggests that its day-to-day lending activity was not based on the use of demand deposits, but rather on its own capital, commercial profits and patrimonial assets, which allows it to be interpreted as a form of lending banking functionally comparable to a full-reserve system.³

² As a methodological precaution – given that this is not a historical journal specialising in Assyriology – it would be pointless to refer directly to specific tablets from the Egibi or Kanesh archives to support our key assertions; we shall therefore draw on secondary sources. Similarly, Akkadian terms are transcribed rather than written in cuneiform script.

³ Huerta de Soto (1998, p. 37) had already highlighted the importance of the Egibi tablets as evidence of ancient banking practices.

2. The Mesopotamian economy: between the redistributive model and the market economy

In what kind of economy did this family and its associates conduct their commercial activities? For much of the 20th century, the dominant interpretation of the Mesopotamian economy was shaped by the **institutionalist paradigm** proposed by the Austrian anthropologist Karl Polanyi (1886–1964). In his influential and widely read works *The Great Transformation* (1944) and *Trade and Market in the Early Empires* (1957), Polanyi argued that the economies of the ancient Near East could not be understood using the analytical tools of modern market economics, as they lacked free prices, private capital and autonomous mechanisms of supply and demand. According to his thesis, economic transactions in pre-classical civilisations were governed by the principles of **reciprocity** and **redistribution**, managed by state institutions such as the temple or the palace, which acted not only as religious and administrative centres, but also as dominant economic agents within a form of primitive distributive socialism. This framework had a profound influence on subsequent historiography, cementing a deeply statist view of the Mesopotamian economy.⁴

However, as early as the second half of the 20th century, archaeological and documentary evidence began to accumulate that challenged this theoretical model. Pioneering research by Leemans (1950; 1960) and Van de Mieroop (1992; 1997) demonstrated the documented existence of a **highly active private sector**, comprising merchants, farmers, artisans and trade associations (*harrânu*, in the Akkadian language), who engaged in both local and international trade without state intervention or redistribution beyond the state's usual functions.

It is symptomatic of the prevailing Polanyian paradigm in research that one of the most renowned scholars of the Ancient Near East, Mario Liverani, in his classic reference work *The Ancient Near East: History, Society and Economy* (1995) and in *The Ancient*

⁴ Even an openly liberal author such as Fernández Méndez (2025, pp. 66–76) repeats the old myth of the predominance of the temple and palace economy in a recent popular work.

Mesopotamian City (1997), adapted Polanyian theory to accommodate this contradictory historical evidence in order to avoid having to reject it. According to Liverani, although temples and palaces retained institutional control over a large part of production, their management was not limited to bureaucratic redistribution, but also included directing profit-oriented commercial practices, which he termed '*administered trade*'. It is regrettable that his followers have perpetuated this view without undertaking a critical analysis (e.g. Renger, 2005; Aubet, 2007).

However, the current trend in Assyriological studies is to recognise that the private sector played a **much broader and more autonomous** role than was previously acknowledged. The evidence provided by cuneiform tablets has led to a radical reinterpretation of the Mesopotamian economic structure and the refutation of Polanyism (e.g. Silver, 1983; Dercksen, 1999). The leading proponent of this paradigm shift is the Assyriologist Michael Jursa, Professor of Assyriology at the Institut für Orientalistik, University of Vienna, who is one of the principal advocates of this necessary re-evaluation.

His most important work, the monumental *Aspects of the Economic History of Babylonia in the First Millennium BC* (2010), represents a historiographical turning point. Basing his analysis on more than **20,000 cuneiform tablets** from public and private archives, including those from the cities of Babylon, Borsippa, Nippur, Uruk and Sippar, Jursa demonstrates that the economy of Lower Mesopotamia during the first millennium BC was not a closed redistributive system, but rather a **monetised, complex economy organised around a free market**.⁵

The great Babylonian temples, such as the Esagila in Babylon, dedicated to Marduk, employed **free labourers**, leased land and engaged in credit transactions. At the same time, merchant families of considerable economic power operated as **diversified enterprises** combining commercial, agricultural and financial activities. This network of mixed relationships demonstrates that the Neo-Babylonian economy was an **open and competitive** system,

⁵ See also Jursa (2004, 2014a, 2014b, 2015) and Pirngruber (2017).

in which private initiative coexisted with a state that could be considered minarchist by today's standards. The latter did not override contractual freedom or private property, and certainly did not intervene in price formation or redistribute surpluses in a quasi-socialist manner.

The interpretation of Babylon as an increasingly monetised economy sensitive to market mechanisms has been reinforced by recent research on prices and economic integration. Pirngruber (2017) has re-evaluated the late Achaemenid and Seleucid economies using cuneiform records and price data from the Babylonian Astronomical Journals, focusing on the impact of political events on supply, demand, prices and the money supply. His approach, inspired by New Institutional Economics, is useful because it shows that the Babylonian economy can and should be studied through the lenses of market performance, monetary circulation and institutional incentives, and that the old paradigm of an economy administered by temples and palaces is untenable.

3. Kanesh: capitalism four thousand years ago

In this debate on the nature of the ancient economy, the case of the Old Assyrian trading post of Kanesh (now Kültepe, in Cappadocia), which reached its peak between the 21st and 18th centuries BC, is of great significance. It provides evidence of typically capitalist practices, revealing an economic complexity and rationality that predate by several centuries what is generally acknowledged in popular works (*e.g.* Fernández Méndez, 2025). The abundant cuneiform archives found at Kanesh—more than **25,000 tablets**—constitute one of the most significant documentary collections from an economic perspective in the entire ancient world, offering an exceptionally detailed picture of economic and financial activity in the second millennium BC. The picture painted by the extensive studies carried out by Veenhof (1972, 2010), Michel (2001, 2020) and Larsen (2015) is absolutely irrefutable and debunks many myths.

Kanesh's significance for economic history lies not only in the exceptional volume of preserved tablets, but also in the private

nature of the archives. Veenhof has emphasised that the Paleo-Assyrian archives were found in the homes of merchants based in Kanesh, and that they contain a combination of contracts, correspondence, caravan records, legal documents and private memos. We are therefore not dealing with documentation generated primarily by palaces or temples, but rather with domestic and business archives that reflect the activities of private merchants, their families, agents, partners and creditors. This fact is decisive for the historiographical debate, as it proves the existence of an autonomous commercial sphere, organised through documents, witnesses, correspondence and complex contractual practices. Within this **commercial diaspora**, Assyrian merchants maintained their own identity, networks and norms, striking agreements with local political powers (Veenhof, 2003; Stein, 2005, 2008).

