

TRADE IN MESOPOTAMIA FROM THE EARLY DYNASTIC PERIOD TO
THE EARLY ACHAEMENID PERIOD WITH EMPHASIS ON THE FINANCE
OF SUCH TRADE

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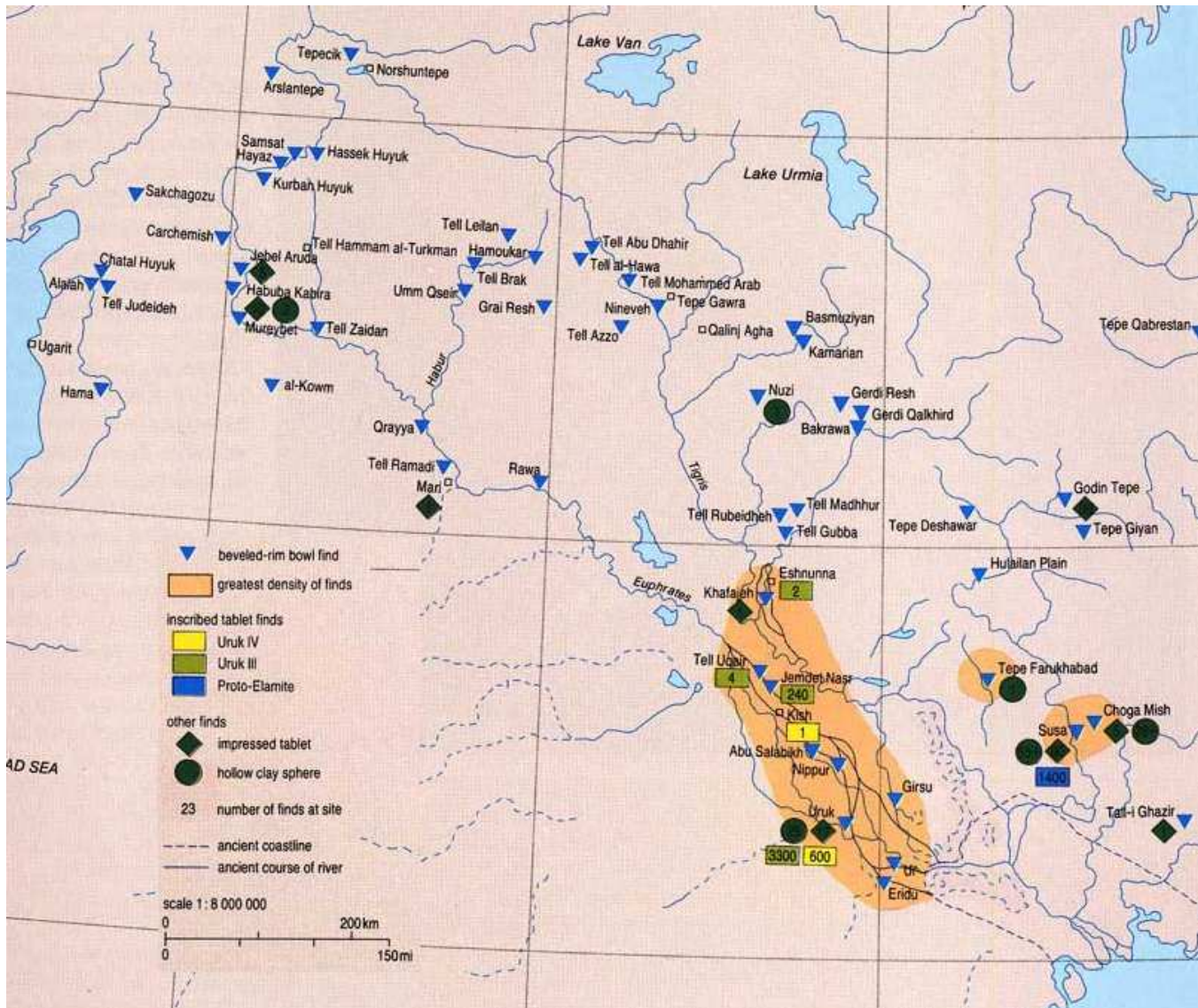


Figure 1: Archaeology Map: Early Dynastic Period in South Mesopotamia

[Online]. Available at: <http://proteus.brown.edu/mesopotamianarchaeology/799> Harmansah Ömür Assistant Professor of Archaeology and Egyptology and Ancient Western Asian Studies [Accessed 21 November 2013].

Student number: 361-375-37

I declare that **TRADE IN MESOPOTAMIA FROM THE EARLY DYNASTIC PERIOD TO THE EARLY ACHAEMENID PERIOD WITH EMPHASIS ON THE FINANCE OF SUCH TRADE** is my own work and that all the sources that I have used or quoted have been indicated and acknowledged by means of complete references.

.....

SIGNATURE

(Francis A M Hay)

.....

DATE

SUMMARY

This dissertation considered trade and trade finance in Mesopotamia over a period of 2000 years commencing with Sumeria and ending with Achaemenid Persia, taking in Ur III and Assyria. A range of financial instruments was selected together with important business transactions, for instance, agricultural finance, specifically the brewing industry and the working capital requirements of merchants and money lenders. The role of women in private enterprise was examined, including their role in retail finance. The great estates of temple and palace had a substantial impact on finance and trade throughout the periods. Their interaction with merchants and money lenders was important to the study. I used reductionism to facilitate analysis of complex products highlighting the essentials of finance namely, borrowing, lending and return. The study concludes that, during the era under consideration, the evolution and enhancement of the financial instruments and products developed in self-generated, incremental and progressive steps.

Key terms:

Achaemenid Persia; antichretic; Assyria; Babylon; brewing; Bronze Age; economy; finance; lending; loan; merchant; negotiable; Mesopotamia; money; money lender; palace; promissory note; rate of interest; temple; trade; trade finance; women in finance.

ACKNOWLEDGEMENTS

I began exploring the background to this dissertation imagining that I would enter a world of tokens and counting beads. I have been constantly and pleasantly surprised to discover a sophisticated financial world with loan arrangements as detailed as anything I encountered in over 30 years working life in the City of London. Without modern computing power, the Mesopotamians created intricate financial structures together with the capability of recording their transactions that continued, unbroken, for over 2000 years through wars, catastrophes, changes of rulers and dynastic upheavals.

While I was conducting my research, numerous people stood by and helped me along the way and I would like to express my gratitude to them.

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GLOSSARY

Antichretic Loans	The borrower hands over his property to the creditor for a stipulated period of time. In antiquity the loans were also made to obtain the borrowers pledge of labour in lieu of interest.
Barley loans	Loans attracting a rate of 33 $\frac{1}{3}$ %, repayable in barley at harvest or the silver equivalent.
Bill of Lading (B/L)	Document prepared by the carrier who accepts the goods for shipment, outlining goods description, quantity, value, vessel details, date, port, consigner, consignee. It is also a contract to carry the goods to the specified destination. The seller can claim consideration and the buyer can take delivery of the goods. Negotiability allows transfer of title of the goods to the order of the named entity.
<i>Bala</i>	To rotate, turn over, cross.
<i>Bulla</i>	Molded clay stamped with a seal, thereby guaranteeing the integrity of the contents .
Consumption loans	Express or implied contract under which a lender hands over certain consumable goods (such as food, fuel, material) to a borrower who undertakes to return the goods of same or equivalent quantity, quality and type.
<i>Damkar</i>	(Sumerian) merchant (Akk. loanword from
<i>Dam-gàr</i>	<i>tamkàrum</i> , 'merchants').
Domestic Finance	Finance within the same geography, that is, finance of trade and commercial transactions within the country or regional entity i.e. there is no cross border trade or foreign exchange risk involved.

<i>Éren</i>	Lowest-ranking dependants of the state.
Export trade	Trade where the goods flow from the geography in return for payment owed or received.
Foreign trade	Trade conducted between different geographies.
<i>Gur</i>	Sumerian, ass load or 33 gallons.
<i>Hubullu</i>	An obligation, debt (with interest) and also interest. OAk., OB.
Import trade	Trade where the goods flow into the geography in return for payment owned or made.
Inland trade	A transaction within the geography i.e. the trade does not cross a border.
Intercity trade	Trade conducted between cities within the geography that both occupy.
International Finance	Similar to domestic finance in many of the aspects; involving foreign currency or to be more precise the exchange rates and foreign currency exposure. Also called cross border finance.
Leads and Lags	The practice of speeding up the receipt of payments (leads) if a currency is going to weaken and slowing down the payment of costs (lags) if a currency is thought to be about to strengthen, in order to maximise gains and reduce losses.
<i>Mina</i>	The weight of water contained in the Mesopotamian pint, called <i>qa</i> in Akkadian and <i>sila</i> in Sumerian.
Negotiability	Instruments such as bills of exchange, promissory notes, cheques which are legally transferable to another by endorsement or by proper delivery.
<i>Palastgeschäft</i>	Palace business by individual entrepreneurs who always promoted the interests of the palace.
Payday Loan	A small, short-term unsecured loan, typically but not necessarily with repayment linked to a borrower's payday, attracting a high interest rate and a substantial burden in the event of non payment.

<i>Qannu</i>	The handing over of silver to a woman as her own exclusive possession or for her own private use shown by being tied in her hem.
<i>Quppu</i>	Part of the dowry held in a cash box by the woman as her own exclusive possession or for her own private use.
<i>Še-ur₅-ra</i>	A system of advances, usually interest-free that the central administration would make to its dependents.
Shekel	Shekel (<i>sheqel</i> , Akkadian: <i>šiq₁lu</i> or <i>siq₁lu</i> , Hebrew: שקל, pl. <i>shekels</i> , <i>sheqels</i> , <i>sheqalim</i> , Hebrew: שקלים), is any of several ancient units of weight or of currency. The first usage is from Mesopotamia around 3000 BCE. Initially, it may have referred to a weight of barley. This shekel was about 180 grains (11 grams or 0.35 troy ounces).
<i>Šuku</i>	Sumerian, subsistence land, also including the holdings of the royal family.
Trade Finance	Finance to support a cross border (international) trade transaction. (Can also support domestic trade but this aspect is outside the scope of this dissertation).
<i>Tamkāru</i>	Merchant, trader, money- lender from OAkk.
<i>Ur₅-šè</i>	Debt with interest ('loan' + 'portion').
Usufruct	The right of use and enjoyment of the fruits or profits of property titled to another person or which is held in common ownership, enabling a holder to derive those profit or benefits, provided it is not damaged or destroyed.

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CHAPTER ONE

INTRODUCTION

1.1 BACKGROUND INFORMATION

This dissertation grew from a previous study, which considered finance in the Late Bronze Age. During the background research it became apparent that finance and financial instruments generally were highly sophisticated almost “modern” and had evolved over some time. Restricting the study to the late Bronze Age, could at best give a small snapshot of a much wider picture. For example, the significance of financial instruments found in the late Bronze Age could best be understood by considering the earlier periods and working through the later periods, culminating with the sophistication encountered during the beginning of the Achaemenid Period.

It also became apparent that finance could not be considered as detached transactions. While finance covers every aspect of economic life, both with the ancients and in the modern world, without considering the underlying business activities, finance cannot be placed in context. As profit centre finance cannot be divorced from business dealings without a risk to stability as the current financial melt down is demonstrating.

During the periods under consideration, the many regions under the umbrella term “Fertile Crescent” had differing financing requirements. For example, Mesopotamia would incorporate domestic finance (e.g. crop growing) but also, by the nature of its location, trade finance. As another example, the Phoenicians concentrated largely on trade finance; they purchased wool, hides, furs, copper and other metals, exchanging manufactured goods, for example purple dyed robes, workings in gold, silver, ivory, amber and glass.

Finance, then and now, is continually changing and adapting both to meet new economic circumstances and sometimes to lead changes. Collateralised debt obligations only emerged in the last 25 years but were themselves based on an older financing tool - collateralised mortgage obligations; the lack of control in these products being an initial cause of so much trouble today. Current research shows that the development of finance in the Ancient Near East (ANE) appears to have been no different and to have matured according to changing circumstances. Comparing evidence presented by scholars indicates that the structures first created by the Sumerians developed organically into the Empire wide structures of the Egibi and Murasû¹ families of the Achaemenid Persian Period. Many scholars have examined financing in the ANE; it is a well travelled road both as discrete work and as part of other investigations. Additionally there has been lively debate over the precise meaning of the source material with later scholars often contradicting earlier interpretation.

1.2 RESEARCH QUESTIONS

a) Selected financial instruments will be chosen, loans, promissory notes, sale contracts and the rate of interest.

Key questions will be considered:

- How significant is the theology of the time in introducing an abstract notion of interest?
- Was interest only a penalty payment in the event of non-payment of the original facility?
- In turn did this mean that there was a “rental” aspect to the facility that in the case of non-payment of interest the debtor would rent the property from the creditor?
- How close are modern ideas of “interest” to ancient practice?

¹ Note Murasû can also be spelt Murašu, Murašû, Murashu and Murashû. I have retained the spelling of the source material as appropriate.

b) Business activities will consider the split between temple and palace. Brewing, a vital agricultural industry will be appraised. The dissertation will also consider the role of merchants and money lenders and private enterprise, specifically, the role of women in private enterprise. The significance groupings will be taken into account.

- What were the implications of the groupings and if so what were the circumstances that controlled the separation?
- Could there be harmony between palace and temple, how was it manifested and determined?
- How significant was religion in the granting of temple loans? The god part-granted the loan and thus the loan repayment was part due to the god.
- Was the temple only involved in “domestic” finance and the palace in “international” finance? The work will look at the importance of the categories “temple” and “palace” rather than “domestic” and “international”.
- The significance of women in private enterprise from the early periods through the Late Bronze Age and the zenith under the Persians. How and why did they play such an important role in finance?
- A specific industry will be examined namely the brewing industry. Why was this an important industry at the time? Did the industry play key part in agricultural finance?

1.3 HYPOTHESIS

The hypothesis for the dissertation will try and establish the progression and development of the financial instruments, products and personalities involved, by examining the progression of trade and financing techniques through the periods. A recognised timeline and continuum will be considered, commencing with the earlier Sumerian financing techniques, through periods of major financial development for instance the Ur III Period, Babylonian financing and concluding with the early Achaemenid Period. The development through time will be examined and accentuated.

To support the general enquiry specific examples are considered; for example an assessment of important trading posts of Assur finishing with the Egibi sons and the Murasû of Persia. Selection will also be made by category for example the brewing industry; by type for example the role of women and by product i.e. various financial instruments.

1.4 SOURCES

1.4.1 Primary literary sources

The literary review was significant to the work and in particular the examination of work by scholars across all the periods under consideration. Key to the hypothesis is the recognised timeline and continuum. Books, articles, electronic databases and the internet on the individual periods by reputable authors were consulted. In support of this, primary texts were examined for provenance and “look and feel”. These were sourced from CDLI² and its URL <http://cdli.ucla.edu>, as well as the British Museum. Selected texts were also read, translated by reputable scholars.

Various museums were visited to see the tablets and artefacts on display.

- Archaeological Museum, Tehran, Iran
- Ashmoleum Museum, Oxford, England
- British Museum, London, England
- Museum of the Anatolian civilizations, Ankara, Turkey

As it was not possible to visit Mesopotamia, under the guidance of Professor Vermaak of UNISA, trips to the following Bronze Age trading cities were made.

- Ebla, Syria
- Susa, Iran
- Ugarit, Syria

² Cuneiform Digital Library Initiative, a joint project of the University of California, Los Angeles, and the Max Planck Institute for the History of Science, Berlin.

Participation in an archaeological dig was undertaken in the following Bronze Age location:

- Tall el-Hammam, Jordan (probable site of the Biblical city of Sodom) under the direction of The College of Archaeology Trinity Southwest University, Albuquerque, New Mexico, USA.

Supplementary knowledge was gained by attending and participating in the short course in the British Museum London run by Birkbeck College University of London entitled 'Is not this great Babylon?'. The course was taught by Lorna Oakes from 2 October 2008 – 11 December 2008.

1.4.2 Secondary literary sources

The literary review was conducted making use of books, articles and electronic databases and internet websites. The background research included significant authors in the field of trade, economics and finance, for example, Yoffee, Leemans, Hawkins, Powell, Van der Mieroop, Wunsch and Garfinkle together with theoretical thinkers such as Polanyi and Hudson.

In considering the approach to layout I have needed to recognise that the dissertation would cover a period of 2000 years, multiple geographies, significant variation by product and diverse originators, temple, palace, merchants, money lenders, women etc. I found that once the source material was cut as described above, specialist authors emerged. For example, *inter alia*, Jursa in *Debt and Economic Renewal in the Ancient Near East* is strong on the palace. Other scholars included Sasson, Renger and Steinkeller while Postgate, Van de Mieroop and Powell with others provided useful detail on the temple.

Dandamayev, Hudson and a special reference to Oppenheim in his seminal work *Ancient Mesopotamia Portrait of a Dead Civilisation* were fascinating for the study of merchants and money lending. Garfinkle made Ur III an exciting period to scrutinise. The contribution of Veenhof on the Old Assyrian Trade is

widely acknowledged, while Westbrook proved to be thorough on Ancient Near Eastern Law.

The chapter on the impact of brewing on the financial life of the Ancient Near East proved an interesting journey of discovery. Dandamayev and Englund were invaluable. Roth and Lahtinen both considered the involvement of women in the brewing industry. Together with Stone their contribution was vital when considering the role of women in finance.

This does not diminish the much appreciated material provided by the many other scholars shown in the bibliography.

Each chapter therefore, contains its own bibliography because, with a few exceptions, there proved to be almost no overlap in references chapter by chapter.

Further research was undertaken on authors who have considered finance specifically, not necessarily restricted to Mesopotamia, *inter alia*, Goetzmann and Monroe and where relevant contact was made.

Contact was made with other students considering economic structures where overlap could be useful e.g. Röthlin on the Levant, especially the involvement of Hezekiah with Assyria and Plenderleith (Barrell) on the Assur trade.

Attendance at complimentary courses and projects, gave me opportunities to meet other scholars run by the British Museum.