The *Kārum Kanesh* (literally, the ‘commercial quarter’ of the city of Kanesh) constituted a trading colony in the interior of Asia Minor, subordinate to the city-state of **Aššur**, the homeland of the Assyrians, but endowed with legal and economic autonomy from the kings of Kanesh. This enclave formed part of a well-organised network comprising some thirty **trading posts** (*kārū*),⁶ which enabled Assyrian merchants to maintain a permanent presence in the main trading centres of Anatolia, operating under their own laws and courts, and enjoying freedom of movement and safeguards against arbitrary exactions or confiscations.

Trade was essentially carried **out by caravan**, based on long overland routes connecting Assyria with Anatolia via donkey caravans transporting **tin, textiles and precious metals** – high-value goods in short supply in the region. It is interesting to note that in the city of Aššur, trade was overseen by a **municipal assembly**, presided over by the so-called *limmum* (an eponymous magistrate),

⁶ Barjamovic (2010) reconstructed the historical geography of Anatolia, as well as the logistics and dangers of Paleo-Assyrian trade, based on topographical, archaeological and textual evidence. Stein (2005, 2008) emphasises that the Assyrian trading colonies in Anatolia constitute one of the earliest and most significant examples of colonial encounter, and were not the result of the forcible imposition of political power, but rather of the migration of individuals for economic reasons. The fact that private trading networks could generate their own forms of institutional coordination is a further refutation of Polanyism.

who acted as a body for oversight and public administration: he safeguarded the treasury and the archives, collected taxes, regulated weights and measures, and managed the municipal grain stores. The **royal palace**, by contrast, is scarcely mentioned in the records, which demonstrates that Early Assyrian trade was not a palace-based enterprise, but rather a **civic and private** institution, organised around the citizens' assembly and the merchant guilds.

Specific economic terminology has been the subject of monographic studies, such as those by Veenhof (1972, 1997) and Dercksen (1999, pp. 55–100, 2014, 2018). Assyrian merchants formed associations (*tappūtum*) or full-fledged **companies** (*ellūtum*) with shared legal liability, with the curious guarantee that the contract had been formalised in the merchants' houses (*bīt tamkārim*). They financed their expeditions through direct loans in which 'silver was borrowed in return for interest' (*kaspa ana šibtim laqā'um*) on a medium- or long-term basis (*ana ūmē qurbūtīm; ana ūmē patiūtīm*), distinguishing between initial capital (*šīmat kaspin*) and interest (*ana šibtim*), or through investment contracts with **financial partners** (*ummiānum*). The latter contributed silver (*kaspu*) or goods (*makkūrum* or *luqqūtum*) in exchange for a share of the profits. These partnerships, known as *naruqqum* ('[money] bag'), invested the available capital (*būlātum*) and effectively functioned as **joint-stock companies, as rights to the invested contributions** (*šipkātum*) **could be freely bought and sold by means of certified tablets** (*ṭuppum ḥarmum*). Profits were distributed at the end of each trading cycle, in proportion to the initial investment, either in cash (*ana itatlim*), sometimes 'entirely in silver' (*kaspa nuiabbi*), or in instalments (again expressed using the phrases *ana ūmē qurbūtīm* and *ana ūmē patiūtīm*). Payment in silver was not always possible due to its scarcity (*kaspu dannu*). In the event of loss, disruption to trade or abandonment of the goods, there was a right to claim payment (*bābtum*).

The legal framework was equally advanced. The evidential role of written documentation was central to Old Assyrian commerce. As many transactions involved valuable goods, silver or personal obligations, it was customary to conduct them in the presence of witnesses and to have them recorded in writing by scribes. The tablets were not merely accounting aids, but transferable instruments

of evidence that could attest to debts, payments, claims, corporate agreements or settlements (*muka'il tuppim*: 'to the bearer of the tablet'). Even the cancellation of an obligation could be documented by means of a receipt or tablet of satisfaction, drawn up in the presence of witnesses, stating that, should the original debt tablet reappear, it would be deemed invalid. This practice reveals a legal-commercial system in which private trust was reinforced by documents, seals, witnesses and procedures for the cancellation of titles (Veenhof, 2003).

Indeed, the relationship between money, calculation and written documentation has its roots in the very origins of Mesopotamian writing. Nissen, Damerow and Englund (1993) have shown that the earliest proto-cuneiform tablets of the 4th millennium BC emerged in response to needs for record-keeping, administration and accounting. Before writing became a literary medium, it functioned as a technology of economic control: it classified goods, quantities, people, rations, inflows, outflows and obligations. This documentary tradition is fundamental to understanding the subsequent development of loan contracts, deposits, payment records and archives in Mesopotamia.

There was a **free market**—a concept expressed by the Akkadian term *maḥīrum*—where prices were determined by supply and demand, rather than by state decree. High-interest loans, often at 30 per cent per annum—higher than the 20 per cent customary in Sumer or Babylon (Hudson, 2000; Garfinkle, 2004)—were granted by specialised merchants (*tamkāru*), who acted as **bankers** (Dandamayev, 1995; Spek et al., 2018). These transactions were backed by collateral, guarantees and penalty clauses, demonstrating a full awareness of risk and the time value of money.

The existence of high interest rates should not be interpreted anachronistically as a mere form of usury, but rather within a context of commercial risk, long transport times, legal uncertainty and high demand for liquidity. The history of usury shows that the moral and legal assessment of interest has varied considerably depending on institutional, religious and economic contexts. In ancient economies, interest could function simultaneously as remuneration for capital advanced, compensation for the risk assumed and a penalty for breach of an agreed obligation. Interest-free loans

(*ebuṭṭum*) also existed, typically granted by family members. This perspective allows us to situate the rates documented in Kanesh and Babylon within a broader history of theories of interest-bearing loans, predating their modern systematisation, and avoids reducing them to mere contractual abuses or signs of economic backwardness (see Hudson, 2000; Jiménez Muñoz, 2010; Martín-Grande, 2025; Chancellor, 2022 [2024]).

It is interesting to note that women (wives and daughters) were not marginal or passive figures, but **economic agents** with the capacity for effective action: they managed shipments, coordinated trade-oriented domestic production, administered the assets of their husbands and sons as well as their own, participated in financial decisions, and maintained a correspondence that reveals first-hand economic information (Michel, 2020). Far from being merely anecdotal, this fact is significant because the sophistication of contractual arrangements and the stability of commercial networks did not depend exclusively on large palatial or Templar institutions, but on a socio-legal fabric based on obligations and customs capable of sustaining, over time, the trust necessary for economic calculation.

In the legal archives of the city of Larsa (near Senkereh, in present-day Iraq) from the Early Babylonian period (2000–1600 BC), studied by Földi (2018), we also find a **similar legal and economic context**. The procedural documentation shows that the economic rationality evident in contracts and legal disputes depends on legal categories and commercial practices that ensure obligations are enforceable. The Babylonian institutional structure, with its complex network of scribes, judges and witnesses, guaranteed the **legal certainty of contracts**. The surviving cuneiform tablets record countless sales, leases, interest-bearing loans and deposits, all formalised with notarial precision. The existence of a well-established legal framework, with figures equivalent to notaries and commercial judges, fostered confidence in transactions and enabled the development of a **complex economy**, in which written documentation served an essential evidential function and reinforced the security of private property (Bongenaar, 2000).

Of course, a free market does not imply the absence of the state, taxation, institutional oversight of commercial activity, the state's

occasional involvement, or its monopoly on the use of force. The tax system levied on Old Assyrian caravan trade reveals a remarkable degree of **fiscal sophistication and customs control on the part of the state authorities**. Export and import duties were levied in both Aššur and Kanesh: there was an export duty of 1/120 of the total value (*wasītum*), whilst the *nišātum* was levied on imports at varying rates: 3 per cent on tin, 5 per cent on textiles and 4 per cent on precious metals. In addition, there was a **transit duty** (*dātum*) of 10 per cent of the total value of the caravan; a **personal transit tax** (*qaqqadātum*), ranging from 10 to 15 shekels of tin per person; and other specific duties, such as the *sadduātum* (1/60 of precious metals in Kanesh) and the *išrātum*, which granted the king of Kanesh a preferential right to purchase 10 per cent of the textiles at a reduced price.

Taken together, the Kanesh system and the Old Assyrian and Old Babylonian sources reveal characteristics typical of a market economy, **displaying a surprising level of complexity** for such an early period: clearly defined property rights, freedom of contract, flexible prices determined by supply and demand, credit instruments, written contracts, financial liability and profit-oriented corporate structures. To speak of capitalism is not a conceptual anachronism, provided we exercise due historiographical caution. We should not equate it entirely with the modern industrial capitalism found in economics and history textbooks, but rather view it as an analytical category referring to private ownership of the means of production, the division of labour, entrepreneurial initiative and calculation, free and voluntary exchanges, the free formation of prices, investment with the expectation of profit, and the private accumulation of capital. The capitalism to which we refer is, therefore, a spontaneous institutional order, not merely an industrial stage or a modern social structure (see Menger, 1871; Mises, 1920, 1949; Hayek, 1945; Kirzner, 1973; Rothbard, 1962; Huerta de Soto, 1992). Under this institutional and functional definition, Kanesh's documentation allows us to speak of an early form of mercantile capitalism, underpinned by voluntary exchanges, economic calculation and legal certainty.

The absence of state direction and the existence of autonomous institutions of oversight, commercial insurance and commercial

justice reveal an economic culture based on trust, cooperation and the pursuit of individual profit. All this demonstrates that the principles of mercantile capitalism are not an exclusive creation of the modern world, but are rooted in the business practices of ancient Mesopotamia from the very dawn of civilisation over four thousand years ago.

Ancient Near Eastern sources do not contain direct conceptual equivalents of the modern notion of entrepreneurship; consequently, the concept must be applied in an analytical and functional sense. In this study, therefore, Mesopotamian actors are not attributed a modern capitalist self-awareness; rather, economic practices characteristic of the entrepreneurial function are identified: investment, risk, profit, wealth accumulation, information management, contracting and the coordination of resources.

Paleo-Assyrian trade at Kanesh also had no direct continuity with the activities of the Egibi household, as they are separated by more than a millennium. Its significance lies in the fact that it demonstrates the early existence in Mesopotamia of private institutions of trade, credit, investment and contractual documentation. Kanesh thus shows that the Mesopotamian economy was familiar with private forms of financial coordination from a very early stage, whilst the Egibi case allows us to examine these institutions in first-millennium Babylonia, within a monetised economy based on silver by weight, documented credit and a family-owned business.

4. Money in ancient Mesopotamia: a return to Menger

The influential anthropologist David Graeber (1961–2020), best known for his critical stance towards capitalism and conventional economics, argued in his most renowned work, *Debt: The First 5,000 Years* (2011), that money did not emerge as a natural evolution of barter. Graeber sought to refute Carl Menger's theory, set out in his *Grundsätze der Volkswirtschaftslehre* (Menger, 1871) and later developed in *Geld* (Menger, 1909).

Menger's theory of the origin of money should not be understood as a simplistic, mechanistic narrative according to which

entire societies would have moved in a linear fashion from pure barter to currency, but rather as an evolutionary explanation of an undesigned social institution. Menger argued that, in contexts of indirect exchange, certain goods tend to be preferred not only for their direct utility, but also because they are easier to sell. The liquidity or marketability of these goods increases their demand as instruments of exchange, generating a cumulative process whereby certain products eventually become general means of payment. This explanation forms part of a broader theory of social institutions, according to which money, the market or certain legal rules may arise as spontaneous, unintended outcomes of human action, without the need for deliberate creation by a political authority (Menger, 1871; Menger, 1909; Martínez Meseguer, 2006).

Graeber argued that there was no historical or anthropological evidence to support this theory. Instead, he believed that primitive economies were based on **communal exchanges of gifts and redistribution**, which gave rise to networks of credit and debt. Rather than exchanging goods directly, people relied on the future return of favours or goods, thereby establishing an informal system of accounting within the community. For Graeber, money did not emerge as a commodity facilitating exchanges, but as a means of **quantifying debts**. The rise of states and great civilisations is thought to have driven the development of more complex administrative systems, which in turn led to the formalisation of debts and the creation of standardised currencies, often linked to a political or religious authority.