1.5 METHODOLOGY

In considering a subject as wide as finance, I have had to reduce complex products to the essentials of finance namely borrowing, lending and return where return should be considered as the underlying reason for the transaction and may be more multifaceted than “profit”. The OED describes reductionism as “the practice of analysing and describing a complex

phenomenon in terms of its simple or fundamental constituents, especially when this is said to provide a sufficient explanation”.³

Reductionism has facilitated the construction of the dissertation to take into account the period involved (2000 years), the complexity of the financial products found across the periods and the geographies – northern and southern Mesopotamia. To support the research while maintaining consistency by chapter, I have selected four key periods to represent the passage of time over the 2000 years. In the same way I have tried to bring out consistencies in financial products and consider “new” products where appropriate, such as negotiability to follow the hypothesis.

Layered onto basic fundamentals certain products should be considered, for example Loans and Promissory Notes.

The work will consider “trade” and following reductionism will consider the personalities involved in trade (merchants and money lenders) and will consider “trade finance” in so far as it supports cross border trade transactions, for example the Assur trade. Women had a particular and in many ways a complex role to play in finance with important divergences. In view of this their involvement in trade will be considered in a separate chapter.

Theories on third millennium societies postulated a division of these early cities into the “temple-city” and “palace economy”. Such theories are no longer considered accurate, with the prevailing concept now one of a mixed economy, in which private or business enterprises take place beside the transactions carried out by the “Great Estates”. Nevertheless for the purposes of this dissertation and to assist analysis, the split between the “Temple” and the “Palace” will be followed.

³ Concise Oxford English Dictionary (Eleventh Edition)

1.6 STRUCTURE OF DISSERTATION

1.6.1 Financial Instruments

A selection of financial instruments will be considered in conjunction with the important business transactions.

Categories will focus on:-

- Agricultural finance; a specific example, the brewing industry, will be considered.
- Working capital (overdraft). This would be important to merchants and money lenders. The role of women in private enterprise will be considered.
- The financial requirements of public institutions especially temples and the needs of the palace.
- International (trade) finance as supporting the requirements of business activities. Given the locality of Mesopotamia, domestic finance could not only be seen as intra regional but would extend to cross border trade.

1.6.2 Regions and Periods

The dissertation will cover Bronze and Early Iron Ages. Mesopotamia will be considered and will include the southern and northern parts of the region.

Chapters will be broken down into the following regions:-

- Sumeria, the early periods
- Third Dynasty Of Ur - Ur III Period
- Babylonia, including Assyria, both the Old and Neo – Babylonian/Assyrian Periods and where appropriate to compare and contrast
- Persia (early Achaemenid Period)⁴

⁴ For the purposes of this dissertation the Achaemenid Persian period commences in 550 BCE and the Neo-Babylonian period ends in 539 BCE.

By contrast, financial needs in other areas in the “Fertile Crescent” would be structured differently, for example:-

- Egypt
Regular Nile floods meant infrastructure projects tended to be on temples and palaces with less emphasis on, for example, canal building. Finance requirements were developed around these needs.
- Levant
Trade was important to this region and the financing of such trade would be key.

These geographies will not form part of the dissertation.

1.6.3 Breakdown of Dissertation

To maintain consistency, each chapter throughout the dissertation will be broken down into four parts:-

- An introductory section concentrating on key city states in Sumer.
- A detailed examination of the Ur III Period emphasising the development and similarities with the Sumeria Period.
- An examination of Babylonian financing around the time of Hammurabi. Comparisons will be made of the Assur trading posts especially Kanesh, emphasising the financing of the trade.
- A concluding section on the early Achaemenid Period with special consideration given to the Egibi and Murasû families where modern financial tools begin to emerge.

1.6.4 Chapter Overview

- Chapter Two introduces financial processes from the earliest recorded beginnings and shows the various financial tools in use at the time including the progression of the techniques over a period of about 10,000 years, as well as the development of record keeping.
- Chapter Three explores the money lending activities of merchants. It also takes into account lending undertaken by others as money lending

was not in the sole dominion of merchants. The chapter will examine the various financial arrangements found during the periods under consideration.

- Chapter Four evaluates the wide range of financial instruments found in the Ancient Near East, for example loans and lending evidenced by what today are referred to as Promissory Notes. The chapter will scrutinise the arrangements used in calculating return on lending, for example the calculation of interest rates.
- Chapters Five and Six consider the temple and palace. A key influencer in the commencement of both entities probably lay in the communal endeavour required to manage water resources especially in maintaining the irrigation systems so necessary in an agricultural economy. Mesopotamia did not enjoy an adequate annual rainfall and the unpredictable flooding of the Tigris and Euphrates necessitated centralised intervention. Agricultural yields could best be enhanced if the venture was nominated as a result of the intercession of the gods, rather than through individuals or families. For example, as early as the Sumerian period, temples came to dominate the economy controlling the land and its use.
- Chapter Seven examines a specific segment of the agricultural industry namely the brewing industry. As agriculture was a substantial activity, agricultural finance was imperative to the economies during the periods under consideration. Selecting the brewing industry facilitates an examination of a specific manufacturing process and the development of the financial configurations needed to support the industry.
- Chapter Eight investigates the impact of women on the economic and financial life of Mesopotamia, both in their own right and as a cover for the involvement of male family members, from the earliest beginnings. For example, and to tie in with Chapter Seven, their role in the brewing industry is explored. Chapter Seven shows that the industry was a significant constituent of the Mesopotamian economy and these women would enjoy extensive responsibilities in this industry.

The work was directed by Professor Vermaak.

CHAPTER TWO

INTRODUCTION TO FINANCE IN MESOPOTAMIA

2.1 THE ORIGINS OF FINANCE, TOKENS ETC.⁵

It is considered that in the Ancient Middle East from around the ninth millennia BCE,⁶ computation was practiced with the help of clay tokens in geometric and miscellaneous shapes, which represented numbers and various commodities.

Schmandt-Besserat (1979:19) identifies major innovations, which depict the evolution of the token system at the end of the fourth millennium BCE after a lengthy period when plain tokens were in use.

1. An improvement in the manufacture of the tokens.
2. An increase in the diversity of shapes of the tokens including the appearance of naturalistic types such as animal heads, vessels and utensils.
3. A proliferation of markings on the surface of the tokens.
4. The appearance of perforations suggesting the stringing together of tokens for special transactions.
5. The storage of tokens in sealed envelopes called *bullae* sometimes provided with exterior markings consistent with the shape and number of tokens inside.

⁵ I have used the modern idiom for example “money lending”, “interest” and “loans” where the context demands it and for clarity even though the Mesopotamians would not have understood our concept of these terms.

⁶ Before Common Era (BCE) and Common Era (CE) are used throughout this study, except where the source is quoted, where the relevant abbreviation is kept.

2.1.1 The emergence of *bullae*

In Susa, Høystrup (2007:258) envisages that the *bullae*, serving in a similar way as a modern day Bill of Lading⁷, recorded goods delivered from the periphery to the temples of the central city. On the surface of the *bullae* the cylinder seal identifying the responsible official or order was impressed. The *bullae* could not be opened without losing its textual significance and so surface impressions corresponding to the tokens contained might also be made.

According to Goetzmann ([sa]:2), *bullae* appear to be the earliest archaeological evidence of contracts. Each *bullae* found in the Inanna temple complex suggests an undertaking to provide commodities, for example, jars of honey, sheep, cattle and perhaps even days of work, to the temple. The inscriptions on the *bullae* meant that the contracting parties could refer to the amount owed over the term of the contract. Together with the tokens inside, kept by the lender as evidence of the agreement, these denoted the obligation. Some of the *bullae* were covered entirely in the impressions of cylinder seals that may have been the Mesopotamian equivalents of signatures. These could represent a personal mark stipulating the promise to the owing party. The *bullae* that were entirely covered in seal impressions may have suggested that the owing party was concerned that the *bullae* holder might break open a small part of the *bullae* and insert, or remove, tokens (Goetzmann [sa]:2). In fact it would appear for the “contract” to be complete both the *bullae* and the tokens inside must be present. Comparing the nature of this contract with a Bill of Lading we see that this “documentation” may not be connected to the underlying goods forming the transaction.

The system, allowing for variations in marking on the surface of the *bullae*, was improved in Uruk, the central city of the emerging Mesopotamian region and it came to be accepted that with impression of the tokens on the surface of the *bullae* the tokens themselves would be superfluous. Consequently a flat clay surface carrying only the impressions, a so-called 'numerical tablet,' and

⁷ Bills of Lading (B/L) are governed by a number of rules often incorporated into national law including the Hague Rules, 1924 and the Hamburg Rules, 1978.

the seal actually would serve to record the transaction. During the ensuing Uruk IV phase, the accounting system was expanded into or integrated into the development of writing (Høyrup 2007:258).

2.2 THE BEGINNING OF RECORD KEEPING

These various innovations in the recording system during this period may be in response to economic developments such as the expansion of craft production in workshops, the increase in local and long distance trade and the emergence of bureaucracy in the new city states. Indeed Schmandt-Besserat (1979:19) suggests that writing derives from the system of markings used on these bullae; the first signs of Sumerian writing representing numbers and commodities according to the shape of the tokens used in the archaic recording system.

Also around the mid-fourth millennium, changing ecological conditions made possible the introduction of large-scale artificial irrigation in the south of Mesopotamia. A direct consequence of this was a significant growth in population, with the concomitant development of a social structure characterised by several levels of administrative control and division of labour - centred around the great temples (Høyrup 2007:258).

To support the economic development and demographic growth were various tools, the most important of which was the accounting system based on these small tokens of burnt clay. These were in various shapes such as small and larger spheres, cones, discs and cylinders. From the eighth millennium onward, these tokens were in use in Anatolia, Syria, Iran and Iraq (Høyrup 2007:258).

In the Uruk-Jemdet Nasr Period (3100–2900 BCE) they were manufactured with much greater care than in the preceding Chalcolithic and Neolithic periods. The clay chosen was very fine and was reduced to a fine powder in manufacture to remove all impurities. However, the lack of any standard size suggests that they were modelled by hand (Schmandt-Besserat 1979:20).

In summary, Uruk and Late Uruk precursors of writing in Mesopotamia and Persia can be tentatively divided into the period of early tokens prior to c. 3500 BCE, in which simply formed geometric clay counters were used in an *ad hoc* fashion to record simple deliveries of goods, primarily grain and animal products of local economies. This was followed by a period of clay envelopes, c. 3500–3400 BCE, in which similar geometric clay counters, with some distinguishing features, were enclosed in clay envelopes. These envelopes were covered with impressions from cylinder seals with the outer surfaces of some envelopes impressed in a one-to-one correspondence to the enclosed pieces (Englund 2001b:22).

2.2.1 Emergence of tablets

Subsequently the tablets advanced into the period of early numerical tablets, c. 3400–3350 BCE. In this period were found flat and round clay tablets, sealed and unsealed that were impressed with symbols or cut and shaped with styli, to represent numerical notations. In the period of late numerical tablets, c. 3350–3300 BCE, flat and rectangular-shaped sealed clay tablets were impressed with styli to record numerical notations. Finally, during the last Late Uruk period of combination tablets, c. 3300 BCE where flat and rectangular-shaped sealed clay tablets were impressed with styli to record numerical notations and one, or at most two, ideograms. The purpose of the ideograms was to represent the objects of the transaction, including sheep, goats and products derived from them, above all textiles and dairy oils (Englund 2001b:23). This could be in keeping with the suggestion made by Høyrup (2007:258) that *bullae* might be seen as an early Bill of Lading. These representations would enable all parties to “read” the transaction without being restricted to a language or writing style, a key element in cross border trade.

2.3 THE ECONOMIC CONTEXT

With the substantial increase in population during the Uruk Period came an increase in the number of settlements. Also in the Susa area the number of settlements tripled. A feature of the settlements during the Uruk Period was a variation in size in both Mesopotamia and Iran. The resultant hierarchy of settlements seems to be linked to the emergence of a new economy based on specialisation and more diversified local exchanges of finished products. Large and small settlements seem to specialise in various crafts, such as production of bitumen, stone tools and pottery. Progress in technology, for instance, the invention of the potter's wheel, transformed the home or village pottery into an industrial workshop geared to mass production and finished goods were distributed extensively. There was also a noteworthy increase in imported goods, including obsidian, copper, basalt, marine shells and lapis lazuli, sourced from beyond the immediate region. An economic system based on cross border exchanges of goods led to efficient recording procedures. Production, storage and redistribution of goods needed to be computed and recorded with accuracy. These ancient tokens, first intended as a simple household and market bookkeeping systems, came to be developed and used to discharge the increasingly more complex accounting needs of developing businesses and state administration (Schmandt-Besserat 1979:24).



Figure 2: Examples of sealed (left), sealed and impressed (middle) bullae and a numerical tablet

All from Susa; left: Sb 1932, middle: Sb 1940, right: Sb 2313; (*digital images courtesy of CDLI*) from Englund 2001b.

2.4 THE IDEA OF INTEREST

Goetzmann ([sa]:4) suggests the idea of charging interest can be found in the Sumerian language. The word for interest, *mash*, was also the term for calves. In later periods in ancient Greek, the word for interest, *tokos*, also refers to the offspring of cattle and the Latin term *pecus*, or flock, is the root of modern word "pecuniary." The Egyptian word for interest carries a similar concept to the Sumerian word and means "to give birth." All of these terms point to the derivation of interest rates as the natural multiplication of livestock.

In this way Uruk would appear to have been the perfect setting for the evolution of the practice of lending at interest. It was a pastoral society in which wealth, as measured by livestock, "created" wealth through birth. In addition and importantly it had a system for recording contractual obligations and a numerical system that could specify particular quantities of goods. With this it would have had a concept of present and future values. Indeed during

the Sumerian Period, the Mesopotamian calendar was developed, allowing a mathematical link between lunar months and solar years (Goetzmann [sa]:4).

2.5 THE CONCEPT OF VALUE

Continuing the suggestion that “goods” could be contractually distinct from “documentation”, an even more fundamental tool was the capability the Mesopotamians developed to represent goods and quantities. The Uruk accounting system made it easy for the Sumerians to own and exchange quantities of goods. By placing the tokens in bullae, ownership became implicit. Perhaps finance in the Ancient Near East began to mature into our “modern” understanding because, for the first time, it was possible to represent units of wealth symbolically (Goetzmann [sa]:4).

In addition to livestock, grain was probably an early indicator of the value of goods, a standard related to basic subsistence. However, as silver was a better medium of exchange because of its low bulk and permanence, it became the most common measure of value. Prices in Mesopotamia were sometimes also stated in gold or copper (Monroe 2000:45).

In later periods from Ur III to Old Babylonian times, weighed coils and smaller broken-off pieces of silver, copper, gold and bronze were used as currency. Then in Late Bronze Age texts prices appear simply as weighed amounts of metal, which again was silver. With the balance-pan scale and set of stone or metal weights, the merchant could convert metal into something equating to our modern concept of money. Even after the widespread adoption of coinage, weights were still used to check the actual worth of coins or conduct business in bullion; the coin being no more than a state-weighed and sealed quantity of metal (Monroe 2000:45).

The dissertation will consider finance through these periods:-

- 1) Early Periods – Prior to 2400 BCE
- 2) 3rd Dynasty Of Ur - Ur III Period

- 3) The Old Babylonian Period 2003-1595 BCE and The Old Assyrian Period North Mesopotamia in The Period 2000-1740 BCE
- 4) The Neo-Assyrian Period 934-609 BCE, the Neo-Babylonian Period 626-539 BCE and the early Achaemenid Period 550-400 BCE.

CHAPTER THREE

MERCHANTS AND MONEY LENDERS

3.1 INTRODUCTION

(Note this chapter will exclude women as Merchants and Money Lenders; they will be discussed in *Chapters Seven and Eight*).

This chapter will look primarily at the money lending activities of merchants. However, it will also touch on lending undertaken by others as money lending was not in the sole dominion of merchants.

Shamash (Akkadian *Šamaš* "Sun"), was a native Mesopotamian deity and the sun god in the Akkadian, Assyrian and Babylonian pantheons corresponding to Sumerian *Utu*. The link of religion to finance can be seen in the Mesopotamian hymn to *Šamaš*, which was unusually explicit regarding the conduct of weighing practices:

He who [commits] fra[ud as he holds the ba]lances
Who switches weights, who lowers the [],
(His) profits are illusory, and he lo[ses the capital].
The one who is honest in holding the balance, [] plenty of [],
Whatever (he weighs) will be given to him in plenty [].

The honest merchant who pays loans by the [ex]tra(?) standard
thereby to make extra virtue,
Is pleasing to *Šamaš*, he will grant him extra life,
He will make (his) family numerous, he will acquire wealth,
[His] seed will be perpetual as the waters of a perpetual spring
(Monroe 2005:176-177).

The Code of Hammurabi points to the role of the merchant as a money lender. The merchant was seen as lending money to farmers to finance agricultural operations.

§ 49 states as follows:

If a man obtain money from a merchant and give (as security) to the merchant a field to be planted with grain and sesame (and) say to him: "Cultivate the field, and harvest and take to thyself the grain and sesame which is produced;" if the tenant raise grain and sesame in the field, at the time of harvest, the owner of the field shall receive the grain and sesame which is in the field and he shall give to the merchant grain for the loan which he had obtained from him and for the interest and for the maintenance of the tenant.

§ 50 continues as follows:

If he give (as security) a field planted with [grain] or a field planted with sesame, the owner of the field shall receive the grain or the sesame which is in the field and he shall return the loan and its interest to the merchant.

§ 51 continues as follows:

If he have not the money to return, he shall give to the merchant [grain or] sesame, at their market value according to the scale fixed by the king, for the loan and its interest which he has obtained from the merchant. Thus the borrower could pay in kind according to the royal tariff. In this way the king becomes the enforcer of the law for this and other circumstances (Translation Harper 1904:29).

3.1.1 Private commercial activities

Commercial activities were undertaken at the request of the centralised authority, probably originating in Sumer's temples and palaces in the third millennium BCE, or through the private entrepreneur given license to carry out business transactions by this central authority. This person, referred to in the texts as the *tamkarum*, was involved in both overland and sea trade and, for the purposes of this chapter, money lending. Typically, the *tamkarum* was involved in transactions on a large scale. A negative perception seen in the texts indicates the peddler, vendor and merchant continued vocations that

were disliked. A comparably negative attitude was expressed for the merchant in medieval Europe. Thomas Aquinas in the thirteenth century wrote that there was something shameful sordid about commerce, for instance, in *Liber contra impugnantes Dei cultum et religionem*, translated by John Procter, O.P (Procter, J 1902:230) he writes “that those occupations are to be called secular, in which men are engaged in making money but not by manual labour. To this class belong all mercantile pursuits. Religious are forbidden to involve themselves in any business of this description”. The rise of commercialism in medieval Europe gave rise to public hostility towards those involved in its undertaking. A comparable hostility was voiced in the texts of the Babylonians. The merchants were seen as obtaining a profit from the labour and commodities produced by others (Lamberg-Karlovsky 1996:150).