The weakness of Graeber's thesis lies not simply in the fact that it contradicts Menger, but in that it transforms a theoretical discussion of the institutional origin of money into a historical reconstruction insufficiently supported by the available documentation. From a Misesian perspective, economic theory and history do not fulfil the same function: the former provides analytical categories for understanding human action, whilst the latter allows for the interpretation of concrete, contingent and documented manifestations of those categories. Consequently, the Mesopotamian evidence does not 'prove' Menger's theory in a strictly empirical-inductive, that is to say, positivist, sense. However, it does show that the Mengerian explanation is historically plausible and compatible with the known

data. It is not enough to accumulate anthropological or documentary examples if these are interpreted without an adequate theory of human action. Economic theory provides concepts such as action, exchange, property, calculation, money, interest and credit; history shows how these categories manifested themselves in social institutions, methods of production and specific economic conditions. At the same time, it undermines interpretations that present money as primarily a state creation, a redistributive or purely accounting construct, detached from actual market processes (Mises, 1957; Menger, 1871; Powell, 1996; Jursa, 2010).⁷

Graeber was an anthropologist, not a historian, and his thinking falls within the **Polanyian tradition**. As we have already indicated, Polanyi maintained that ancient economies differed profoundly from modern ones. According to him, they lacked rationality and, therefore, could not be understood through modern economic theory, which he regarded as a product of ‘our obsolete market mentality’. He argued that exchanges were not driven by commercial relations, but by **social and administrative ones**, governed by the principles of **reciprocity and redistribution**. These principles were still evident in contemporary primitive societies in Melanesia, Polynesia and North America, exemplified by practices such as the *potlatch*. In Polanyi’s view, the market—understood as a mechanism for setting prices according to supply and demand—did not emerge until the beginning of the Hellenistic period (4th century BC). Furthermore, it is symptomatic of his thinking that he regarded the very idea of a self-regulating market as a utopia whose existence would destroy human society (*sic*).

The Mesopotamian system is the best documented, as Graeber himself acknowledged. But in ancient Mesopotamia **there were no systems of gift-giving and redistribution dominated by temples and palaces**, nor a ‘planned economy’, but rather **market economies**. Supply and demand determined prices, and temples and palaces participated in an active market economy. These facts have

⁷ Rallo (2017, pp. 25–57) explains Menger’s model and cites Jursa (2020) without fully grasping the historical implications, beyond simply supporting his own argument. In the case of Fernández Méndez (2025, pp. 41–83), several clichés regarding the temple and palace economy are repeated uncritically.

been demonstrated beyond any reasonable doubt by the authors we have cited. Of course, Graeber did not bother to consult these works. He sought to debunk the myth of barter on the basis of an **extremely limited** body of evidence. As a result, he exaggerated non-commercial exchanges and denied the existence of economies based exclusively on barter – a straw man argument, since this is something no one has ever claimed. In reality, barter has always coexisted with other forms of exchange, even today – a fact already recognised by researchers of the Mesopotamian economy, such as **Marvin A. Powell** in his article ‘*Money in Mesopotamia*’ (1996). Moreover, money facilitates **all kinds of exchanges**, whether commercial or not.

A well-documented example of the **barter-based** economic environment **in which money emerged** was described by **Guillermo Algaze** in his work *The Uruk World System* (1993). Algaze analysed the expansion and influence of early Sumerian civilisation on the surrounding regions during the era of ancient Uruk, in the fourth millennium BC. He argues that Uruk, the first great city in history, was not merely an isolated urban centre or a hub of luxury consumption where agricultural surpluses were buried, but an integral part of a **complex system of exchange** that shaped and organised the commercial dynamics of vast areas around Mesopotamia and beyond. The Sumerians exported agricultural and livestock products in exchange for the timber, stone and metals they lacked in their homeland, which they transformed into new products. Stein (1999) qualified these contributions, emphasising their commercial, private and decentralised nature, rather than the domination of a ‘centre’ over a ‘periphery’. It is significant that **lapis lazuli** from Afghanistan is found in both Mesopotamia and Egypt as early as 3500 BC, as demonstrated by **Payne** in *Lapis Lazuli in Early Egypt* (1968). In particular, in Mesopotamia, silver—sourced from **Anatolia, Iran, Egypt** and even more distant regions—could only be obtained through **trade, tribute or plunder** (Reiter, 1997, pp. 75–83).

Following Menger’s line of argument, which goods were the most tradable within the Uruk world system? **Barley**, the main agricultural product of Lower Mesopotamia, and **silver**, sourced from the Zagros Mountains and Anatolia. Which goods functioned as money in ancient Sumer? Precisely **barley and silver**.

Of paramount importance is the expression used in the Akkadian language to denote the act of buying and selling: *ana kaspim nadānum*, which literally means ‘to give [something] in exchange for silver’. This phrase reflects with the utmost clarity how silver by weight gradually became the general equivalent of value—that is, money. However, silver appears not only as an accounting term in contracts, but also as a physical object documented archaeologically, which was broken up, weighed, verified and circulated in trade networks (Peyronel, 2010).⁸

Metals such as silver, bronze and copper had such high intrinsic value in those days that it stands to reason they were not used in small-scale transactions, being supplemented with barley. This is without taking into account the technical problem of manufacturing scales precise enough to weigh the minute quantities of silver that would have been required (Powell, 1996; Schoonheydt, 2001a, 2004b).

In this context, the **sacred weights and measures**, guaranteed by Shamash, the sun god and patron of justice, served as a guarantee and standardised transactions, ensuring fairness in exchanges and facilitating reliable accounting that enabled economic calculations. The unit of measurement was the mina or MA-NA, one-sixtieth of a talent of silver (504g), which was in turn divided into sixty shekels (*sheqel*); the earliest record of this appeared in the Sumerian city of Shurruk and dates from c. 2600 BC. The silver *shekel*, weighing around 8.4 grams, was roughly equivalent to **one month's wages for an unskilled labourer**. Its fractions, used in everyday transactions, remind us of the origin of these small

⁸ Regarding the accounting and monetary function attributed to clay tokens—small objects moulded into geometric or figurative shapes—a theory first proposed by Denise Schmandt-Besserat (1992, 1996) and recently championed by Fernández Méndez (2025, pp. 59–61), caution is warranted. However, this interpretation must be treated with extreme caution. They may have been instruments for recording, counting and controlling assets or obligations, but there is no archaeological evidence whatsoever that the tokens were used in trade; quite the contrary, in fact, and recent research has questioned whether they constituted a unified symbolic system or an exclusively accounting system (Zimansky, 1993; Bennison-Chapman, 2019; Valério and Ferrara, 2022). Semenova (2007) reinterprets the tokens from a neo-chartalist perspective, not only as domestic inventory tools, but also as possible mechanisms for public taxation or compulsory contributions in kind.

weights: 1/24 was called *a girû* or ‘carob seed’, and 1/40 *a hallûru* or ‘chickpea’ (Bartash, 2019).

However, this primitive, pre-monetary system still lacked **standardised metal denominations**. Silver circulated in the form of **coils, ingots or irregularly cut fragments (*hacksilber*)**, known in Akkadian as *sibirtu*, literally ‘broken’ or ‘fragmented’. These pieces, often marked by goldsmiths or merchants with hallmarks, conformed to the weight system and represented money by weight without official coinage, the acceptability of which depended on trust in the reputation of the offerer (Powell, 1996; Le Rider, 2001; Ialongo-Vacca-Peyronel, 2018).

Robson (2004) has highlighted the importance of professional literacy, mathematics and metrology in Mesopotamian administration and the economy. The ability to weigh silver and other materials, convert units, record interest, calculate equivalences and draw up balance sheets depended on specialised training. Therefore, the existence of complex contracts, interest-bearing loans and commercial records cannot be understood without this intellectual infrastructure of calculation, measurement and record-keeping.

Over the centuries, this **silver-based** monetary system evolved into a fully-fledged market practice. In first-millennium BC Babylon, silver had established itself as **the de facto monetary standard**, coexisting with payments in kind (barley, dates, wool) but gradually supplanting barter (Powell, 1996; Spek, 2017). Its use intensified under Achaemenid rule, particularly from the reign of **Darius I (521–486 BC)** onwards, when the introduction of an imperial monetary system featuring standardised gold and silver coins—the darics—reinforced silver’s role as a universal means of payment. Transactions could be carried out through **deferred payments, bills of exchange or commitments to future delivery**. The prices of agricultural goods, slaves and property were determined freely by supply and demand, and transactions were formalised through contracts drawn up by public scribes on sealed cuneiform tablets. This legal and monetary framework enabled the emergence of a highly integrated economic space, where credit, investment and trust became the driving forces behind trade (Joannès, 1994; Jursa, 2010, pp. 469–753).

This precision makes it possible to integrate, without any inherent contradiction, the commercial and legal dimensions of money.

Ingham (2004a, 2004b), who is more subtle than Graeber, has criticised economic theory for treating money as merely a lubricant for exchange derived from barter. He proposed understanding it as a **social relationship** expressed through credits and debts denominated in a unit of account, which enables economic calculation. In reality, and although this author believed otherwise, this formulation does not contradict the Mengerian explanation of money as an institution of spontaneous order, but rather highlights its social and commercial nature. The fact that money functions as a unit of account and as a means of denominating debts does not imply that its origin must be sought exclusively in state imposition or in courtly accounting. On the contrary, the unit of account, the means of payment and the law of obligations reinforce one another, particularly in an economy such as that of Mesopotamia. Silver by weight made it possible to value heterogeneous goods, calculate equivalences, set prices, document debts and settle a wide variety of obligations. In this sense, the legal function of money does not replace its commercial function, but rather complements it: it is only where enforceable rights, recognised measures and settlement mechanisms exist that money can fully fulfil its role as an instrument of economic calculation and social coordination (see Pobes Layunta, 2024).

Thus, **family-run trading houses**, such as the Egibi firm, emerged as hubs for the accumulation and management of capital within a favourable legal environment. They acted simultaneously as **financial intermediaries, landlessors and commercial agents**, consolidating a business model that foreshadowed the banking system that would later develop. The Egibi firm, the subject of this study, is a prime example of this system: a private enterprise with a substantial capital base, operating within a secure legal framework and in a market economy where reliable money and contractual trust were the cornerstone of economic life.

5. The House of Egibi: banking activities with a 100 per cent cash ratio

The **Egibi** family **established** a multi-generational family-owned business. Their case is the best documented and most representative

of private financial activity in Neo-Babylonian and Achaemenid Babylonia, although it should not be used to make generalised extrapolations. Their archive is estimated to have originally comprised between 3,000 and 4,000 cuneiform tablets, and today approximately **1,700 tablets** have been attributed to them. This *body* of documents has been edited and studied by Cornelia Wunsch (2000), although it had already attracted the attention of authors such as Weingort (1939), Ungnad (1941), Bogaert (1966, pp. 105–118), Krecher (1970) and the aforementioned Jursa (2010), whose work we follow in the subsequent discussion.

The tablets enable us to reconstruct the development of a far-reaching family business, active over **six generations**, from the late 7th century to the early 5th century BC (c. 606–486 BC). The Egibi were not the only bankers of the period, as there were other very well-documented trading houses, such as the Nūr-Sîn family (linked to the Egibi by marriage) and the Murašû family; however, they are the best known thanks to their most valuable legacy: the **most extensive and coherent commercial archival record** of the Neo-Babylonian period.⁹ As with all private cuneiform archives, the Egibi archive must be treated with methodological caution. It does not constitute a complete sample of all the transactions carried out by the family, but rather the contingent collection of documents that have been preserved, transmitted and ultimately attributed to the house. The relative absence of certain types of contract, such as deposits, does not in itself amount to absolute negative evidence; however, when combined with the legal structure of the contracts, the patrimonial nature of the firm and the source of its main profits, it allows a reasonable inference to be drawn about the ordinary financial logic of the firm.

The Egibi family, commonly referred to as *bīt Egibi*, ‘the house of Egibi’, had humble origins and probably originated in the vicinity of Babylon.¹⁰ It went on to play a pre-eminent role in the economic networks of the Neo-Babylonian Empire (639–539 BC) and, subsequently, of the Achaemenid Empire (550–330 BC). Diversification was one of the cornerstones of its success. The firm

⁹ See Stolper (1985) on the *Murašû* from the city of Nippur.

¹⁰ The name Egibi derives from the Sumerian *e.gi-ba-ti.la*.

combined **banking, commercial and agricultural functions**, a characteristic typical of the great merchant houses of the Neo-Babylonian period. Its organisation exhibited **corporate** features in the modern sense: the family acted as a **collective legal entity**, with an internal hierarchy and clear intergenerational continuity. The leading and most prestigious members of the house, such as Itti-Marduk-balātu or Nabû-aḥḫē-iddin, appeared in documents as the firm's legal representatives, whilst other individuals—often dependants or junior partners—acted as agents in specific transactions. On occasion, the Egibi would establish **joint ventures** for specific investments, distributing the profits in accordance with each partner's contribution (Lanz 1976, on business organisation).

This hybrid structure enabled the Egibi firm to engage in a wide range of operations, ranging from local trade and the management of rural estates to the financing of international trade. Furthermore, some of its members held official posts within the imperial administration, such as judges or royal officials, which strengthened their legal standing and their access to privileged information.

The most significant aspect of this trading house's activities, for the purposes of this study, is its **banking function**. The cuneiform documents show that the Egibi made **payments and transfers** on behalf of their clients, granted loans, issued money orders, financed commercial transactions and acted as **guarantors** in third-party contracts.