3.2 EARLY PERIODS – PRIOR TO 2400 BCE

Southern Mesopotamia had little by way of natural resources; the region lacked timber, metals and stone. Further, the land was wide and flat and marshy, providing no natural protection from invaders. The economy was based on agriculture; predominantly the cultivation of barley; the crop came to be used as means of payment for wages in kind and daily rations. Barley was also the basis for the natural beverage, beer (Heise 1996).

Trade commenced within the northern regions because the alluvial plains in Mesopotamia are perfectly suitable for high food production. In addition to barley, the region could grow other crops such as flax, enriched into linseed and oil. In exchange the region needed precious stones, metals and timber. Good timber was only available in the forests in Lebanon or closer in the mountains of modern Iran. These mountains were also rich in minerals, stones and metals (Heise 1996).

Some lumber was manufactured but the wood came from soft palm trees and was not hard enough for typical timber usage. Timber and stone were needed for the construction of buildings and in addition metals become increasingly

important. A roof span of, 10 metres would require strong rafters; timber made from date palm trees was too flexible (Heise 1996).

3.2.1 Southern Mesopotamia

The extreme south of Mesopotamia had an economy based on dates and fishing (Heise 1996).

Herds of sheep and goats could graze the meadows outside the growing season and cattle could pasture when sufficient water was available. There was a large production of wool giving rise to manufactured textile fabrics (Heise 1996).

3.2.1.1 Storage economy

In southern Mesopotamia, we could speculate that economic development initially came as a result of what Oppenheim (1964:89) has described as a “storage economy” with the centre being either part of the palace or the temple. Though it could be self supporting it did not represent the only means of economic integration in that region. Economic progression seems to have advanced in harmony with the storage centres on the one side and a stratum of the population engaged in independent economic activity, either as individuals or as a group of persons of equal status, on the other. The coexistence of differing systems of integration, storage versus private economy, seems to have created a surplus in staples. In considering the development of trade a useful assumption might be that the storage economy originally lacked the means of contacting the world around it for those raw materials, which the region lacked, in this case stone, metal and timber. However, recognising a business opportunity the groups outside of the storage arrangements were sufficiently mobile and commercially minded to serve the centre and to be paid for their services. Through a mutual economic understanding, both parties would have created an economic climate, which, among other consequences, favoured the urbanisation that occurred so early and efficiently in this region (Oppenheim 1964:89-90).

3.2.1.2 Categories of trade

Two categories of foreign trade, which in the age of empires would include intercity trade, can be found. Firstly there was export and import trade. Early forms of industrialisation created surpluses, for instance, left-over textiles produced by serfs in the self-contained organisations of temple or palace. This surplus produced the goods for export required to import metal, stone, lumber i.e. raw materials that were not available and also manufactured products, such as spices and perfumes. Secondly, there was trade between foreign cities, trading outposts and barbarian tribes who lacked the prestige, the political power and the initiative necessary to engage in trade relations on the basis of treaties. There is evidence for both types of trade, before the Dark Age⁸, around the modern day Persian Gulf and Turkey as well as along the Euphrates route into the Mediterranean littoral before and after that period. In both instances, trade contributed directly or indirectly towards the raising of the living standard in Mesopotamia and helped to increase the spreading influence of Mesopotamian civilization (Oppenheim 1964:91).

The accounts of the traders of the period before the Dark Age show us that a large variety of luxury goods and essential raw materials were imported, apparently for the court of the king and the temple of the god but there was never a direct mention of export activities. Trade seems to have been conducted on a purely administrative level and private initiative or gain was not openly admitted (Oppenheim 1964:91).

It was probable therefore that these public institutions would have established relationships with well-placed individuals whose title in Sumerian *dam-gâr* and in Babylonian *tamkarum* – are usually translated as “merchant” or, by Babylonian times, could be extended to “entrepreneur” (Hudson 2010).

⁸ For the purposes of this dissertation the Dark Ages of Mesopotamia fall in the period of the Gutti who held sway over Mesopotamia from 2220 to 2120 B.C and came to an end with the rise of the city of Ur.

3.2.1.3 *The role of the entrepreneur*

The term entrepreneur and his unique risk-bearing function was first introduced into economics by Richard Cantillon (1680-1734). He was an important figure in the Physiocrat school of economics. The Physiocrats were a group of economists that believed that the wealth of nations was derived solely from agriculture and Cantillon was influential for the development of the classical economic thinking. His fame rests largely on a single, posthumously published work, *Essai sur la nature du commerce en général*. He concluded that beyond those who earned “income” whether certain or not, all the others are entrepreneurs, whether they are set up with capital to conduct their enterprise, or are entrepreneurs of their own labour without capital. They may be regarded as living under uncertainty. Even the beggars and the robbers are entrepreneurs of this class (Cantillon translated by Saucier 2010:76).

In Babylonia, the palace leased land and workshops at stipulated rents and advanced textiles and other handicrafts to these merchants and entrepreneurs who undertook the risk and enjoyed the rewards of long-distance trade. In the process of building up these ventures, the combination of administrators and entrepreneurs created the managerial elements for large-scale production and market exchange to create a surplus in goods and to reinvest the yield for further gain (Hudson 2010).

It can be concluded from these activities that the Sumerian *dam-gàr* and Babylonian *tamkarum* were large traders and were found working with the royal bureaucracy. Additionally they were not acting on their own but for their mutual benefit. Industrial enterprise was first developed in Bronze Age times by the palace and temple operating as public institutions. In southern Mesopotamia, private profits were made by royal collectors and temple officers. Merchants viewed as private, played a symbiotic role throughout the period under consideration. Closely associated with the large public institutions, the merchants conducted trade in their private capacities while also providing a service as public collectors. They organised themselves into

temple guilds to provide security of trade and perhaps to qualify for temple consignments of export goods and loans (Hudson 1996:40).

From the beginning, during the Sumerian Period, the city-temple complexes were the central organs, which controlled the economic surplus. Private household production existed alongside that of the temples but seems to have been orientated towards subsistence needs. Any surplus production of goods for the market was probably specific to the householder's needs and less tradable than those produced in the temple and palace workshops. However, while these household commodities were produced for a narrow purpose, their prices, especially the price of barley, including that grown on public sharecropping lands, was free to rise and fall with changing supply and demand. Barley prices, for instance, rose dramatically in response to shortages stemming from the military disturbances that marked the transition from Ur III to the Isin-Larsa Period (Hudson 1996:41).

Rim-Sin (1833-1793 BCE) of Larsa then initiated a policy, which was continued into the Babylonia Period where the overseer of merchants (*ugula dam-gàr / wakil tamkarim*) and members of his guild or association become the tax farmers responsible for conversion into silver or barley of all payments-in-kind from all gardeners, fishermen and shepherds (Adams 2009:7).

These entrepreneurs formed business enterprises, probably in the form of consortia or extended family groups without a formally designated leader. However, there was an assumption that there must have been some sort of formal agreement (although none have been found), at the initiative or at least with the full support of the palace or temple to carry out specific sets of duties to the mutual benefit of both parties. As we have seen, the objective was to take control of the results of the public work or activity and to find ways to convert much of it into silver at prices advantageous to the entrepreneur as well as to the palace (and temple) and then to concentrate fungible wealth in royal hands, while relieving the palace of most or all managerial responsibility (Adams 2009:7-8).

3.2.1.4 *Financial return*

Turning to finance, interest charges for commercial and agrarian debts seems to have commenced its important developmental phase in Sumer's temples and palaces in the third millennium BC. Hudson (2002) suggests that interest was charged on advances of workshop handicrafts to travelling merchants associated with these large institutions as officials or holders of *dam-gàr* status (Hudson 2002).

The holders of *dam-gàr* status could place their own money with merchants (made easier because they were often related). They made short term loans to peasants who lacked the surplus to disburse the relevant amount due to the palace or temples. Loans, which in modern parlance would be considered as "payday loans", could be made for food and other resources in times of crop failure or military devastation of the land, or as a result of illness, incapacity or other hardship. However, most agrarian debts stemmed from sharecropping arrangements with the large institutions whose anticipated crop share was recorded as a debt owed by the cultivators (Hudson 2002).

As time progressed, the *dam-gàr* traders continued to operate and resolve disputes through their city-temples but they came to be under the supervision of the "chief trader", *dam-gàr-gal*, a palace official (Hudson 2002).

Temples and palaces provided loans to merchants to finance their trade ventures and also provided merchants with commodities to trade at a profit sufficient to repay their creditors and while creating a surplus corresponding to a profit for themselves. Lenders typically shared in the mercantile risk, often by taking an equity position. If there were losses in transit, for example, if ships were lost at sea, caravans robbed or cargoes otherwise lost to the merchant through no fault of his own, the debt was cancelled (Hudson 2002).

From the earliest periods commercial loans were functionally distinct from agrarian lending. They were denominated in silver whereas agrarian loans

were denominated and repayable in barley or other crops (but could be valued in the silver equivalent). The commercial rate of interest was standardised at 12/60ths per year (20%), substantially lower than the rate charged for agrarian loans, typically barley, of a third to half the value of the nominal principal (Hudson 2002).

Fees owed to the palace will be considered in *Chapter Six*, however various other types of fee were charged and advances of barley, seed and water were needed to settle these at the same rate of interest as the rate in land utilisation. This resulted in a higher rate for agrarian interest compared with interest on commercial ventures, for example long distance trade and, in effect, replicated sharecropping rates, widely found in agricultural debts. Impoverished peasants were obliged to pay the same rate for advances of barley or food for their own consumption or other emergency needs as they paid for the advance of productive assets. Once they fell behind in their payments, their debts tended to mount up at exorbitant rates. The usurious rates had to be paid out of other income or by relinquishing assets. Living near the margin of subsistence, the peasant was obliged frequently to pledge the labour services of his family members (his daughters, wife, sons or house-slaves) as collateral while working to settle the interest and debt charges (Hudson 2002).

3.3 3RD DYNASTY OF UR - UR III PERIOD

The available evidence indicates that, effectively, Ur III society was based on economic dependency on the palace, either directly, for instance, in the case of the military organisation or the members of the immediate circle of the king and his extended family, or, indirectly, through the medium of provincial economies, represented by the governors. The economic support of the palace depended on an individual's place in the social order. Members of the higher and middle ranks of the society were granted allotments of arable land, designated as *šuku*, "subsistence land", as well as, in the case of at least some of them, allotments of staples, for the duration of their particular work-

duty obligations toward the state. The lower strata of the society were supported exclusively through staple alimentation (Steinkeller 2002:114-115).

3.3.1 Money lending and loans

There are few records of the loans issued by private individuals but there is a huge body of surviving texts related to institutional lending. These loans are designated by the term *še-ur₅-ra*, “barley loan” and can be best described as a system of advances, usually interest-free that the central administration would make to its dependents, as well as to the various compartments of the provincial economy. It can be speculated that the absence of private money-lending activities at Lagaš and Umma was because the system of *še-ur₅-ra* advances largely eliminated private demand, as these loans were not a commercial, profit-oriented venture as understood today but were meant to serve as a safety-net, protecting the dependents of a given institution from economic hardship (Steinkeller 2002:116).

A typical moneylender of the period was thus most probably associated with the royal sector and had sufficient resources to cultivate his *šuku* plot (barley, silver and a team of draft animals) but would have needed seasonal agricultural labour, especially at harvest time, the most labour-intensive part of the agricultural cycle. To secure the labour needed, he would lend grain or silver to economically stressed individuals, usually, lower-rank *šuku* holders, with the view to obtaining their services when the loans were not repaid (Steinkeller 2002:117).

3.3.1.1 The šuku holder

Even at these early stages of financial life, economies of scale would surely be important, bringing benefits to the mid ranking *šuku* holder who could control further *šuku* fields, since the more land he put under cultivation, the more rewarding the whole operation became. He was able to obtain that extra *šuku* land in the following three basic ways: (1) by leasing *šuku* plots from impoverished holders; (2) by contracting with *šuku* holders in an antichretic

arrangement in which the interest on a grain or silver loan was repaid through the cultivation of the debtor's *šuku* field; and (3) by getting outright control of the *šuku* plot through the debtor's default on the loan. Clearly, this was an escalating sequence, since the more land the entrepreneur accumulated in this way, the more labour he needed to cultivate it. Therefore, he continued to expand his money-lending operations, with the expectation of procuring extra labour (Steinkeller 2002:117).

This analysis suggests that in the Ur III economy there was shortage of readily available labour. In the absence of a free labour market, the scarcity of agricultural labour placed stress on households engaged in the agrarian economy both for the mid ranking *šuku* holder and the peasant. However, Garfinkle (2004:6) feels that this interpretation of the non-institutional money lender where most of his lending operations were directed towards the acquisition of labour and land is somewhat restrictive.

Acknowledging the difficulty in proving that the Ur III creditor was motivated by a desire to recover interest rather than labour or land and that it was this that constituted the financial instinct, the concern of the lender for interest can be documented. The importance of promissory notes will be explored in *Chapter Four*. There are examples of these and court documents preserved in the Ur-Nusku archive from Nippur and these records demonstrate the extent to which creditors went to recover both their principal and the interest owed on loans. In these texts, the promised payments were often substantial and included the penalties on default (Garfinkle 2004:8).

3.3.1.2 Return on money lending

Money-lenders could also issue some loans with the objective of profiting from the accrued interest, especially in long-distance trade. Nevertheless lending operations undoubtedly were also directed toward the acquisition of labour and land. However, options for investing capital in land were probably quite limited because money lenders were unable to make outright purchases of arable land (Steinkeller 2002:118).

The records contained in the loans of this period show the amount and commodity, which would be the fundamental element of the loan, the identities of the borrower and the lender, the interest rate to be charged, the names of the witnesses and the date usually only the year on which the credit was advanced. The terms of the loans were indicated in one of two ways. Either the interest rate was expressed numerically, or it was specified with the use of certain routine phrases. The majority of the loans from this period, the usual rates of interest were 20% for silver loans and 33% for barley loans (Garfinkle 2004:6).

3.4 OLD BABYLONIAN PERIOD 2003-1595 BCE AND OLD ASSYRIAN PERIOD 2000-1740 BCE

In the Old Babylonian Period that followed Ur III the role of the moneylender (*tamkaru*) became more complex in the south, especially as the traders in royal service (especially those of Larsa) were allowed to grow rich. In Ur during this period, there are texts showing that the merchants imported copper from beyond the Gulf and transacted their business by pooling their funds and by sharing the risks, the responsibility and the profits. These texts repeatedly mention the *kāru*, a merchant organisation with a seat and a legal status of its own, outside the city proper (Oppenheim 1964:91).

The conduct of international trade can be found in Mari texts. These link the Gulf with the island of Telmun, (modern day Bahrain) via the Euphrates, Aleppo and the Orontes valley, north of Damascus to the Mediterranean. Mari seems, furthermore, to have been a station on the tin trade route (between inner Asia and the Mediterranean) taking over the role of Assyrian merchants. Tin was, of course, essential for the manufacture of bronze and it could be had in quantity only from sources outside Mesopotamia, reaching the region through the hands of many intermediaries. Mari trade apparently operated on a different level from that of Ur and Kanis⁹ - caravans enjoyed royal protection

⁹ Note Kanis can also be spelt, Kaniš I have retained the spelling of the source material as appropriate.

and brought foreign merchants from court to court, granting them something similar to diplomatic status (Oppenheim 1964:92-93).

3.4.1 Overseer of the merchants and merchants

From the middle of Rim-Sin's reign an office of "overseer of the merchants" (Akkadian *wakil tamkāri*) appears in the texts. These overseers seem to have been very important citizens of Ur and it was possible that Sîn-muštāl, *wakil tamkāri* under Hammurabi, became the governor of Larsa during the revolt led by Rim-Sin II. The Larsa texts indicate that during this period, the palace extensively used the merchants to collect taxes and to market the surpluses produced on palace owned land. Van De Mieroop (1992b:204) advises that the agricultural surpluses were given by the palace to the merchants who converted them into silver for the treasury. The system must have given the merchants considerable economic power and access to significant amounts of silver. It is possible that even during this early stage in financial structures, there were leads and lags in the collection of its share of the taxes by the palace and therefore the merchants could use the silver for their own profit for several years. Leads and lags are found today in the foreign exchange market where the alteration of normal payment or receipts in a foreign exchange transaction can be beneficial because of an expected change in exchange rates. By extension, merchants also undertook an important role as financiers. For example, the moneylender, Dumuzi-gamil, obtained a substantial amount of silver through a five year loan from the merchant, Šumi-abum. (See also the activities of Dumuzi-gamil in *Chapter Four*). Merchants may have acted so often as creditors that the term "merchant" came to be synonymous with the idea of "creditor" in general. In this way credit transactions developed into a very important part of the economic life of the citizens of Ur (Van De Mieroop 1992b:204).

In Babylonia after about 1800 BCE, the entrepreneurs to whom the palace leased fields, herds and workshops tended to be members of the elite or upper classes. The title of *dam-gār* or *tamkarum* merchant presupposed social status and connections to the palace or temple bureaucracy,

administering franchises in a form of economic management termed by Kraus as '*Palastgeschäft*' (Kraus 1958). Some managers worked in the palace bureaucracy but others worked entirely on their own account. Hudson (2010) outlines the example of Balmunamhe who was a private *tamkarum* merchant, not a palace official.

3.4.2 Northern Mesopotamia: the Assur trade

In the north, archives of Old Assyrian traders who were active between Assur and ancient Anatolia for at least 85 years (ca. 1920-1835 BCE), have been found. The number of tablets excavated demonstrates that a commercial network of some thirty settlements was established in modern day Central Turkey (Veenhof 1997:337). This merchant colony, known as *kārum* in Akkadian, adjoined the ancient city of Kaniš, located at Kültepe near the modern village of Karahüyük, in the region of the provincial capital of Kayseri. A few tablets have been found at Boğazköy-Hattušaš and Alisar Hüyük. These discoveries have produced a satisfactory number of texts to enable scholars to reconstruct the nature of trade between Assur and Anatolia in the nineteenth and eighteenth centuries BCE (Barrell 1998:1).