However, the nature of the money lent is decisive. The uneven preservation and fragmentation of the archives may skew the record, but the apparent scarcity of deposit contracts in their archives suggests that the Egibi did not engage in this activity on a regular basis. In Mesopotamia, this function was primarily the responsibility of the temples,¹¹ although there are later documents recording deposits of silver and barley made by private agents (Stolper, 1993; Joannès, 1995; Jursa, 2006). The typical structure of this type of contract is as follows:

¹¹ The great Babylonian urban sanctuaries, such as the Esagila or the Eanna, also granted loans, entered into leases and traded in various goods, at times in a manner indistinguishable from that of a private enterprise (Harris, 1960; Mieroop, 1992, pp. 94–96; Steinkeller, 2004; Jursa, 2010, pp. 500–623).

(A specified amount) of silver is owed by (name of the depositor), in a tied and sealed bag, entrusted to (name of the depositary). When (name of the depositor) so wishes, (name of the depositary) shall return (a specified amount) of silver, with its bag and seal intact, to (name of the depositor).

Stolper (1993) has shown that certain Late Achaemenid, Early Macedonian and Seleucid records can be understood as custody accounts, and that some related texts document their occasional conversion into interest-bearing accounts. This evidence does not contradict the distinction between deposit and loan, but rather reinforces it: only where the documentation allows for the identification of a contractual transformation can one speak of a transition from custody to an interest-bearing credit relationship. Consequently, the argument does not require denying the existence of private deposits, but rather demonstrates that their ordinary lending activity does not appear to have been based on the systematic appropriation of deposits held in custody, but rather on their own capital, family assets and commercial profits.

Whilst it is not possible to rule out all forms of intermediation involving third-party funds, the general structure ensures that these deposits remained available to the depositor at all times, without **ownership of the deposited money being transferred to the custodian, to the extent that it can be stated that irregular deposits did not exist under Babylonian law (Jursa, 2006, pp. 163–164).** The Egibi, for their part, **lent exclusively their own capital**, not that of their clients; in other words, they did not engage in credit intermediation based on irregular deposits. It is precisely for this reason that contemporary historiography has, mistakenly, denied them the title of bankers, preferring to reduce them to a diversified family business, since they did not take in deposits in order to grant loans and earn a living from the interest differential (Bogaert, 1966, pp. 105–18; Dandamayev, 1991, pp. 321–32; Wunsch, 2000, pp. 12–20, 2002a; Jursa, 2010, p. 245).

Indeed, from the modern perspective of the Austrian School of Economics, this would be equivalent to a bank with **a cash ratio of 100 per cent**; that is, an institution that does not multiply the means of payment through fractional reserve banking, but rather radically

separates the custodial function (deposits) from the credit function (lending). As a methodological caveat, however, it is worth emphasising the limitations of the available evidence. No text explicitly states that the House of Egibi maintained full reserves against all the deposits it received, nor that there was a legal provision prohibiting the use of such funds in credit operations. One must therefore avoid anachronism and refrain from drawing overly literal analogies with contemporary banking.

What can be established with certainty is through an analysis of Neo-Babylonian contractual formulas, which carefully distinguish between deposit and loan, and in the terms used for **deposits of a specific property or asset** (*nikkassu*) and for **loans** (*rēdu*), as well as between the concepts of depositing 'in a tied and sealed bag' (*hindu rakistu* or *kaniktu*) or an 'open bag' (*hindu patertu*), the contents of which have been inspected, and giving 'silver for [something]' (*kaspu ana*) and placing 'silver at the disposal' (*kaspu ina muhhi*) of someone, that is, lending it (Bogaert, 1966, pp. 105–118; Westbrook-Jasnow, 2001; Jursa, 2002a, 2002b, 2006), without the two being mixed together. These explicit formulations emphasised custody as opposed to the appropriation and investment of the funds, and the contracts stipulated the immediate availability of the deposit (Stolper, 1993; Jursa, 2006).

The distinction between loans, deposits, the custodian's liability and agreed interest must be viewed within the context of a broader Mesopotamian legal tradition, beginning with the famous Code of Hammurabi, dating from 1792–1750 BC (Price, 1927). The legal collections compiled by Roth (1997) show that Sumerian, Babylonian and Assyrian societies developed, from an early stage, rules concerning property, debts, interest, security, breaches of contract and the restitution of property. Although these collections should not be read as positive codes in the modern sense, they do reflect legal categories and normative practices that help us understand why contractual tablets could function as instruments of asset security.

The economic significance of this distinction lies in the fact that the contract was not a mere documentary formality, but rather the mechanism that defined the availability, ownership and risk associated with the transferred assets. Where silver was handed over for safekeeping, the central obligation was the return of the same

asset or its equivalent under conditions of immediate availability. Where silver was lent, on the other hand, the borrower assumed a future obligation to repay, usually accompanied by interest or a penalty. The distinction between these two arrangements prevents us from simply equating all financial activity with deposit-based credit intermediation. In the case of the Egibi, the available evidence points more towards a lending bank based on own capital, contractual guarantees and the transferability of rights, rather than a demand deposit bank used to create additional credit. In fact, lending at interest was a secondary activity for the Egibi.

Most of the loans recorded in the Egibi archive tend to be transactions in which family members charged interest at 20 per cent per annum, the standard rate in Babylon at the time (see Hudson, 2000, and Jiménez Muñoz, 2010, pp. 24–25, on interest in antiquity), and it was customary for repayment to be made in agricultural produce whose price fluctuated—such as dates—rather than in silver. Furthermore, the existence of intercalary months in the Babylonian calendar affected the calculation of interest, so that on occasions it is unclear whether it should be interpreted as a strict annual rate or as an agreed surcharge that was not always calculated in exact proportion to the time elapsed (Csabai, 2020).

The interest rate documented in these loans should be understood as part of a standard contractual practice in first-millennium BC Babylonia, rather than as an anomaly incompatible with an advanced market economy. Interest reflected the difference between the present availability of silver, barley, dates or other goods and their future return under agreed terms. In Böhm-Bawerkian terms, the existence of interest reflects the differing valuation of present and future goods, as well as the need to compensate the lender for the temporary forgoing of the availability of their resources (Böhm-Bawerk, 1884 [1986]). This interpretation is particularly apt for the Egibi case, since, as we have already indicated, their loans do not appear to stem from the appropriation of other people's deposits, but rather from their own capital accumulated through agricultural, property and commercial activities. Interest, therefore, does not appear here to be associated with a fiduciary expansion of means of payment, but rather with the productive use of real savings previously accumulated.

However, far from suffering from a lack of liquidity, the Egibis apparently prospered enormously over generations, even though it is impossible to quantify their income and turnover.¹² Consequently, the argument in favour of a practice equivalent to a cash ratio of 100 per cent rests on a structural inference: the clear terminological and legal distinction between deposit and loan contracts, the absence of evidence of a 'multiplication' of means of payment, and the fact that the firm's main profits derived from the management of land, leases and grain, rather than from maturity mismatches.