The archives comprise numerous letters, accounts and legal documents. Specifically, their houses and archives were discovered in the lower town of the ancient city in turn located some 20 kilometres northeast of modern Kayseri. This centre proved to be the main administrative centre of the network. The site has yielded roughly twenty thousand cuneiform tablets, originating from at least seventy different archives and these sources have brought to light a large scale, well organised and sophisticated overland caravan trade, which imported into Anatolia quantities of tin (essential for the Anatolian production of bronze) and fine woollen textiles to be exchanged or sold, both directly and indirectly, for silver and gold, which were shipped back to Assur (Veenhof 1997:337).

Goods imported into Anatolia by these Old Assyrian merchants were paid for in silver and sometimes, though more rarely, in gold. When gold was used as

the medium of exchange, value of the gold had to be converted into its silver equivalent when it reached Assur. Silver was, *de facto*, the common currency of the Ancient Near East and this silver would be in a refined state (Barrell 1998:10).

Although the underlying trade was based in Assur, Assyria, no text supporting the business activity has been discovered in Assur itself. The texts show the merchants had at least two roles: handling the export of textiles manufactured in or traded through the town of Assur and acting as intermediaries between mining and smelting centres and distributors in the copper and iron trade within Asia Minor. These merchants enjoyed freedom of movement, seemed to have operated without military protection and reaped large returns in silver and gold and operated to high ethical standards. Similar operations were not to be seen again in the region until the full flowering of the Nabatean caravan trade, based around the city of Petra, which continued until the Abbasid dynasty transferred the capital to Baghdad in 750 CE leading to a sharp decline in the fortunes of the city. The texts themselves do not indicate what historic circumstances fostered this short-lived flowering in Kanis; it lasted little more than three generations but it may well have been no more than the self-interest of the native king and the needs of the community (Oppenheim 1964:92).

3.4.2.1 *Capital*

The Assyrian merchants would have required capital to set up trading operations; to acquire the textiles and tin to be transported to Kanesh, to acquire silver and gold and to cover expenses. The necessary capital was raised in Assur in various ways, with the most important instrument being the *naruqqu*, an investment purse collected from a number of people (Van De Mieroop 2002a:75). The word probably originally referred to a bag into which the merchant would put his money and by extension a bag for carrying the packed textiles on the journey (Barrell 1998:xiii). The *naruqqu* provided fixed and working capital to merchants. As fixed capital it could be enjoyed for lengthy periods, sometimes as long as ten or twelve years. All profits made

with the *naruqqu* were divided amongst the investors and the merchant and upon conclusion of the agreement the capital was repaid. Where required short term facilities were available and merchants could also obtain loans to be repaid when their expedition returned. The flexibility in credit enabled both fixed and working capital to be raised to facilitate the establishment of the trade and provide liquidity for its continuation (Van De Mieroop 2002a:75).

3.4.2.2 *Contractual arrangements*

The Assur trade operated on the basis of a variety of contractual arrangements between various participants sometimes in multiple roles - money-lender, guarantor, trader, partner, representative, travelling agent, caravan leader and employee. These arrangements would have been impossible without a set of legal rules defining the responsibilities, rights and obligations of all parties (Veenhof 1997:343). Additionally, we can surmise that the relationship between the Assyrians and the local princes went further and must have been on good terms besides being economically favourable to both parties since peaceful co-existence was maintained for a lengthy period. (Barrell 1998:68).

The accords may have developed with the trade, starting perhaps with the relationship between creditor and debtor, which could then be applied, adapted or developed to define commercial relations between investor and trader, trader and agent (given goods in consignment), seller (trader) and buyer (in case of credit sales), trader and shipper (goods entrusted to him being considered special purpose deposits). The financial facilities in particular were relevant and would have covered compensation for losses (of a collective caravan), surety and guarantee arrangements and the division of commercial profits. The agreements would have needed to distinguish between the actual trader and the investor whose rights and liability for risks were different. More complicated were the legal rules for (long-term) partnerships and those for various forms of cooperation, in particular in collective enterprises, such as the one designated as *ellutum*, "company i.e. joint caravan" (Veenhof 1997:343), which was a business venture or a joint

undertaking by several traders, among whom costs and losses were shared proportionally. What they were entitled to consisted of amounts called "one thirds" (*šalšātum*) and amounts still in the "fund" (*mišittum*) of the company, the latter usually being about double the former. The word "one third" was a technical term for a guaranteed share in the profits of an undertaking (Westbrook 2003:475).

The traders of Assur condensed the default procedures by introducing an effective contractual device, which offered the creditor the possibility of fast and efficient redress. In the acknowledgment of a debt, the creditor could insert the stipulation that "if the debtor does not pay in time, I (the creditor) will enter the house of a money-lender (*bet tamkārim*) and take the silver (plus the interest on it) (at interest) for his (i.e. the debtor's) account" (Veenhof 1997:350-351).

The contractual arrangement, ensuring that the interest due to the money-lender was paid, specified that the creditor who took out the loan should be liable for it to the investor while at the same time allowing him to charge it to the debtor. On default the latter would have to pay double since, he had exceeded his term and therefore already owed interest to the creditor. The rate of interest mentioned was twice the normal one found in the Assur trade, of 30% per year, "according to the rule of the *kārum*". This solution appears to be similar to the one available to guarantors who had to take out a loan in order to be able to meet their obligation of paying for an insolvent debtor. When doing so they could be authorised by a verdict of the City-Assembly, on the basis of a law inscribed on a stele, to charge the debtor "interest on interest" (Veenhof 1997:351).

In the Assyrian trade we begin to see in a small number of contracts the addition of a clause similar to that attested in Old Babylonian bonds, stating that "the bearer of the tablet is the creditor". It seems that when this clause was included, the intention was that title or ownership could be transferred. This can be better understood within the context of international trade seen during this time. It was there to transfer debts and settle accounts. However,

the more interesting aspect was that it served the practical needs of the caravan trade where merchandise or silver was sent from one place to the next and had to be entrusted to partners, agents and representatives and who therefore needed authority to handle it. The key aspect was that the record ends with the words: "He who holds the (this) tablet is *tamkarum*," suggesting that he was taking the place of the *tamkarum*. The actual *tamkarum* would not be present and the shipment and sale would have to be carried out by his representatives in various towns (Veenhof 1997:357).

The clause ensures that those handling the merchandise and the silver represented the *tamkarum* and had full powers of disposal during the various phases of the trade. This tablet moved with the goods and was valid only for this specific operation but was usable by the different entities holding it. As soon as the goal of the operation was achieved, that is, the silver had arrived at its destination, the tablet had "to die", i.e. became invalid. The addition of the phrase "the bearer of the tablet is the creditor/owner" may have been necessary to turn the tablet into a negotiable instrument or was only added to state unambiguously what was already implied by mentioning that the owner or creditor was *tamkarum*. This clause could allow the tablet to be exchanged or sold for cash. Silver could be obtained in exchange for outstanding claims (*bābtum*), which were not yet due (Veenhof 1997:358).

The notion put forward by Veenhof (1997:361) that the "tablet bearer's clause", which appeared in private commercial business transactions, is interesting in a modern context. In all these cases payment "to the bearer of his tablet" would take place "in the harbour where he is seen/met" (*ina kār innammaru*) where this was a stipulation meant not for local debts or credit but for long-distance trade. The creditor/investor and debtor/agent were supposed to meet in the *kārum* - the harbour or commercial district of a Mesopotamian town - where debts could be easily paid or balanced. We could consider this as an early form of Bill of Lading (B/L) and especially a negotiable B/L. These instruments evolved with the growth of international trade in the medieval world where merchants needed a way of knowing what had been loaded onto ships. To provide for this, they issued signed receipts to confirm the loading of

goods onto vessels and to verify the condition of those goods at the time of loading. With the growth of the mercantile system, these receipts came to be used as the title to the goods and the modern form of the B/L arose. The modern ocean B/L serves both as a receipt for the cargo and as a contract for transportation between the original owner and the carrier. The document also indicates ownership and in negotiable form, it can be bought, sold or traded while the goods are in transit. Currently as technology develops, it is certain that the ocean B/L will eventually give way. Both Electronic Data Interchange (EDI) and the internet allow for the transfer of data between different computer systems or computer networks and, as the technology continues to develop and the transaction is protected, title could also pass. In much the same way, tablets became obsolete as the use of paper became widespread,

3.4.2.3 Recording keeping

The texts themselves would not be sufficient for the organisation of this trade without the administrative accounting in the *kārum*-office where members had their "*contos*" (lit. "hands" or "shares"). Here they could make deposits ("to lay down silver/goods"), manage transfers ("to bring an item to the 'hand' of somebody else") and balance credits and debits ("to add to or deduct from somebody's 'hand'", *napālum*, "to balance"). Over time, the use of the "*tamkārum* -clause" and the "tablet bearer clause" may have been exploited to suit even better the needs of an overland trade in which time, distance and credit were vital issues (Veenhof 1997:360).

In the Old Babylonian era occurrences of these "tablet bearer clause" started later, the earliest examples being from the 18th century BCE, more than a century after those tablets used in the Assur trade. A major difference between the two clauses was that the creditor was always mentioned by name (even gods occur, if the temple extends a loan) and *tamkārum* was not used (Veenhof 1997:361).

While full negotiability could be considered, the significance of the wording is that the document became a transferable note. For example one of the texts

in this group states that the silver is to be paid "to the bearer of the tablet" (BM 81591).¹⁰ This clause becomes more often found in contracts from northern Babylonia from the reign of Hammurabi onwards, and indicates that a loan or claim for payment in the future of whatever nature could be passed from one creditor to another, or from a creditor to his agent (Van de Mieroop 2002b:166).

Many were small, possibly consumption loans, frequently payable at harvest time, both from private money-lenders and temples, others have a commercial or institutional background. There are examples in many late Old Babylonian records, which deal with traders who had received wool from the palace. The traders, in the due time, had to pay silver "to the bearer of their tablet". However, in some instances the tablet was not negotiable and payment had to be made "to the envoy of the palace" or a named representative of the institution who had been given the tablet. Similarly where silver was given by an authorised official to a trader for making a business trip along the Euphrates, payment had to be made at the return of the caravan to a named scribe. Other records prescribe payment to "the bearer of his tablet". While the negotiability can be restricted as set out in one case, nevertheless both clauses are understandable in an institutional environment where different officials needed authorisation to act as creditor (*tamkārum*), with the responsibility to collect debts due to the institution they represented (Veenhof 1997:361).

Where the "tablet bearer's clause" appeared in a more private commercial context, payment "to the bearer of his tablet" was specified in the harbour where he was seen/met" (*ina kār innammaru*), suggesting water borne trade. This stipulation was not meant to support local debts or credit but was there for inland trade long-distance trade where creditor/investor and debtor/agent were supposed to meet in the *kārum*, that is, the harbour of a Mesopotamian town where debts could be easily paid or balanced (Veenhof 1997:361).

¹⁰ This tablet is discussed more fully in Chapter 6.

Comparing modern practice in trade finance, traders need flexibility and the B/L incorporates consignment details and the name of the destination port.

3.4.2.4 *Financial return*

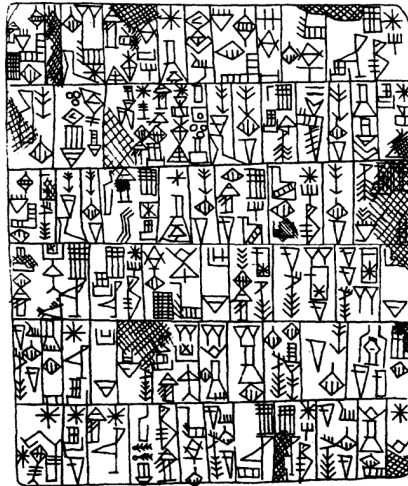
An explicit numerical indication of the interest rate in Old Babylonian loan documents was not required and could be replaced by certain phrases, such as *máš gi-na*. It is possible that these phrases were understood to indicate not just that interest was due but also the actual rate of interest, which was commonly known. The customary interest rates in the Old Babylonian Period were the same as those attested for the Ur III Period (Garfinkle 2004:10).

Rates of interest remained steady but were excessive: 20% on loans in silver, 33% on barley, as mentioned above. The need for loans was highest in advance of the harvest but repayment was expected not on an annualised basis but after the harvest when the amount to be repaid would be largest because barley was in plentiful supply and thus cheap. The consequential loss of land to creditors, meant indentured service was almost certain to follow and with the possible enslavement of members of the debtors' families (Adams 2009:8).

3.4.2.5 *Debt burden and redemption*

There is evidence from the earliest periods in Mesopotamian history that an important feature of redemption from the consequences of debt bondage and the forfeiture of lands was the periodic royal proclamation of economic "order and justice". Records of Mesopotamian lawsuits show that these restorations of the status quo ante were indeed enforced in practice and were not unusual, being proclaimed by rulers as part of their pledge to maintain economic justice. The proclamations were found in all regions and all periods - *amargi* and *nig.šiša* in Sumerian, *misharum* (*mīšarum*) in Babylonian, *andurarum* in Assyrian, *shudutu* in Hurrian (the language spoken in Nuzi, to the north of Babylon) and related terms elsewhere in the Near East (Hudson 1993:14).

Similar tensions can be seen today on a global scale when considering different forms of debt relief for heavily indebted countries including rescheduling, refinancing, buying back and outright debt cancellation (Pabst 2000:15).



A drawing of the cuneiform transcription of a debt cancellation (amargi law) by Enmetena ruler of the Sumerian city-state of Lagash, c. 2400 BC, the first known legal proclamation. (Original in the Louvre.) From *The Lost Tradition Of Biblical Debt Cancellations* Michael Hudson, PhD. 1993

Figure 3: A drawing of a cuneiform transcription

By this period the burden on the rural economy led the ruler to prevent, or at least to focus on the process. Acts of *mīšarum* were announced with increasing frequency, granting forgiveness of certain categories of loans relating to the palace economy. However, the timing of these acts depended on the ruler and perhaps with the burden of various conditions debtors were rarely fully compensated. It seems possible that the creditors, having powerful connections with local officials and being entrepreneurs serving many aspects of palace business, were a group that the palace would be cautious to oppose and would only take limited steps in enforcement (Adams 2009:8).

3.4.2.6 Tax collecting

Another component in the role of merchants related, as we have seen, to the central role played by the merchants of Larsa in the administration of tax-

collecting as tax-farmers. Borrowing from those examples used by Rim-Sin of Larsa, the palace of Babylon probably introduced a system for the collection of taxes that also relied on the merchants (Van De Mieroop 1992a:114). Under the Babylonian occupation the merchants of Larsa collected garlic and onions for taxes from the gardeners who also provided dates (Van De Mieroop 1992b:176).

It is possible that all inhabitants of the areas conquered in the south had to pay taxes to the palace in Babylon. The royal treasury collected barley and silver, which could be used as currencies but not all the citizens had access to those commodities. Certain occupations such as gardeners, fishermen and shepherds, could only provide payments in kind. These payments were collected by the merchants who converted the dates, vegetables, fish and wool into silver for the palace. They were given the right to market these products, as long as they provided set payments in silver to the palace. In the case of Larsa, the crown seems to have been rather lax in the collection of its dues and waited several years to demand the silver, allowing these merchants to profitably invest the capital in short term loans. The merchants worked under a group of “overseers of five.” and were under the authority of a *wakil tamkāri*. The overseers were only attested for the larger cities of the state and they were directly responsible to the king. In a letter to Sin-iddinam, Hammurabi summoned Šēp-Sin, overseer of the merchants of Larsa and Sîn-muštāl and overseer of the merchants of Ur, to Babylon to deliver large amounts of payments overdue. In the northern Babylonian town of Sippar, the *wakil tamkāri* seems to have been the head of the civil administration whose duties involved legal and administrative matters but in the south those aspects of his duties are not documented (Van De Mieroop 1992a:114).

3.5 NEO-ASSYRIAN PERIOD 934-609 BCE, NEO-BABYLONIAN PERIOD 626-539 AND EARLY ACHAEMENID PERIOD 550-400 BCE

Two important families were involved in a range of business activities in the middle of the first millennium; the Egibi family in Babylon and the Murašu family in Nineveh. Indeed they could almost be described as “firms” in the modern sense but although they were money-lenders it is difficult to describe

them as banks as they did not receive deposits and on these undertake money lending activities (Goldsmith 1987:10ff). Wunsch (2002:247) referring to R. Bogaert in his book on the origins of banking reached the conclusion that despite the wide range of their financial activities, the label “banker” would be misleading in its strict sense of the term. A key feature of banking was absent: there is no evidence that the Egibis borrowed money to lend at a higher interest rate so as to achieve a profit from the margin (Wunsch 2002:247).

Nevertheless, financial transactions involving short or long-term silver loans account for a large proportion of the surviving documentation from some private archives. When the Egibis in particular appear as creditors they seem to have worked with their own money. Furthermore, whether they lent or sometimes borrowed money, it was almost always at the prevalent 20% annual rate. So while Egibis appear typical for their time, they were operating on a larger scale than seen in earlier periods with interest-bearing loans and advances secured by pledges representing only one aspect of their wide-ranging business activities (Wunsch 2002:247).

3.5.1 The Promissory Note *u'iltu*

The main instrument for recording debts in Neo-Babylonian times was a new type of document, the promissory note, sometimes referred to by its Akkadian name, *u'iltu*. Typical promissory notes will state only the obligation of one party to pay or render a service to another. As with modern promissory notes the underlying transaction was not given and thus the *u'iltu* may not have been a debt note reflecting an earlier loan (Jursa 2002:197).

In the case of the Egibis, nearly half of their vast archive (of which at least 2000 tablets have survived) consists of records that employ the *u'iltu* formula. The Egibis even used them between family members in order to keep their paternal and maternal inheritance shares separate though they were invested in the same business. In this instance most of the *u'iltus* do not record financial transactions but rather concern deliveries or advances in the context

of wholesale commodity trade, food processing, management of agricultural land and tax collection. The referencing of fees and taxes by the Egibis, as well as showing agricultural equipment and draft animals, should be considered in the context of the commodity trade that formed the core of the family business and generated most of its income. The Egibis used the techniques of their time; advances and collections, forward purchases of crops and various delivery commitments but these devices had little to do with banking in the sense of lending money at interest purely for its own sake as a self-contained activity (Wunsch 2002:248).

3.5.2 Bow land, *bit qašti*

One group of agricultural producers had a demonstrably high average rate of indebtedness: the owners of military “fiefs”, so-called “bow land”, *bit qašti*, (i.e. land granted by the king to which the obligation to outfit an archer (CAD: s.v. *qaštu* (*bow fief*), Q:147)¹¹ was attached originally. They appear in the Murašû archive from Nippur, roughly from the second half of the fifth century BCE. These farmers owed the king military service or compensatory payments but in many cases could not meet their obligations through their own endeavours. Many of them turned to the Murašû “firm” who may have operated with the consent of the royal administration. The Murašû’s loans allowed the owners of the *bit qašti* to pay their dues. In return, they had to pledge their land to the firm who had the usufruct on it and as we shall see in *Chapter Six* could then rent back to the owners creating in effect a double pledge (Jursa 2002:212).

Besides this, private archives reveal several other reasons why people got into debt. Most common were the loans issued to small farmers, mainly consumption loans in the wake of crop failures and, with regard to agricultural advances of seed grain and draft animals, those that had to be repaid in kind. Another typical reason for running into debt was the payment of dues and taxes that were linked to certain holdings including fees for access to irrigation and maintenance of the infrastructure. When the harvest was not sufficient to

¹¹ CAD = The Assyrian Dictionary of the Oriental Institute of the University of Chicago.

enable these obligations to be paid on time, debts mounted up (Wunsch 2002:249).

Economic pressure on the owners of *bit qašti* must have been high even in peaceful times but would have increased dramatically during periods of warfare. An example of this was the contest for the throne that took place during the first year of Darius II. As a result, the number of loans made by the Murašûs and the number of properties mortgaged to them increased creating widespread indebtedness. However, as a note of caution, the Murašû archive is the only source from the first millennium Babylonia that attests to widespread indebtedness among (parts of) the rural population (Jursa 2002:213).

3.5.3 Return on money lending

Creditors extended loans, certainly to obtain interest but mainly were granted to economic peers without interest, possibly to improve the network of relationships and with it to enhance business opportunities. Lenders might also provide loans with the intention of obtaining the property or other assets secured by a debtor in difficulties, especially relating to agricultural matters. Through establishing an antichretic facility, the lender became *de facto* landlord or lessor. This created a dependency system without the need to actually transfer legal title to the property. As was the case in earlier periods of Mesopotamian history loans might be extended to obtain debtor's labour in lieu of interest (Wunsch 2002:250).

Archives show that interest-bearing debt notes could have long lives and were counted among the inheritable assets of the creditor's family. The claims themselves were transferable, including the income from an antichretic pledge and could be ceded by the creditor to a third party without the need to renew the original record or for the debtor to consent. However, there is no indication that debt notes themselves could be traded (Wunsch 2002:249).

3.5.4 Partnerships

Business partnerships were designated as *harrānu* — literally “(business) journey”. (CAD: s.v. *harrānu* ((2) *trip, journey, travel*, (3) *business trip*, (5) *business venture*, (6) *business capital*, H:106). The terminology clearly originated in overland trade but it could be employed to refer to all kinds of business partnerships. However, it is likely that the most important purpose was to support regional and long distance trade but business relationships involving beer brewing, agriculture, brick making and money lending are also found. Applicable record types include texts constituting a partnership, records resulting from the ongoing business of a partnership and dissolutions of partnerships (Jursa 2005:43).

The formation of a business partnership was phrased by using the formulae of promissory notes. If only one partner invested capital and the other partner(s) was/were to do the work, the principal clauses of these texts ran as follows: **(1)** *x kaspu ša A ina muhhi B ana harrāni* **(2)** *mimma mala ina muhhi ippušu ahi (zitti) B itti A ikkal* “**(1)** x silver is owed by B to A for a business partnership. **(2)** in everything he (B) makes of that (capital), he shall receive an equal share with A” (Jursa 2005:44 quoting Lanz 1976).

If two partners invested money and shared the work, the operative clauses were as follows: **(1)** *x kaspu ša A u y kaspu ša B itti ahāmeš ana harrāni iškunā* **(2)** *mimma mala ina āli u šēri ina muhhi kaspi d (x+y) ippušū ahātu šunu* “**(1)** (A and B) have jointly invested in a business venture x silver of A and y silver of B. **(2)** They share equally in everything they make of that (capital) in the city and the countryside” (Jursa 2005:44 quoting Lanz 1976).

The basic structure of these texts can be expanded if there was more than one investor and/or more than one non-investing entrepreneur expected to act as employee. When an investor also participated in the running of the business jointly with non-investing partners, a promissory note was drawn up in which this investor appeared as creditor *and* as debtor at the same time (Jursa 2005:44).

The dissolution of partnerships often came later usually at the death of one of the partners. Typical clauses refer to the settlement of accounts for example: *epūš nikkassīšunu ša kaspi ša harrāni ... itti ahāmeš qattû / ipušū*, “the settlement of accounts between them for the silver belonging to the business partnership is complete” (or: “they settled their accounts with each other for ...”) but the clause was not obligatory. Remaining clauses may refer to the dividing of the partnership’s property, to the exclusion of any further claim, and to oaths (Jursa 2005:44).

Wunsch (1999:394) sets out a specific instance where, through a series of documents, we can follow the progress of both one plot of land owned by one individual and his descendants of the Egibi branch. We can begin with Šulaja. From the records he probably did not inherit or own arable land but was engaged in commodity trade, especially in the rural areas near Babylon in long-standing partnerships with other traders.

His son Nabû-ahhē-iddin continued the business and was engaged in *harrānu* partnerships with other traders. One partner supplied the financial backing, while the other oversaw the field work, i.e. lending the silver to farmers, collecting the payments due in commodities at the time of harvest in the countryside, negotiating with officials about taxes and transport fees, renting boats for shipment and perhaps storing and selling the products, although texts do not show this (Wunsch 1999:395).

Each partner shared in the profits, *utru*. This condition distinguishes these contracts from normal interest-bearing loans.

3.5.4.1 *Specific partnership*

From various contracts, which are housed in the British Museum, we can follow particular transactions. Beginning with a sales contract (BM 41399) Nabû-ahhē-iddin purchased a 24 *kur* estate (about 324 000 square meters, 2300 x 140 m) located on both sides of the New Canal (*nāru eššu*) opposite

the Enlil Gate outside the walls of Babylon. It was the largest plot of land ever attested as having been bought by a member of the Egibi family. The contract was drafted in the presence of high ranking witnesses: the governor (*šakin tēmi*) of Babylon and a team of eight royal judges and four scribes. All of them impressed their seals on the margins of the tablet, an indication of the transaction's importance (Wunsch 1999:401).

Four brothers sold the field to Nabû-ahhē-iddin and as part of the arrangements handed over to him the previous purchase contract called *ummi eqli* "mother of the field" to attest to the legitimacy of the transfer. It was a regular practice to hand over such records (or copies of them) to the buyer; the vendor often was obliged to do so under the terms of the contract. PN (seller) will bring and give the original document of the field to PN₂ (buyer) (Wunsch 1999:402).

Another tablet (BM 32184) shows a third person acting as a front man for the four brothers and was drafted two years after Nabû-ahhē-iddin had bought the field. Some 41 years later, when Nabû-ahhē-iddin's son and grandsons divided up their shares in this field, the respective plots were measured and mapped (BM 30627). By this time the area, now cultivated with date palms, represented more than one fourth of the total surface, stretched along both sides of the canal. It seems that at this point, date palm cultivation had reached the limit set by the irrigation facilities. This is indicated by a stipulation in a rental contract (BM 31401) in which one of the tenants was permitted to cultivate an area in addition to his lot but had to water this land with buckets (i.e. it could not be irrigated directly) (Wunsch 1999:402-403).

BM 32184 also shows that Nabû-ahhē-iddin had bought the field and established a half-share *ahi zitti*, with Nergal-ušallim, the son of Suma-iddin reflecting the appropriate clauses in *harrānu* records, in which, usually, two entrepreneurs agreed to undertake certain business affairs together and to share the profits and losses. Nabû-ahhē-iddin assigned a half share to Nergal-ušallim perhaps because the money paid for it had originated from

their joint business or Nabû-ahhē-iddin at this point in his career did not yet possess the means to buy a substantial plot (Wunsch 1999:403).

The property was held in common after its purchase and rented out by Nabû-ahhē-iddin and his partner to a series of tenants until it was finally divided among members of both families after Nabû-ahhē-iddin's death (Wunsch 1999:405).

Finally by looking at BM 31959 drafted during the first years of Darius's reign, we can see the property situation after Nabû-ahhē-iddin's death. According to this document he had transferred his field at the New Canal to his wife Qudāšu and granted her lifetime usufruct. In addition, his three sons were designated as beneficiaries after her death and were to inherit "according to their shares", i.e. the oldest son was to receive a double portion. We therefore may expect Qudāšu to have received the field's yield after her husband's death, for example, tenants owed her dates as rent for the field at the New Canal. One tenant was in the rent contract BM 31401. This fragmentary text seemed to contain an additional stipulation to a previous contract indicating that the tenant was assigned a lot that could not be reached by normal irrigation but had to be watered with buckets. The resultant crop was shared with Qudāšu (Wunsch 1999:406).

To conclude texts show that the Egibi firm sold, bought and traded properties, fields and slaves. It also engaged in money lending operations, accepting money on deposit, giving and receiving promissory notes, paying debts on behalf of its clients, financing and founding commercial enterprises. It played an important role not only in internal trade but also in long-distance commerce (at least, in Elam and Media). Some Egibis were in the king's service, including the firm's head, Nabûahhe-iddin, a royal judge who enjoyed good relations with Neriglissar, Nebuchadnezzar II's son-in-law and future king (Dandamayev 1996:201).

3.5.5 The Murašu family

The activities of the house of Murashû are attested in about 800 documents drafted in Nippur and a few other cities between about 460 to 400 BCE. They indicate the changes introduced by the Achaemenid administration into property management in the Nippur region. Babylonia's land was divided into allotments and distributed to royal officials and collectives of soldiers. They were not farmers and thus both these groups turned their land over to others, including the Murašu firm, to cultivate. Rentals were paid to the holders as well as taxes to the state treasury. The Murašus also rented crown properties and estates belonging to Persian nobility, paying rental income to the owners and taxes to the palace by selling their produce for coarse silver (Dandamayev 1996:202).

In turn, the Murašu firm sublet its leased lands to tenants, along with livestock, implements and seed. Beginning as an institution of agricultural credit, after a few decades it began to take the landowners' place, concentrating the land into its own hands (Dandamayev 1996:207).

3.6 CONCLUSION

From the early beginnings, merchants, as money-lenders, played an important role in the economic life of Mesopotamia, especially in relation to the temple and palace centres. They tended to enter into business arrangements on behalf of the great estates and came to use sophisticated financial techniques to conduct profitable private business, entering into financial contracts including, giving and receiving loans, acting as guarantors, undertaking agency duties and acting as sureties.

In the early periods the records show us that they were importers of essential raw materials and luxury goods, apparently for the court of the king and the temple of the god. Trade seems to have been conducted on a purely administrative level and private initiative or gain was not openly admitted.

During the Sumerian Period, the city-temple complexes were the central organs controlling the economic surplus. Private household production existed alongside that of the temples but seems to have been orientated towards subsistence needs.

Under Rim-Sin of Larsa a policy was initiated where merchants become the tax farmers responsible for conversion into silver or barley of all payments-in-kind from all gardeners, fishermen and shepherds. This would have given opportunities for private endeavour with the prospect of profit.

This continued during the Old Babylonian Period with the palace now beginning to use merchants extensively to collect taxes and to market the surpluses produced on palace owned land. The agricultural surpluses were given by the palace to the merchants who converted them into silver for the treasury. The system must have given the merchants considerable economic power and access to significant quantities of silver. Given the leads and lags in the collection of taxes by the palace the merchants could use the silver for their own profit for several years.

Trade finance facilities could be provided to merchants on the strength of temples and palaces supplying commodities enabling them to undertake trade transactions. At the very least the merchant would expect the income generated to be sufficient to repay their creditors but ideally a surplus would be created giving the merchant a profit on the venture.

For practical purposes, we can conclude that from the earliest periods commercial loans differed in operation from agrarian lending. They were expressed in silver whereas agrarian loans were denominated and repayable in barley or other crops (but could be valued in the silver equivalent). The basis of the rate of interest commercial loans was standardised at 12/60ths per year. Using a modern concept the rate would be expressed in percentage terms i.e. 20%. However, such terminology would not be known in the ANE. Agrarian loans, typically centred on barley, would attract a cost of a third to

half the value of the nominal principal. Again, for comparison purposes, if we relate this to a modern concept of an interest rate, it would be shown as 33.33%. These rates continued throughout the period.

In the Old Babylonian and Assur periods, the concept of the modern practice of negotiability of the instrument advances. Both during the Assur period and in Old Babylonian bonds a small number of contracts contain a clause specifying that "the bearer of the tablet is the creditor". While it is difficult to show that the tablets themselves were transferred, nevertheless on the face of it the holder of the tablets need not have been involved in the original transaction. Additionally the Assur trade went beyond typical commercial and agrarian facilities of borrowers and lenders to give multiple contractual roles to the various participants.

By the time we come to the middle of first millennium we find two important families involved in a range of business activities; the Egibi family in Babylon and the Murašu family in Nineveh.

Negotiability continued into Neo-Babylonian times with, in modern terminology, the promissory note but more usually referred to by its Akkadian name, *u'iltu*. Full negotiability means that the reason for the underlying transaction would not be given. In this period, it is possible that the *u'iltu* may not have been linked to any loan facility but be a simple promise to pay thereby creating the debt. It is difficult to say that this was a new innovation; it should probably be seen as the natural extension of the tablet with the words "the bearer of the tablet is the creditor" which began to be utilised during the Old Babylonian Period.

In the Neo-Babylonian Period royal officials and collectives of soldiers turned their land over to others to cultivate, including the Murašu firm. Rentals were paid to the holders as well as taxes to the state treasury. The Murašus also rented crown properties and estates belonging to Persian nobility, paying rental income to the owners and taxes to the palace by selling their produce for silver.

The Egibi firm enjoyed a different business model buying and selling property, fields and slaves on their own account. They also acted as bankers accepting deposits and undertaking lending operations. They accepted promissory notes through paying debts on behalf of their won clients and financed commercial enterprises. Additionally they founded their own businesses. The firm played an important role in different trade activities both within Achaemenid Babylonia, and also in financing international trade. Some Egibis were in the king's service, including the firm's head, Nabûahhe-iddin, who was a royal judge.

It would be realistic to conclude that, although by the time we come to the Neo Babylonian Period we find sophisticated financial tools in use and instruments, which would be familiar to us today. These were not completely new developments. Instead, each new product built upon and, when appropriate, adapted what had been apposite previously. There can be little doubt that products and services were enhanced to suit the evolving requirements by practical and reward orientated business people.

CHAPTER FOUR

FINANCIAL INSTRUMENTS

4.1 INTRODUCTION

Variations on “modern” financial instruments are found from the earliest times. This chapter will consider the significant earliest written documents.

These are examples of the instruments that will be considered in this chapter with the modern definitions set out below. As will be seen, in the absence of “money”, as we would understand it today, the ancient classifications of the instruments will diverge depending on the period and circumstances.

The giving of credit goes back to earliest recorded times where people grew, produced, bought, sold and traded goods, credit would quickly follow.

This chapter will consider the wide range of financial instruments found in the Ancient Near East during the periods under consideration including loans and giving consideration to lending evidenced by Promissory Notes. The definition of Bills of Exchange is given below to contrast with Promissory Notes but it is highly unlikely that Bills of Exchange as used today were found before the Middle Ages and certainly not during these periods.

4.1.1 Loans¹²

A loan is a written or oral agreement undertaken for a temporary transfer of a property (usually money) from its owner (the lender) to a borrower who promises to return it according to the terms of the agreement, usually with interest for its use. If the loan is repayable on the demand of the lender, it is

¹² These definitions are [Online]. Available as shown [Accessed 22 October 2012].

called a demand loan. If repayable in equal monthly payments, it is an instalment loan. If repayable in lump sum on the loan's maturity (expiration) date, it is a time loan. Banks further classify their loans into other categories such as consumer, commercial and industrial loans, construction and mortgage loans and secured and unsecured loans. A written promise to repay the loan is called a promissory note.¹³

4.1.2 Bills of Exchange

In Great Britain, a bill of exchange is defined by the Bills of Exchange Act 1882 as follows:-

“A bill of exchange is an unconditional order in writing, addressed by one person to another, signed by the person giving it, requiring the person to whom it is addressed to pay on demand or at a fixed or determinable future time a sum certain in money to or to the order of a specified person, or to bearer”. Great Britain (1882) Bills of Exchange Act 1882.¹⁴

4.1.3 Promissory Note

A promissory note is defined as a written promise by a person (variously called maker, obligor, payor, promisor) to pay a specific amount of money (called "principal") to another (payee, obligee, promisee) usually to include a specified amount of interest on the unpaid principal amount (what he/she owes).¹⁵

4.1.4 Rate of Interest

At its basic level the rate of interest is usually the annual price charged by a lender to a borrower in order for the borrower to obtain a loan. This is usually expressed as a percentage of the total amount loaned.

¹³ <http://www.businessdictionary.com/definition/loan.html>

¹⁴ <http://www.lawteacher.net/contract-law/essays/characteristics-of-a-bill-of-exchange-law-contract-essay.php>

¹⁵ <http://legal-dictionary.thefreedictionary.com/Promissory+note>

In Mesopotamia, the level of interest rates on loans was high and reflected the influence of customs on most economic relations. It seems that the rate did not change from the early third to the early first millennium. In Babylon it was at the rate of 1 shekel per mina per month equating to an annual rate for a loan of 20% for loans repayable in silver and at the rate of shekels per mina for three months corresponding to an annual rate of 33.33% for grain loans. The key influence may have been the customary share of rent of one-third, although the annual rate appears to have been charged while many loans were repayable after a much shorter period between seeding and harvest time (Goldsmith 1987:10ff).