From this perspective, the hypothesis of a practice functionally equivalent to banking with a 100 per cent cash ratio must be formulated with caution: not as a literal description of an explicit regulatory regime, but as an analytical reconstruction that seeks to capture the economic logic underlying a set of contracts in which custody and lending appear strictly differentiated. Skaist (1994) has shown that these documents possess their own legal structure and terminology, with significant regional and chronological variations. The basic structure of Neo-Babylonian loan contracts denominated in silver is as follows (Westbrook-Jasnow, 2001, p. 290):

(A specified amount) of silver belonging to (name of the lender) is handed over to (name of the borrower). In the (stipulated month), (name of the borrower) shall hand over (a specified amount) of silver to (name of the lender). If he fails to do so, he shall pay an additional (number of shekels) each month.

By 537 BC, the Egibi's lending activities had reached Ecbatana, one of the Persian capitals, more than six hundred kilometres from Babylon. A prominent member of the family in the service of the Achaemenid monarchy was Marduk-nāṣir-apli, who also served as an administrator and collector of taxes and customs duties during the reign of Darius I (521–486 BC). This figure lent silver to

¹² The same can be said of their counterparts and contemporaries, the Murašû of the city of Nippur, whose loans were primarily mortgage-based (Stolper, 1985, pp. 104–114).

taxpayers to enable them to meet their tax obligations, sometimes interest-free, to be repaid in dates at the end of the following harvest (from the sale of which he made a profit), and he did so with the guarantee of the royal treasury (Abraham, 2004, pp. 37–41; Wang, 2023).¹³

In addition to interest-bearing loans, credit was probably transferable throughout the history of Mesopotamia. Jursa (2006, pp. 167–169) argues that these documents could function as **negotiable** instruments and means of payment similar to bills of exchange or money orders, enabling the transfer of capital without physically moving silver.

The Egibi case empirically illustrates the principles that the **Austrian School** considers necessary for a stable banking system: **functional and moral separation between custody and credit, full backing of deposits, and contractual transparency**. Taken together, these features support a definition of ‘banking’ in a historical-functional sense: intermediation and **payment services** based on contracts, accounting and the transferability of rights, rather than merely the collection and appropriation of demand deposits in the contemporary style for the purpose of making loans.

Indeed, the Egibi house functioned as a proto-banking institution in which: 1, **moral hazard was minimal**, as there was no fiduciary creation of means of payment; 2, **liquidity was total**, as it had sufficient own funds to meet its obligations; and 3, **trust** was as important as legal coercion as a foundation of financial stability.

The significance of the Egibi in the historical context of first-millennium BC Babylonia is therefore of major economic importance. Their model reveals that, even in pre-monetary economies based on metal money by weight, **fully functional and contractually secure** mechanisms for deposit, safekeeping, lending and clearing could exist, without the need to resort to fiduciary expansion. The Egibi did not create money out of thin air, but rather managed assets and made loans using legal mechanisms that provided safeguards.

¹³ A very similar career was pursued by a contemporary named Marduk-rēmanni (Waerzeggers, 2014).

This point is crucial: the House of Egibi does not constitute a precedent for modern banking in all its aspects, nor should it be presented as having operated within a monetary system comparable to the contemporary one. Its importance lies precisely elsewhere: it demonstrates that a monetised economy, equipped with contract law, credit instruments, deferred payments and large-scale family businesses, could function without credit expansion being dependent on the use of custodial deposits. The Egibi family's experience thus suggests that banking activity—understood in a historical and functional sense as lending, payments, guarantees, money orders and wealth management—does not necessarily require fractional reserve banking. It can also be based on equity capital, accumulated savings, family reputation and strict fulfilment of obligations.

All of this may provide useful historical evidence for the modern debate on banking architectures and liquidity risk management. In the contemporary discussion on free banking and competitive money creation, Selgin (1988) argues that a banking system without a state monopoly can discipline money creation and liquidity under certain institutional conditions. White (1984), for his part, reconstructed the Scottish experience of free banking in the 18th century in light of the historical controversy over stability and regulation. However, Rothbard (1988), Sechrest (1988), Cowen and Kroszner (1989), and Dow and Smithin (1992) all rightly pointed out that conceiving the Scottish banking system of that period as free banking was a historical error, and therefore no valid conclusions could be drawn from that experience. Furthermore, Huerta de Soto (1998, pp. 467–556) has highlighted the error of pitting central banking against free banking with fractional reserves. For his part, Bagus (2010) has pointed out that it is not only fractional reserves that can produce an Austrian cycle.

6. Other activities of the Egibi family

The Egibi family did not limit its business activities to the financial sector, which, in fact, was not even its main source of income. Themselves were, first and foremost, a **diversified commercial**

enterprise, with operations spanning domestic and foreign trade, the direct management of agricultural estates, and the purchase and sale of property. The combination of these sectors allowed the family to balance risks and ensure the stability of their wealth, which explains their financial soundness—a soundness that underpinned their policy of maintaining reserves. Their risks were agricultural, commercial and fiscal in nature, rather than the systematic transformation of maturities characteristic of modern banking.

Thus, the Egibi family began their activities with the wholesale trade in agricultural produce (barley, dates, onions, wool) in the vicinity of the city of Babylon. Sūlāja, the first documented member of the family, worked with companies engaged in caravan trade (*harrānu*),¹⁴ which we have already discussed when referring to the Paleo-Assyrian trade of Kanesh.

Like other contemporary merchant houses, the Egibi established contacts and eventually became actively involved in long-distance trade, extending their interests to commodities such as slaves, livestock, beer and wine, which were of great value in the Mesopotamian urban economy. Following the Persian conquest of Babylon, they expanded their operations into **Media, Elam and Susa**, even maintaining commercial agents stationed in those territories for long periods.

Generation after generation, the Egibi invested in properties that generated rental income, accumulating sixteen urban properties in the cities of Babylon, Borsippa and Kish (Wunsch, 1999),¹⁵ and more than a hundred slaves, who were engaged in all manner of specialised activities, ranging from estate management to the production and sale of beer. Baker (2014) has shown that the study of urban form—streets, residential neighbourhoods, dwelling size and household structure—enables us to reconstruct differences in status, wealth-building strategies and the economic uses of domestic space. In this context, the Egibi's urban houses were not merely residences, but assets capable of generating income, serving as col-

¹⁴ See Joannès 1999 for the Neo-Babylonian period.

¹⁵ New texts concerning the rents from these properties have recently been published by Zawadki (2024).

lateral, accommodating dependants or slaves, and reinforcing the family's social standing within the city.