Rates were higher in Assyria, ranging from 25% to 33.50% for silver loans and up to 50% for grain loans. Silver loans among traders seem to have carried higher rates than the standard rates, which were applied to consumption loans.¹⁶ Even higher rates seem to have been charged on small loans to distressed borrowers. In some cases the effective rates of interest were increased by the practice of deducting interest in advance. Compound interest seems not to have been uncommon though forbidden in Hammurabi's law. On the other hand some of the loans made by the temples were interest free (Goldsmith 1987:10ff).

4.1.5 The Sale Contract

A sale contract is a formal contract by which a seller agrees to sell and a buyer agrees to buy, under certain terms and conditions spelled out in writing in the document signed by both parties. An invoice can be a contract of sale. The contract can also be called agreement of sale, contract for sale, sale agreement, or sale contract.¹⁷

¹⁶ Express or implied contract under which a lender hands over certain consumable goods (such as food, fuel, material) to a borrower. The borrower is obligated to return the goods of same or equivalent quantity, quality, and type within a specified or reasonable period.

<http://www.businessdictionary.com/definition/loan-for-consumption.html>

¹⁷ <http://www.businessdictionary.com/definition/contract-of-sale.html>

4.2 EARLY PERIODS – PRIOR TO 2400 BCE

4.2.1 Loans

The earliest evidence of a loan in the broad sense was actually the cause of a war. In a royal inscription Enmetena who ruled Lagash shortly before 2400 BCE, describes how the war began over an agricultural area that both the city-states of Umma and Lagash in the south of Mesopotamia claimed as their own. The royal inscription describes the history of the conflict relating to a border dispute. The background to the war is not a part of this investigation other than to say after some forty or fifty years the grain owed, yields plus the interest charged, had accrued to the huge amount of 8,640,000 *guru*¹⁸. The inscription shows us that even as early as the Pre-Sargonic Period the concept of interest, apparently even compound interest, was fully established; Lagash felt that a debt was due, on which interest was charged when the loan was not paid (Van de Mieroop 2002a:63).

4.2.1.1 Credit

From this early beginning we can identify the origin of an aspect of credit, which came to be seen throughout Mesopotamian history viz. when a debt due to an institution, for example, rents on fields granted in usufruct, were not paid, the arrears were deemed to have been “loaned” to the debtor. Added to this we find that “interest” was charged, or more accurately, acknowledging that this arrangement became by default a “loan”, then an amount of (silver or goods) “lent” needed to be repaid with an increment added to it. In this way, by the late twenty-fifth century BCE, the concept of interest seems to have been established. Thus while loans, as understood today, were not yet documented, arrears in payments owed to the institutions were treated as advances, on which interest could be charged. By extension we could deduce that interest on a loan was regarded as equivalent to a fee charged, for instance, to a herdsman who grazed his animals on rented fields. Van de

¹⁸ grain heap; granary, silo; a capacity measure, ca. 909 liters (cf., gur, 'basket'). Sumerian Lexicon Version 3.0 by John A. Halloran [Online]. Available at <http://www.sumerian.org/sumerlex.htm> [Accessed 22 October 2013].

Mieroop (2002a:64) speculates that this may explain why the rate of interest on barley loans was set at 33% by the law codes. The rental fee on the use of a field for farming often was set at a third of the yield i.e. the same rate (Van de Mieroop 2002a:64).

4.2.1.2 Interest rate levels

Hudson (2000:147) provides a key to explain early interest-rate levels. During the earlier periods and those that followed, the Mesopotamians used the sexagesimal measuring system where the standard weight for measuring silver, the mina, was divided into 60 shekels. Taking this as the standard numerical base and merging this system into business transactions, the rate for commercial debts was set at one shekel per silver mina per month. As the shekel weighed 1/60th of a mina, this worked out annually to 12/60ths but the point of reference was 60 months. Compounding did not begin until the mina of capital had fully reproduced itself by accruing 60 shekels. In Sumer's sexagesimal system of weights and measures, monthly accruals of interest at one shekel per mina were the simplest and most convenient fraction to compute (Hudson 2000:147).

Considering the Sargonic/Old Akkadian texts and from a reading of later texts, *ur₅-šè* can be compared with the Akkadian term *hubullum*, meaning in the relevant context an interest-sharing loan. *Hubullum* remained in use throughout Mesopotamian history, for over 2000 years but the meaning of the word seems to have changed. Van de Mieroop (2002a:64) speculates that if *hubullum* means "interest-bearing (grain) loan" in the Old Babylonian Period (early second millennium BCE), it does not necessarily indicate the same thing in the earlier Old Akkadian Period. However, by about 1500 BCE the term seems to have developed from a "loan" (with interest) to becoming the actual "interest" itself (CAD s.v. *hubullu* A ((2) interest), H:216).

We may find that the same is true for the Sumerian equivalent and the *še ur₅* of Old Akkadian texts does not necessarily refer to an interest-bearing loan. Later, in the context of the Ur III Period, when (*še*) *ur₅-ra* loans were common,

the translation “interest-bearing loan” is not applicable. Again important changes in the meaning of that term occurred between the Ur III and the Old Babylonian Periods (Van de Mieroop 2002a:65).

4.2.2 Pledges

The most complex form of legislation and the widest in scope were debt release decrees, which cancelled not only taxes and debts owed to the palace but also debts arising out of private transactions, as well as land and persons pledged, sold, or enslaved in direct consequence of debt. They could apply to particular cities or to the population as a whole. One manner of referring to them was to say that the king had “established equity for the land” (Westbrook 2003:15-16).

Continuing with the theme of pledges there was remarkable continuity during the earlier and subsequent periods. Pledges could be immovable and movable and could comprise land or persons, including wives, sons, daughters, male or female slaves and even the debtor himself. Pledge of valuable movables is mentioned in letters but not in legal documents. It is assumed a legal instrument for movable property was not needed as deposit with the creditor was sufficient (Westbrook and Jasnow 2001:64).

Pledges continued to remain important and during the Old Babylonian Period we find evidence for pledges; possessory (delivered from the outset) and hypothecary (a legal right over a debtor's property that remains in the debtor's possession)¹⁹ (Westbrook and Jasnow 2001:65).

Many of the pledges were antichretic meaning, in this context that the income from the pledge served as interest. Such a pledge was said to be interest for

¹⁹ As codified under Roman law, hypothec was a type of security for a debt in which the creditor had neither ownership nor possession. It arose in cases in which a renter needed the use of the things that he pledged as security for his continued payment of rent, usually tools or equipment necessary for working the land he was renting. Possession could be taken by the creditor only when the debt, or, in this case, the rent, was not paid. Hypothec. 2014 *Encyclopædia Britannica Online* [Online]. Available at <http://www.britannica.com/EBchecked/topic/280082/hypothec> [Accessed 07 October 2014].

the principal (*máš.bi.šè*) or was designated by a technical term (*mazzazānum*). Non-antichretic pledge of land might be hypothecary, meaning that the creditor only took possession on default (Westbrook 2003:405).

Indeed a further formula could be added to show that the pledge was antichretic. Pledges were often made where the intrinsic value of the article was equivalent to the amount of the debt. However, an antichretic pledge was more common where the profit of the pledge was offset against the interest of the debt. We find that as early as the Sumerian Period, when applied to land the standard phrase was “for it’s (the loan’s) interest” (*máš.bi.šè*). and the creditor would have the usufruct of the field (“will eat”) for two years. On the other hand for persons, the following formula was found: “the slave does not have her hire; the silver has no interest” and in later periods the debtor further promised to pay the maintenance of the slave he had pledged for a loan expressly stated to bear no interest (Westbrook and Jasnow 2001:65).

Antichretic loans were given on the condition that the creditor could use the land or the building belonging to his debtor until the amount loaned had been repaid in full. Antichretic loans are still found in countries using Roman law today. In South Africa, it is still a contract whereby a debtor pledges (i.e., conveys possession but not title) real property to a creditor, allowing the use and occupation of the pledged property, in lieu of interest on the loan (Lee 1946:204).

4.3 3RD DYNASTY OF UR - UR III PERIOD

4.3.1 Loans and credit

Numerous records survive from the Ur III Period and it is in these documents that we can see that credit played a vital role in the economy. While texts from the earlier periods may be less extensive, credit was equally important throughout ancient Mesopotamian history. The availability of credit was critical in economic management at every level of society, from peasants and craftsman to the largest landowning institutions of the state (Garfinkle 2004:1).

Antichretic loans continued during this period and these loans can be divided into two broad categories, individual and group. The texts show us that the creditor sought to acquire labour. In some cases, the labour involved was that of an individual while in other cases the labour involved was that of a group. Antichretic loans were now set out frequently as advances in silver, which was a development from its origins in the agriculture based economy of the Sumerian Period. The labour pledged as interest, or as surety, on these loans was that of a skilled dependent labourer, or a slave, of the debtor. Additionally antichretic loans also involved advances of barley and the interest was paid in agricultural labour controlled by the debtor especially where the labour involved a group (Garfinkle 2004:5).

4.3.1.1 Ur₅-ra loans

During the Ur III Period the *ur₅-ra* loans of the temple households could have been an attempt on the part of the institutions to help maintain their own workforce and to prevent that workforce from becoming indebted to non-institutional creditors. (Temples are discussed in more detail in *Chapter Five*). Perhaps, the so called interest-free loans involving non-institutional households could be shown as commissions for the production of finished goods. It is possible that during Ur III the antichretic loans developed to manage the scarcity of agricultural labour. However, credence should be given to the possibility that many loans were issued in the hope of achieving financial gain through the recovery of the principal plus interest, as, even in an era of acute labour shortages, the value of the loans could well have exceeded the potential value of the debtor's labour and land by many times (Garfinkle 2004:8).

4.3.1.2 Promissory notes

Further consideration must be given to the early development of promissory notes, the penalty clauses being a strong indicator of the desire of the creditor to recover the principal and interest, rather than the labour or land of the

debtor. In addition records make it clear that satisfactory outcomes to unpaid debts did in fact involve repayment of the principal plus interest, especially as many of the debtors were prominent members of the hierarchy of the time and these men were unlikely to be forced into default for their land or labour (Garfinkle 2004:26).

4.3.1.3 Loan structures

Loans seem to have originated from different sources and a variety of businessmen and women could take loans. Loans could be given by single individuals, by groups of people and by the major institutions of the day, for example, the temple, either acting on its own, or by the temple together with private businesspeople. As are found in modern financial agreements all components were covered including the reason for loan, which could be the commercial activity supporting the provision of the commodity and/or goods, interest rate, time of repayment and form of repayment. Silver was the commodity lent in varying amounts from 2.6 grams to 500 grams. Less common were loans of barley from 100 litres to 14,100 litres and very rarely attested were other commodities. Some mixed loans of silver and barley were preserved as well. The loans had to be repaid in silver or perhaps with a product such as fish, grain, sesame or dates, giving rise to the need for the counter value of the commodity in which repayment was made. The value of those products as reimbursement was to be decided at the time of repayment, according to the current market rate (Van de Mieroop 1992c:204).

Interest would be charged typically at 20% but rates of 25% and 10% were also found. Some texts can also state that there was no interest to be charged or omitted the rate charged. Usually there were different interest rates for loans of silver and those of barley in the Old Babylonian Period, as mentioned the former being 20%, the latter 33.3% but at Ur all preserved loans of barley were interest-free (Van de Mieroop 1992c:204).

We have other interpretations of interest-free loans where from the repayment amount specified, the “interest” could be inferred. For example, from the

record of the large loan taken out by one Dumuzi-gamil and his partner Šumi-abiya, we can deduce from the amounts to be repaid. The rate Dumuzi-gamil was charged was 23.9%, while Šumi-abiya was charged 30% over the entire five year period of this particular loan. In other examples an interest-free loan could be given but when the date of repayment was not met, the debtor was supposed to add an interest of 20% to the borrowed capital. From this we can infer that when the interest rate was not recorded in the loan document, it could have been agreed upon verbally (Van de Mieroop 1992c:204).

4.3.1.4 *Interest calculations*

It is difficult to be definitive about the basis of calculation of interest. Modern interest is calculated “annually” but even this is problematical. For instance, each month could be considered normal and the year is given as 365 days thus, in a period from 1st February 2013 to 1st March 2013, the calculation is considered to be 28 days divided by 365. However, in the money markets for short-term lending of, *inter alia*, the US dollar and Euro, again each month is considered normal but in these cases the year is assumed to be 360 days. In the example above, in a period from 1st February 2013 to 1st March 2013, the calculation, for these facilities, is considered to be 28 days divided by 360. Another variation is typically found for US corporate bonds where each month of the year is shown as 30 days and expressed using the convention 30 divided by 360.

The ancient Mesopotamian “year” did not have a standard length. Due to the use of the lunar calendar and its discrepancies with the solar year, a year of thirteen months could be created. Taking a Biblical example, this concept could be implied in Num 9:11; and 1 Kings 12:32-33 where the Jewish calendar was based on the lunar month (29.5 days) and thus the lunar year (354.25 days) would fall short of the solar year (365.25 days). Therefore an intercalary month was inserted say every two or three years to make adjustments for the lunar calendar’s shortage of days. Van de Mieroop (1992c:205) questions whether we should assume that for those years the

creditors obtained only the same amount on their investments as in a twelve month year (Van de Mieroop 1992c:205).

The documents never state explicitly that the interest rate was annual; indeed they may not even say the “interest rate” as understood in modern financial phraseology. Instead the documents will typically state that at the time of repayment the debtor was obliged to pay the capital of the loan, plus an added amount. We would understand this additional amount to be for the “interest”. Texts may state that the loan was “x shekels of silver, an interest rate of 16 shekels per 60 shekels is to be added,” whereas typically in modern parlance the interest rate would be expressed as a percentage i.e. it has become standard to quote interest rates in hundredths. In addition, in the example given above Van de Mieroop (1992c:205) says that the text does not mention that such an amount was to be added after one year. Almost all the loans preserved from Ur were granted for very short periods of time, from as little as ten days. The time span of the loan seems to have been entirely irrelevant for the amount of interest to be added (Van de Mieroop 1992c:205).

It follows therefore that, if fixed amounts were simply added to the principal, whatever the time-span of the loan, it was very advantageous for the creditors to grant short-term loans. For example, a thirty day loan at 20% would have enabled the lender to double his capital in four months, provided he reinvested the capital and the profits. As interest set at these rates was usurious, we find periodical cancellation of debts by royal decree. Examples, are still found today where the burden placed upon borrowers by the activities of the so called “loan sharks” or perhaps less emotively, the payday lenders, are considered usurious often skirting on the edges of legal activities. Van de Mieroop (1992c:205) assumes that these decrees must have come at irregular moments to maintain their purpose of relieving the population from exorbitant debt burdens. Conversely they may have encouraged creditors to shorten the time-span of the loans as much as possible, so that they were not caught with all their capital invested at the moment that a decree was issued by the king (Van de Mieroop 1992c:205). Similar illustrations can be found today. Some states in the USA may not actually cancel loans but rather to

prevent an unreasonable and/or excessive rate of interest being charged will impose a limit on the annual percentage rate that any lender, including payday lenders, can charge. Currently the matter of payday lending is being investigated in the UK. A report in the Telegraph on 25 November 2013 says that “The Financial Conduct Authority (FCA) is to announce plans to cap the interest rates charged by payday loan companies.”²⁰

4.3.2 Lending as a business activity

We begin to see the earliest examples of lending being a profitable business intrinsically, rather than being linked to an underlying transaction, for example, a trading venture or agricultural loan. Thus, the overseers of the merchants appear to have issued large amounts of silver for loans and the lending of silver became a profitable business. In this way loans became an ideal way to utilise and increase capital demonstrating that they sometimes preferred to invest their capital in lending rather than finance or undertake new trade expeditions (Van de Mieroop 1992c:206). (Note: Merchants are discussed in more detail in *Chapter Three*).

4.3.2.1 Loans in arrears

However where loans were linked to an underlying transaction, there are examples of traders who took out a loan to finance their expeditions. Fishermen had to pay arrears on their taxes and rental fees. The latter borrowed the silver and the loan would be repaid in fish. Examples are found of fishermen being unable to repay their debts with the income of their work and, as a result, they were forced to mortgage their fields or their boats when they were in arrears. When a debtor defaulted on a mortgaged property, the creditor obtained the usufruct of the property and usually rented the asset back to the debtor for a rental fee. If the debtor was unable to pay the rental fee he could be forced, by circumstance, to borrow more silver, thereby becoming further indebted. The possibility of an economic slump could have

²⁰ [Online]. Available at <http://www.telegraph.co.uk/finance/newsbysector/banksandfinance/10471982/Payday-lenders-to-face-interest-rate-cap-from-City-regulator.html> [Accessed 22 October 2013].

again forced the ruler to intervene from time to time with edicts forcing the release of the debtors. Lenders continued to issue loans, even with the risk that they might never be able to collect their capital, indicating that the risk/reward ratio remained in favour of the creditor. At the extreme end of the spectrum, in the Old Babylonian Period, it was possible to sell oneself as a slave if one was unable to repay a loan but by the time of Ur III there was only one example of that practice (Van de Mieroop 1992c:206).

Over 500 years later at Nuzi the continued transfer of the field (or house) to the creditor was the final phase in a trend of economic hardship that may have started with an interest-bearing loan and proceeded through the necessity for of antichretic facilities. It seems that the ordered economic life by this time manifests itself through the various credit institutions at Nuzi giving rise to formal terminology, for example, interest-bearing loans (*hubullu*) antichretic contracts (*tidennūtu*), sales (*mārūtī*). Peasants continued to be drawn into debts in the face of economic difficulties and they had to pledge relatives, houses and fields, or themselves. If they defaulted at the conclusion of the set term; they had to confer on the creditor a share or all of their assets (Zaccagnini 1979:145-146).

Lines in tablet	Text
1	<i>Antichresis tablet.</i>
2-4	<i>Uqari, his father, has given Taena son of Uqari in Antichresis to Tulpun-naya for six years.</i>
5-6	<i>Tulpun-naya has given one homer of barley to Uqari</i>
6-10	<i>When six years have elapsed, Uqari shall repay Tulpun-naya the one homer of barley and take his son.</i>
10-14	<i>If Taena absents himself from work for Tulpun-naya for one day, Uqari shall pay Tulpun-naya one mina of copper per day as compensation</i>
15-16	<i>Tulpun-naya shall give barley and clothing rations.</i>
17-30	<i>14 witnesses</i>

Figure 4: Antichresis agreement tablet City of Nuzi, 1500 BCE

Maidman (1979) - Maidman, M. P. (1979). A Nuzi private Archive: Morphological Considerations. Malibu, Undena Publications: 8 p.

4.3.3 Negotiable instruments

We also find the earliest example of what we would today term negotiable instruments. Promissory notes could be passed on from one creditor to another in effect the passing on of loans. The promissory note would be kept in the archive of the new creditor who was not mentioned in the original text in much the same way as promissory notes operate today. By knowing when the original contract was placed with certainty in the archive of another man, we know that the loan was passed on. The trading of promissory notes made financial transactions easier and, as is still found today, it is not necessary to know the name of the original creditor. By extension therefore, those citizens with the capital did not have to use their silver resources for certain financial transactions, but could use promissory notes, obtained from people in debt to them. The new creditors only had to wait for the loan to be due in order to collect their silver. As most loans were short term this trading of promissory notes may not have been very extensive but given the location in the archives it is possible to conclude that this may have taken place (Van de Mieroop 1992c:207). It is interesting to speculate whether the new creditor would first satisfy himself as to the financial standing of the debtor. The classic promissory note of the modern era, the bank note, *inter alia*, the sterling pound note, would originally have been backed by the gold deposited in the Bank of England.

§ 100 of the Code of Hammurabi in the Old Babylonian Period says

. . . interest for the money, as much as he has received, he shall give a note therefore, and on the day, when they settle, pay to the merchant.

Sadly the text for laws 66 through 99 is missing (King 1910b:21).

4.4 OLD BABYLONIAN PERIOD 2003-1595 BCE AND OLD ASSYRIAN PERIOD 2000-1740 BCE

During the Old Assyrian Period and, in particular, the old Assyrian trade with Anatolia, a contract was used to hire a person as leader of a caravan by granting him an interest-free loan (usually about half a pound of silver). This had the benefit of enabling the caravan leader to earn wages by investing the

sum loaned in the business activity by buying goods such as woollen textiles, which could be shipped in the caravan he was leading. This arrangement gave him an interest in the success of the enterprise and also meant that specific wages would not need to be paid by the lead contractor even if the venture failed. The contract, which used terminology we have seen in earlier periods, was in the form an antichretic pledge (the person hired "is held by the silver"). A penalty for abandoning the job "in the middle of the journey" perhaps by entering someone else's service could be introduced where, in addition to repaying the loan, the former caravan leader had to pay the costs of hiring a substitute; costs, which in some contracts, were specified according to the distance still to be covered by the caravan ("one shekel of silver for each double hour") (Veenhof 1997:346).

4.4.1 Working capital *be'ulatum*

This *be'ulatum* is described in CAD as capital placed by money lenders (*tamkāru*), at the disposal of travelling merchants, in a long term credit transaction but in which credit is never mentioned. In certain instances the borrower had to offer the services and person of a relative, or a slave, either because security was required, or because the *be'ulatu* was granted only to persons, such as merchants, or persons performing menial or other services who were directly attached to the enterprise (CAD: s.v. *be'ulatu* B money, capital, H:215).

These transactions represent a system of "working capital" in which an employer places capital at the disposal of his employee. The employee, while in the service of his employer, was free to utilise this capital, which must be returned at the termination of his service and the profit realised from its use constitutes wages of the employee (Kienast 1989:87).

In the context of the trade in Asia Minor (Kanesh), the Old Assyrian documents reveal that the *be'ulatu* transaction usually involved loans made by business firms who placed the *be'ulatu*-capital at the disposal of travelling merchants or caravan personnel. This capital would be utilised by its

recipients to finance their own commercial enterprises with the hope of realising profits from the borrowed capital. Thus the institution of the *be'ulatu* was basically a commercial transaction, which is in keeping with the “capitalist” spirit pervading Old Assyrian trade (Kienast 1989:88).

The *be'ulātum* became the normal method of paying caravan staff whereby their employer in Assur gave them, effectively, an advance payment, which would be put to use on the journey to realise a profit. In this way the profit became their pay but they had to return this “working capital” to the agent in Kaniš on arrival, after which the debt was discharged. Some of these contracts insist on service in the principal's ‘house’ or firm. Šu-Su'en, a trader, was advanced 12½ shekels of silver, called his “working capital”, with which to buy textiles. On arrival in Kaniš he had to repay this amount but could keep the proceeds he made on the sale of the textiles. These interest-free loans meant the firm would get only the original sum back and the profit made on it would go as payment to the caravan staff (Barrell 1998:133).

In conclusion we can see that these texts specify that loans should be granted interest free. The loan could be secured by a personal pledge, the pledged person being either the debtor himself or a person under his authority, for example, his son or slave. As with the loans we have seen in earlier periods, the personal pledge was again antichretic in character with the debtor doing service for the creditor through this work. The loan seems to be interest-free on the face of it but within the context carries its own specific risk and reward. At the same time they can be seen as simple loans secured by a personal pledge, with the pledged person then doing service in the household of the creditor. In this way the *be'ulatum* transaction becomes a means of taking caravan personnel into service (Kienast 1989:95).

4.4.2 Negotiable promissory notes and credit transfers

Various clauses within the texts acknowledge and record deposits on what could be described as promissory notes. The clauses, functioning as negotiable instruments, allow for capital transfers. They have precursors in

the older records of deposit but promissory notes came into being in Old Babylonian and Old Assyrian contracts. These are special because they do not name the creditor. In some Old Assyrian debt notes, the place of the creditor's name was taken by the word *tamkāru*, which literally means "merchant," but in this context could be reinterpreted as "creditor." From this it can be conjectured that the debt note and with it the debt itself could be passed on from one creditor to another. One text says explicitly: "whoever holds the tablet is the creditor".²¹ Another text includes the stipulation: "wherever (creditor and debtor) meet, the bearer of the tablet is the creditor."²² A similar subsection can be found in Old Babylonian texts, which stipulate that the debt was to be discharged in whatever trading post or harbour district (*kāru*) the two parties should happen to meet. In the context of second millennium long distance trade, such "promissory notes" were obviously useful instruments. They were negotiable (at least within a circle of loosely acquainted merchants) and in this way could be similar to medieval negotiable instruments. However, it would not be accurate to describe them as bills of exchange as used today (Jursa 2006:20).

In a specific example, (Eisser & Lewy 1930-1935) a debtor owes 40 shekels of silver to A, according to a promissory note, which mentions *tamkārum* as creditor. The record states that this silver has now been collected (from him) by M. and that if (the) *tamkārum* or A turn to the debtor for this silver, M. shall "clear him." From the wording, the promissory note in question had changed hands and was in the possession of a third party, since neither the original creditor A., nor M. who had collected the payment, could return it to the debtor. Therefore a clause was inserted to protect the former debtor against claims by somebody else's demand payment on the basis of the promissory note, which had come into his possession (Veenhof 1997:355).

The Old Babylonian and Old Assyrian promissory notes were special facilities with many of the characteristics of full negotiability developed possibly because of the need for an instrument to enable the transfer of capital without

²¹ *mukil tuppim šut tamkārum*

²² *a li i-na-mu-ru-ú wābi[!] suppim šut tamkārum*

corresponding movements of cash. These transferable records of deposit and promissory notes were backed by money in the hands of the depositary (Jursa 2006:21).

In summary, promissory notes with an anonymous *tamkārum* as creditor could be ceded and this must have been very useful in a society of travelling traders and agents. This cession of the promissory note could be interpreted in two different ways. Firstly that only the right to collect the claim was transferred. The person collecting the money who "bears/brings the tablet" (*wābil tuppim* in Old Assyrian, *nāši tuppim* in Old Babylonian), acts for the original creditor without himself having become the creditor. The title to the claim itself would not be linked to the possession of the note but "the right of collecting" would be the key element of the process (Veenhof 1997:355-356).

This interpretation means that the note was not a negotiable instrument as such and that the bearer was acting as agent for the *tamkārum*. It is to be presumed that their arrangement would need to have to be some sort of agency arrangement in place prior to the collection of the proceeds.

The second interpretation is that, in specific cases, the claim itself was transferred, so that a person "bearing the tablet" became the creditor and as such could collect the asset for himself. This interpretation allows for the possibility that the claim itself was transferred, the argument being that because there was an absence of a stipulation on interest due over a past period there would be no difficulties when a claim was ceded. An additional factor to be considered in support of this argument is that the payment part may state that the debtor "on the basis of this tablet shall pay to whoever carries his bond in whatever *kārum* he may turn up."²³ The implication behind this form of wording suggests uncertainty about to whom and where the debtor might have to pay, apparently because the note might have changed hands in the mean time (Veenhof 1997:356).

²³ ARM 8, 78:23ff.: (CDLI no.: P341557) *ana nāši tuppīšu ina kārim sa innammaru ša pi tuppim annim itanappal.*

Turning to a later period we will still find similar loan structures. As an example we have the city of Nuzi, a city in the kingdom of Arrapha, which reached the height of its importance during the 15th–14th centuries BCE, when it was a vassal state of the kingdom of Mittani. Its population largely spoke the Hurrian language and shared its Hurrian culture though they wrote in Akkadian.²⁴



BM 026280 Photograph by Karen Radner; reproduced with permission of the British Museum.

Figure 5: Interest-free loan of barley

BM 026280: interest-free loan of barley (Nuzi, c.1400 BC). Photograph by Karen Radner; reproduced with permission of the British Museum.

4.4.2.1 Nuzi loan agreements

This was a private legal text document and specifies a debt of barley owed by a group of three men to Zike who has given them an interest-free loan. The reason for this generosity may be that one of the debtors was Zike's cousin. The document was excavated at Nuzi. Nuzi has yielded most of the 5000

²⁴ [Online]. Available at http://www.jewishvirtuallibrary.org/jsource/judaica/ejud_0002_0015_0_14989.html [Accessed 22 October 2013].

known tablets from Arrapha, which is why they are usually called "Nuzi tablets".

Nuzi private archives do show the development of the credit institutions over a period of about 100 years. There seem to be three types of loans. Firstly loans with or without interest (*hubullu*) where the normal rate of interest at Nuzi was 50% annually; secondly loans secured with personal pledges (*tidennūtu*) or thirdly with mortgages of real estates (again, *tidennūtu*). The last two types of loan were based upon antichretic mechanisms (Zaccagnini 1984:145).

Nuzi loans could be interpreted for personal need by looking at the commodities that were lent in *hubullu* contracts. By far the commonest object of transfer was barley, the most typical subsistence commodity at Nuzi. Debts were normally made between late summer and the beginning of autumn and had to be repaid "after the harvest". Loans of emmer and wheat were much less frequent. This is well in line with the general picture of Arraphean agriculture where the role of barley predominates. When considering loans secured by personal pledges or by real-estate securities (*tidennūtu*) we find that, again, barley was the commodity which was most commonly lent, while occasionally loans of emmer and wheat occurred. It is instructive therefore to note that in spite of the similarity of the objects of transfer in the *hubullu* and in the *tidennūtu* transactions where value became important, goods conveyed in the *tidennūtu* transactions (i.e. a secured facility) exceed those of *hubullu* contracts. To put it in another way basic subsistence commodities (barley in the first place), in percentage terms, played a less important role; whereas, cattle (oxen, asses, even one mare) and livestock were more important by value (Zaccagnini 1984:149).

4.5 NEO-ASSYRIAN PERIOD 934-609 BCE, NEO-BABYLONIAN PERIOD 626-539 AND EARLY ACHAEMENID PERIOD 550-400 BCE

Loans represent the largest group among the documents of the first millennium from around 700 BCE until the Hellenistic Period and until around 300 BCE at Uruk. The objects of loan were predominantly silver, barley and

dates but could be wool, tiles and other products, which were repayable with their equivalent value, as in earlier periods (Oelsner *et al* 2003:949).

The typical document in this period was the debt note *u'iltu* (see also *Chapter Three* page 41), perhaps better translated as the “promissory note” (Shiff 1988:189), which usually did not mention the underlying transaction that gave rise to the debt. It could be interpreted that the debt was created by the document and not by delivery, which would give it the modern meaning (see above). However, as a caution there are occasional references to debts being created “without a debt note” (*ša lā u'iltu*) (Oelsner *et al* 2003:950).

Credit was issued by the temples and by private individuals. The palace economy is not well documented for this period, although certainly it was important. We can access it only via the activities of private entrepreneurs such as the Murashu family, which acted on its behalf. The textual evidence shows significant private economic activity in this period unlike the paucity of evidence in the temple archives (Van de Mieroop 2002a:78).

4.5.1 *Hubuttu* facilities

As with the earlier period mentioned above we find that the standard loan is interest-bearing (*hubullu*) but the *hubuttātu* (*/hubuttūtu/hubuttu*) loan, in which no interest is recorded, can also be found. Conversely a speciality in the Neo-Assyrian Period is a document formulated as a real contract but is found less frequently from the seventh century to the Achaemenid Period (Oelsner *et al* 2003:950).

Contrasting the term *hubuttu* as it appears in the Neo-Babylonian texts, with facilities found in the Old-Babylonian Period, the term does not appear within the context of a loan agreement. Indeed the loan, as a separately formulated and written transaction, is no longer evident during the Neo-Babylonian Period. The promissory note (*u'iltu*), became the predominant debt instrument existing during this period. It was used exclusively for credit related transfers of fungible items, including most extant *hubuttu* transactions (Shiff 1988:189).

By extension, we can say that the purpose of the promissory note during this period was not, as is the case with loan contracts, to record the formal act of the creation of the debt but rather to acknowledge an already existing obligation on the part of the debtor. It is therefore often difficult to establish the underlying reason for the debt. In the *hubuttu* promissory notes, typically, the contracts did not contain statements by the debtors or the creditors, or record actions taken by them that explicitly provide reasons for the insertion of the *hubuttu* designation in the documents (Shiff 1988:189).

Where interest is mentioned, the clause comprises the second part of the document generally at 20% for loans of silver, with considerable fluctuations seen especially in commodity loans. Frequently, interest is charged only if the debtor fails to repay the loan on the due date (Oelsner *et al* 2003:950).

However, compensatory interest payments could be included in *hubuttu* promissory notes. This debt statement gives us a strong pointer as to the reason for a seemingly interest-free transaction. Furthermore the creditor's economic interests were a consistent priority throughout the thousands of extant Neo-Babylonian economic and legal contracts. In particular when he functioned as a private entrepreneur, unaffiliated with either the palace or the temple, the creditor operated with an expectation of profit. Using modern financial activities as the basis for assumption, we can deduce that he would not accept a postponement of payment or delivery, as well as the loss of use of his loaned silver or produce, without receiving some sort of compensation. Furthermore, safeguards against interest payments would not be offered to a debtor who had not already agreed to an arrangement that properly reimbursed the creditor's potential losses. Consequently, "interest-free" did not necessarily mean "profit-free" (Shiff 1988:194).

4.5.2 Loan repayment

The due date for repayment was stipulated in the third part of the document and often the place was given as well (locality, creditor's house, door of the

warehouse (*bāb kalakki*), threshing floor (*maškanu*) This stipulation was typically found for commodity loans. For bulk goods, the measure (*mšīhu*) to be used was also set down. Usually this was the measure of the creditor. Short-term loans were common - a few months or even days, typically for loans maturing at harvest. If the debtor died, the debts were passed to his heirs. Claims could be assigned and subrogation of claims was also known in this period (Oelsner *et al* 2003:951). It is possible that promissory notes could be fully negotiable. However, although claims were transferable (including the income from antichretic usage of the pledge) and could be ceded by the creditor to a third party without the need to renew the original record or for the debtor to consent, there is no actual evidence that debt notes themselves could be traded. Instead the archives show that interest-bearing debt notes could have long lives and were counted among the inheritable assets of the creditor's family (Wunsch 2002:249).

4.5.2.1 Liabilities

Where there were multiple debtors, each was liable for the total debt and could be called upon at the creditor's discretion. This can be seen in the clause "whoever is available, will pay" (*ša qerbi t̄tir*) (Oelsner *et al* 2003:951). This is equivalent to joint and several liability as understood today. To take partnership law as an example, in modern jurisdictions, the principal difference between English Law where the liability of partners for partnership debts is joint and Roman-Dutch Law where it is joint and several, could suggest that Roman law followed the earlier practice. However, in South Africa, as in England, actions arising out of partnership transactions must be directed against the firm, not against individual partners and all the partners must, as a rule, be joined as defendants (Lee 1946:285). In Mesopotamian times business partnerships were designated as *harrānu* — literally "(business) journey and the formation of a business partnership was phrased by using the formulae of promissory notes. *Harrānu* have been examined in *Chapter Three*.

4.5.2.2 Security - Promissory note

A promissory note would be kept in the archive of the creditor and at discharge, at maturity, would be returned to the debtor or destroyed (*hepû, huppiû*). From this we can assume that promissory notes found in the archive of the creditors were probably unpaid (and therefore had a continuing value for the archive holder), while in the archives of the debtors they were evidence for obligations that had been discharged (Jursa 2005:43).

Complications arose because creditors could have kept duplicates of old promissory notes in their archives or issued receipts instead of returning the original promissory note (Jursa 2005:43).

4.5.2.3 Security - antichretic pledges

In this period antichretic pledges were implied by the expression *idi biti/amēlutti yānu hubul kaspi yānu* “there is no rent of the (pledged) house/hire of the (pledged) slave and no interest on the silver” (Jursa 2005:43).

Taking the example of urban houses, especially when viewed in the archival context i.e. the house is adjacent to the palace of the crown prince, the sophisticated nature of the financial arrangements can be seen. Assuming the crown prince’s administrator wanted to use it, the underlying transaction could be converted into a rental contract clad in the shape of antichresis (Wunsch 2002:240).

Antichretic pledge of these assets could have a financial purpose that went beyond a normal creditor - debtor relationship. The debt approximately matched the value of the property and the antichretic use means that neither interest nor rent had to be paid. This avoided the need for any subsequent money transfer, except for the final repayment of the principal (Wunsch 2002:239).