They also acquired **uncultivated or unproductive land and transformed it into productive date palm plantations**, demonstrating long-term planning. These were mainly located on the outskirts of Babylon, but also in the vicinity of the cities of Borsippa and Kish. These plantations were either managed directly or leased out, and the documentation relating to them forms a significant part of the archive. Over a period of some sixty years, records show that the Egibi acquired around 67.5 hectares of land in exchange for some **160 minas** (around **eighty kilograms**) of silver (Wunsch, 2000, pp. 21–178).

At the same time, the Egibi, like the Murašû, were involved in the maintenance of canals and irrigation ditches, and in the leasing of irrigation rights, which were essential for ensuring the productivity of the land in the region's arid climate. They also managed estates belonging to officials of the royal court (Abraham, 2004, pp. 127–129), and, more generally, they had dealings with officials and scribes from the palace and the temple, leasing, for example, onion crops belonging to the Esagila temple, and even flocks of sheep owned by the prince and future king Neriglissar (560–56 BC) in Babylon (Wunsch, 2002b).

Finally, it should be added that, in addition to their commercial activities, some of the most prominent members of the House of Egibi were simultaneously in the service of the kings of Persia; that is to say, they were officials, whilst also acting as tax collectors and contractors for the supply of goods to palaces and garrisons. For example, Nabû-ahhe-iddin was trained as a scribe and lawyer, and served as a scribe to the Babylonian king Nebuchadnezzar II (604–562 BC) for thirty years, and later as a judge under King Nabonidus (556–39 BC). **Itti-Marduk-balāṭu was a tax collector as well as a contractor for military supplies during the reigns of Cyrus the Great (559–30 BC) and Cambyses (530–23 BC).** As we have already noted, Marduk-nāšir-apli served as an administrator and tax collector under Darius.¹⁶ Even so, the Egibi acted as **independent**

¹⁶ Marduk-nāšir-apli faced a claim to his inheritance from two younger brothers; his statutory share comprised sixteen urban properties in Babylon, Borsippa and Kish,

entrepreneurs operating within the royal sphere in their business dealings, pursuing their own profit-making aims and investment strategies.

The case of the Egibi house exemplifies an early form of **integrated family capitalism**, combining liquidity, diversified investment and institutional stability. Their commercial practices reveal economic calculation within a free market, business planning and intergenerational capital accumulation. Far from conforming to Polanyi's redistributive paradigm, their activities form part of the vast body of documentary evidence demonstrating the existence of **developed financial and credit markets** in the Neo-Babylonian period, underpinned by trust, contractual law and private property—which *in itself* refutes any interpretation that seeks to reduce Mesopotamian trade and finance to mere extensions of the temple or the palace.

7. Conclusions

Our article compiles evidence that substantially challenges the Polanyian paradigm and theories regarding the purely non-commercial origin of money. It also presents a new, well-documented historical case to discuss the viability of banking with a **100 per cent reserve ratio**, a topic that is usually discussed in the abstract. The documentary evidence shows that the Egibi firm did not lend out or invest funds deposited by third parties, but rather its own capital, derived from its commercial activities.

This practice was grounded in the legal nature of **the Babylonian deposit contract**, which entailed a strict duty of care. The depositary did not acquire ownership of the deposited goods—be they silver, grain or any other commodity—but merely held them in temporary custody. In the event of loss or misuse, the depositary bore full liability; temples served as the main places of deposit, as religion fostered trust.

Thus, the Babylonian financial system was based on a clear **separation between savings and investment**: loans were financed

over a hundred slaves, and a proportionate share of the profits from all his ongoing commercial activities.

from the lender's own capital or through specific commercial partnerships, not from funds deposited by third parties. From a theoretical perspective, this confirms the historical feasibility of a banking system with full reserves, in which credit intermediation does not depend on the creation *ex nihilo* of fiat money, but on **accumulated real savings**.

The financial activities of the Egibi house allow us to assert, with the necessary caution given the available evidence, that there were historical forms of lending banking that were functionally compatible with a full-reserve regime. This was neither modern banking nor a regulatory system explicitly designed around a 100 per cent reserve ratio, but rather an institutional practice in which deposits, custody, lending and own capital were clearly differentiated. From the perspective of the Austrian School's business cycle theory, this thought-provoking case demonstrates that **full-reserve banking** can be efficient even within the context of a pre-industrial market economy, provided there is a reliable legal infrastructure and a sound monetary base (in this case, silver by weight), and does not necessarily require the fiduciary creation of means of payment or the use of demand deposits for lending.

In the context of Neo-Babylonian and Achaemenid Babylonia, between the 7th and 5th centuries BC, this family carried out banking and commercial activities characterised by a **clear separation between equity capital and borrowed funds, active participation in trade and agriculture, and loans** based exclusively on their own accumulated savings. In the absence of fractional reserve banking, credit expansion could only take place through the mobilisation of the genuine savings of the family itself and its partners—that is, through the reallocation of existing real resources (agricultural capital, slaves, grain and date stores)—and not through an accounting expansion of means of payment. This suggests that any possible cycle of credit over-expansion and contraction, had it occurred, would have been closely linked to the availability of the family's capital in response to climatic, political or fiscal variations, rather than to the internal dynamics of the banking system, in line with what one would expect from a regime of high reserve requirements.

From an institutional perspective, the House of Egibi represents a unique example of **ethical and prudent banking**,

founded on clear legal principles and on a conception of trust as an essential pillar of financial relations. This implies that the Babylonian financial system did not need to resort to the **secondary creation of money** or to fiduciary expansion, appropriating depositors' money. Loans were drawn from the lenders' **real savings**, generated through actual commercial activities, which limited systemic risk and preserved monetary stability. This practice, grounded in respect for private property and contractual transparency and rigour, anticipated by more than two millennia the principles that the Austrian School of Economics upholds as the foundations of a stable and ethical financial order.

In this regard, the experience of the Egibi provides a historical example that lends credence to the thesis put forward by Huerta de Soto (1998): a banking system based on full reserves can operate effectively, guaranteeing both the liquidity of deposits and credit discipline. Clearly, this historical example demonstrates logical and functional viability, rather than an optimal model of universal validity that can be extrapolated to contemporary economies, insofar as many of Rallo's (2019) objections depend on features of the modern economy that did not exist in ancient Babylon (central banking, fiat money, etc.). The economic analysis of a 100 per cent reserve system compared with a fractional reserve system should be examined in future research.

Conflicts of interest

The author declares that he has no conflict of interest and has not received any funding that may have influenced the drafting of the manuscript or the decision to publish the results of this research.

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