This arrangement accommodated both parties. The owner of the house had acquired the legal title by credit purchase and as long as this owner continued to repay the debt, title would pass on completion of the re-payment programme. In the example of an antichretic facility, instead of semi-annual up-front rental payments, the owner of the house received from the crown prince's administrator (i.e. the prospective tenant) the full amount of the price (or close to it) a short time after the purchase. The owner of the house could now reinvest in his business the entire capital spent on the house purchase. The crown prince's administrator was *de facto* providing the credit for this acquisition by the owner of the house. This purchase of real estate did not function as mere outlet for commercial profits but ownership seems to have been the underlying aim in purchasing the real estate. If the owner of the house's future activities failed, the loss could be covered by the asset. From the royal administrator's point of view the operation also made sense, for instead of spending institutional resources piecemeal on rental fees, he handed out a lump sum, although in the form of credit, secured by an object of equal value (Wunsch 2002:240).

Objects of pledge were land, houses, prebends, slaves and members of the debtor's family. Animals and other movables were more rarely attested, possibly because they were mostly pawned without a written record, given the more antichretic nature of these debts (Oelsner *et al* 2003:951).

Usually the pledge was established in the debt note. An occasional note contained a clause of self-pledge in which a debtor and his family undertook to work in the household of the creditor (Oelsner *et al* 2003:952). Examples are found of a general charge on assets, in the form of a modern debenture ("whatever property (there is) in the city and the country" *mimmû ša āli u šēri*).

Despite the underlying pledge, the debtor remained personally liable. This can be seen by the "*rāšû* clause" where another creditor had no right to the pledge until the prime creditor was satisfied. A pledge in this period did not automatically become the creditor's property on default but specific agreements could be incorporated. From the earliest periods, it was frequently

stated in the contract that antichretic use of the pledge should be in lieu of interest (Oelsner *et al* 2003:952).

4.5.2.4 Security - surety

The value of a security was at the very least expected to cover the principal amount but in theory should well have exceeded it, allowing additional amounts to be added later to the debt. When the creditor was granted antichretic usage of a pledge, its estimated income was correlated to the interest on the principal and was assumed to be roughly equal. (Wunsch 2002:238). Obligations could be secured through surety (*pūt našû*). This was found not only in debt notes but also in separate suretyship documents (Oelsner *et al* 2003:953).

The surety either guaranteed that the debtor would be available to the creditor at the due date or undertook to deliver the debtor to the creditor. There are cases where the surety took the place of the debtor and personally promises payment. As is found in the modern law, the surety guarantees payment by the debtor (*pūt etēri naši*) and, in default, the creditor would have recourse to the surety. Where there were co-debtors, they assume mutual suretyship (*išten pūt šanî naši/ pūt ahameš našû*), as well as each being liable for the whole sum ("whoever is available, shall pay," *ša qerbi ittir*) (Oelsner *et al* 2003:951) and therefore were jointly and severally liable.

4.5.2.5 Non payment - imprisonment

Creditors, including private entrepreneurs, could imprison the debtor who had to work to repay the money owed but the insolvent debtor could not be sold to another person. Moreover, the right to use one's wife as security for a loan disappeared at this time, although children could be sold in rare cases of dire need. Thus, in contrast to earlier periods of Mesopotamian history, debt-slavery was a rare occurrence in the Neo and Late Babylonian Periods (Van de Mieroop 2002a:74).

Even as recently as the 19th century in England we find the Marshalsea, which was a prison in England, located on the south bank of the River Thames in Southwark. It existed from at least the 14th century until it closed in 1842 and it became most closely associated with imprisoning London's debtors. The length of their stay could be determined by the whim of their creditors. The father of Charles Dickens, the author, was imprisoned there and the author has described the prison in his book *Little Dorrit*.

4.6 CONCLUSION

Within this two thousand-year-long history of Mesopotamian credit transactions, some aspects are remarkably constant, above all the rate of interest. The law codes from the Ur III Period to the reign of Hammurabi state explicitly that barley loans have a rate of 33⅓%, silver loans 20%. This was still the case more than a thousand years later where the Neo-Assyrian and Neo-Babylonian loan documents still affirm that, for silver transactions, that “every month one shekel of silver will be added to one mina,” hence the same annualised rate of 20% (Van de Mieroop 2002a:84).

Van de Mieroop (2002a:84) believes that this rate derived from the metrological system in use to weigh the metal, rather than economic forces. In Mesopotamia's sexagesimal system the mina and the shekel were two basic units, both indicated by a vertical wedge. The monthly addition of one smaller unit, the shekel, to the higher ranked unit, the mina, led to an annualised increase of 20% (Van de Mieroop 2002a:84).

However, even into the later Babylonian period the form and the quality of the money remained somewhat uncertain, but Dubberstein (1939:23) concludes that the general monetary system can be established, with money being calculated by weight. The largest division was the talent (*biltu*), weighing about sixty-six pounds. The talent was divided into sixty minas (*manû*) of about one and one-tenth pounds in weight. The mina consisted of sixty shekels. Also found were fractions of a shekel, but the *še*, the one hundred and sixtieth of a shekel, commonly used in earlier ages, was by this period

rarely used (Dubberstein 1939:23). It is possible that general inflation over the long period was a factor in the demise of this measurement.

In considering other financial and loan facilities we have seen that loans with interest (*hubullum*) could have developed into meaning the interest itself. In itself the change was not significant and perhaps was no more than a convenient contraction. Certainly the substance has not changed, especially when comparing these facilities with a *hubuttātu* loan, in which no interest was recorded.

We can see that antichretic loans given on the condition that the creditor could use the asset belonging to his debtor until the amount loaned had been repaid in full did not change. Indeed these facilities continued into the Roman Period and are still to be found in countries using Roman Law today, such as South Africa. It is still a contract whereby a debtor pledges (i.e. conveys possession but not title) real property to a creditor, allowing the use and occupation of the pledged property, in lieu of interest on the loan.

The remarkable stability of the financial system found in Mesopotamia throughout the 2000 years under consideration despite wars, conquests and disruptions and the adoption of many of the fundamental tenants into later Roman law continuing into the modern era, is evidence of the solid foundation of the system and laws governing it, built and refined by practical businessmen and women and perhaps most importantly implemented and followed by them.

Perhaps the most significant development since this period was in the development and use of money. According to Herodotus, the Lydians were the first people to use gold and silver coins. However, despite the absence of money and the convenience and permanence it brought, the Mesopotamians were able to develop and enjoy a sophisticated and long lasting financial system.

Without a solid legal system no financial system can hope to survive and thrive so perhaps the most pertinent quote can come from Westbrook (2003:1).

The ancient Near East also has the distinction of being the cradle of the two great modern Western legal systems, the Common Law and the Civil Law, and in consequence of modern law in general. Its influence has left few visible traces apart from the Hebrew Bible, the one relic that survived the collapse of its constituent civilizations and whose hold on the minds of Western lawmakers continues to this day. Rather, the connection is indirect, through the intermediary of the classical systems of Jewish, Greek, and Roman law. The legacy of these systems to the two great modern law traditions is well known; the legacy of much more ancient cultures to classical law is only now coming to light.

CHAPTER FIVE

THE TEMPLE

5.1 INTRODUCTION

Cuneiform records in Mesopotamia are found from as early as 3000 BCE and continuing well into the Parthian Period. Throughout this period there are documents relating to the temples and their administration. By far the greatest number of these came from Akkad in the north and in the south Sumer. Otherwise cuneiform writing was only in use at certain periods and for limited, generally non-utilitarian, purposes (Postgate 1972:811).

Deimel (1928:18) created the idea that the temples dominated the Sumerian economy but was well aware of the bias in the sources. In his article '*Ackerwirtschaft*,' he wrote:

All these texts [i.e., everything from Fara through the Ur III Period] come from administrative archives of temples. Therefore one can draw few conclusions from them about private property and how it was managed. By far the greater part of cultivated land, however, surely belonged to the temples. (translated from the German by Marvin A. Powell 1994:100)

Deimel's (Foster 1981:226 quoting Deimel) contention is that when the Sumerians first settled in southern Mesopotamia, they had to irrigate their agricultural lands because of inadequate annual rainfall and the unpredictable flooding of the Tigris and Euphrates. Thus construction and maintenance of the irrigation works required the full participation of the entire population. Land could be exploited efficiently only if it was considered the property of the gods, rather than of individuals or families.

The old "temple-city" and "palace economy" theories postulated for third millennium societies by Falkenstein (1974:793ff), among others are no longer

considered accurate. The prevailing concept is now one of a mixed economy in which private or business enterprises took place beside the transactions carried out by the “Great Estates” i.e. both temples and palaces. Although most records inevitably come from the archives of the bureaucracies, merchants did not function simply as agents of the state. The state protected merchants and tried to keep markets open. Profits accrued to merchants and markets in which local exchanges were made, did exist. (Yoffee 1983:7)

Nevertheless from these early records we can begin to see that there was a possible separation of financial structures of a “temple” and “palace” system.

5.1.1 Community participation

At all periods the Mesopotamian temple was an integral part of the community which it served. During the early stages of Mesopotamian history, the temple was administered by the community for its own benefit but the relationship between the secular population and the temple varied over the course of time. In economic terms, the temple could not survive without the co-operation of the community and in return the temple provided services to its settlement or group of settlements. Primarily, the temple was responsible for the care of the gods and for the financing and organisation of festivals but it could also undertake privately commissioned ceremonies, such as burials (Postgate 1972:813-814).

All citizens, including slaves, belonged to a particular temple. At Uruk, we read of “the people of the god E-Anna.” The temple community comprised a cross-section of the population from influential members of the community like officials and priests, to income earners like merchants, craftsmen and farmers and including slaves. It also assumed community responsibilities - for example, for the care of orphans, widows, the blind and needy citizens unable to care for themselves (Lamberg-Karlovsky and Sabloff 1995:172).

The temple also carried out administrative duties. The temple could be found co-ordinating the construction of irrigation canals often demanding the

cooperation of several communities. Using the patronage of their deities, an enormous concentration of manpower was harnessed to produce the goods and surplus required by the growing city-state (Lamberg-Karlovsky and Sabloff 1995:173).

Van Driel (2002:35) suggests that there was a right to income derived from the fulfilling of a function in the cult of the gods, which involved contact with the divine. From the outset this was either hereditary, or became so in the course of its development. The remnants of the offerings placed before the gods became an important source of remuneration but they were not reserved exclusively for prebendaries using the modern definition. While the term the prebend belongs to ecclesiastical tradition and is therefore, when applied to Ancient Mesopotamia, an anachronism, nevertheless some form of consecration is essential and a precondition for consecration was, in turn, being of the right descent (van Driel 2002:35-36).

5.2 EARLY PERIODS – PRIOR TO 2400 BCE

Originally the temple acted to the members of the community as a sort of “wealthy neighbour”. This was most clearly stated in a passage from the Laws of Hammurabi (§ 32 c. 1800 BCE), which may have codified previous practice and specified that if a man had been ransomed from abroad by a merchant and brought back to his village or town, then his family should refund the merchant, otherwise the local temple should pay the amount. Finally the palace (i.e. secular authorities) should step in. The temples also made loans of barley to small farmers or peasants to assist them until the harvest. Thus, they functioned as “emergency granaries” for the communities and, if justly run, prevented profiteering at the expense of the peasant (Postgate 1972:814).

5.2.1 Urukagina reforms

Urukagina, (ca. 2350 BCE) the leader of the Sumerian city-state of Girsu/Lagash, introduced reforms into what were considered as oppressive legal and governmental structures found in Sumeria at that time. Urukagina introduced laws that guaranteed the rights of property owners and he

reformed the civil administration and instituted moral and social reforms. He banned both civil and ecclesiastical authorities from seizing land and goods for payment and eliminated most of the state tax collectors. He ended state involvement in matters on a personal level, such as divorce proceedings and perfume making. He returned land and other property that his predecessors had seized from the temple and ceased the extraction of money from citizens through the abuse of the judicial process. He also ensured the public nature of legal proceedings (King 1910a:Chapter VI).

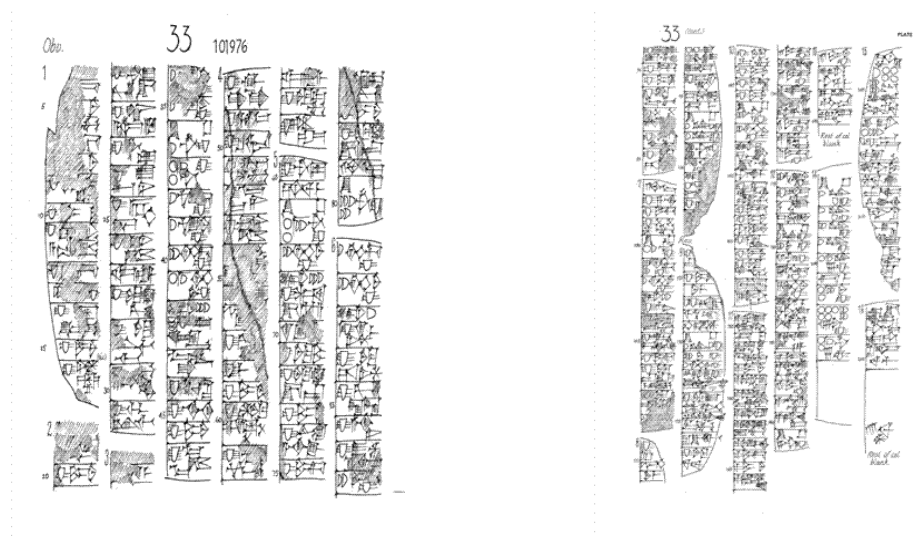


Figure 6: Clay tablet with eight and eight columns of inscription

Pre-Sargonic administrative text; barley rations to workers, third distribution, year Urukagina *ensi*; repaired British Museum No. 101976

There seems to have been an attempt by the palace to appropriate the place in the national life, which had formerly been held by the temple. Furthermore, the tithes due to the latter were not diminished and the population became burdened with additional taxation. Tax-gatherers and inspectors were appointed in every district and for every class of the population. Farmers, both the owners of flocks and herds and cultivators, fishermen and boatmen on the rivers and canals, were never free from the avarice of these officials who, in addition to levying their dues, appear to have imposed themselves on the population. Urukagina records that his predecessors on the throne had

appropriated the property of the temples for their own use. Corruption enabled priests, as individuals, to grow rich at the expense of the temples. They also plundered the people with impunity, even going so far as to enter the gardens of the poor to cut down the trees or to carry off the fruits while, according to Urukagina, keeping on good terms with the palace officials (King 1910a:Chapter VI).

The laws introduced by Urukagina were similar in form to those found in the Code of Hammurabi. This indicates not only that Hammurabi codified the legislation of earlier times but also that this legislation itself was of Sumerian origin. We can also speculate that Urukagina, in introducing his reforms, was essentially reviving the laws of an earlier age, which had been allowed to fall into disuse or as a way of reintroducing the influence of the temple. Hammurabi attributed the origin of his laws to the Sun-god whom he represents upon his stele as reciting them to him. In the earlier period Urukagina considers that his reforms came as a result of the direct intervention of the deity Ningirsu (King 1910a:Chapter VI).

In Sumeria, the temple was the principal owner of the land and property. It was not only the centre of the religious life but also the centre of the socio-economic unit. There were three types of arable land, firstly *gána-ni-en-na* (in Ur III *gána-gu₄*), “the land of the lord” secondly *gána-kur₆-ra* “subsistence land allotment” and thirdly *gána-uru₄-lá* “field for ploughing”. The temple needed large numbers of people for the exploitation of the cultivatable lands. It is likely that it needed to borrow either seed (barley) or money (silver). Certainly by the Ur III Period we find large numbers of archival documents concerned with either the loan of barley or the loan of silver (van der Westhuizen 1989:290).

5.2.2 Temple Personnel

The temple personnel were organised by type, agriculturalists, artisans and administrative officials. Administrative officials comprised the *agrig*, “steward”, *nu-bànda*, “the superintendent” and *sanga*, the “priest”. At a lower rank there were assistants in the administration such as the *dub-sar*, “scribes” and *sa₁₂-*

du₅, “the registrar of lands”. *Nu-bànda* and *dub-sar* were indicated as two of the occupations held by borrowers. We can say the temple would also have functioned as a kind of bank, lending silver through the agency of temple officials (van der Westhuizen 1989:290).

Citizens had to perform service for a temple or for the ruler (*en* or *énsi*). The *énsi* was regarded as a civil administrator who could also fulfil the function of “lender” and was considered to be a representative of the city state’s patron deity. For this service citizens received a “subsistence ration” (*kur₆/šuku*) from temple land, possibly the most important element of their economic existence. In an agricultural community, the economy was comprised mainly of farmers who took part in the general exchange of goods and they must have disposed of silver. It seems temple personnel also had certain privileges, *inter alia*, being exempted from paying interest on loans (van der Westhuizen 1989:290).

As the temple could act as the community’s “wealthy neighbour”, it needed a secure source of wealth. Initially the community could have willingly donated offerings, or outright gifts to the temple. However, while such sources of income may have been important to the temples in historical times, the great temple institutions relied much more on their own permanent possessions for the maintenance of their economic strength (Postgate 1972:815).

5.2.2.1 *Temple income*

Offerings probably obligatory payments to the temples and gifts certainly went a long way towards supplying the temple’s everyday sustenance. Presumably food offerings to the gods (which are the most frequent type) were at least partly used for the feeding of the temple personnel. In addition to this the chief priest(s) might themselves receive payments whether as a regular payment or in return for a specific service. Plausibly, the obligations to supply offerings to the temple were shared between the whole community (Postgate 1972:815).

As mentioned, the temple’s own estates, constituted the real basis of its wealth and power. Even where the temple was part of a small village, it

probably held land. In a village community the ownership of land was a sign of worth and as such could hardly be denied to the god (and his priest). The produce from the temple lands, which combined with offerings, enabled the temple to act as the community's emergency granary (Postgate 1972:816).

However, this should not give a definite picture as by Early Dynastic times it was not always possible to differentiate between religious and secular authority. Both palace and temple had a central role in trading matters and probably organised and financed a great deal of trade. It may also be fair to speculate on whether private enterprise also undertook trading ventures. However, there are indications that some private trading may have been undertaken, recognising the increasing evidence for private ownership of land, property and therefore of capital (Crawford 1973:237).

5.2.2.2 Temples and merchants

There are a few instances where merchants, not specifically stated to be palace or temple merchants, received exchange goods from the temple. In two examples²⁵ ²⁶fish were mentioned and the name of the depositor of the fish was also given. It is possible to suggest that the temple may have been acting as a kind of "banker" to two private individuals. Perhaps, on completion of the trading venture, the merchant deposited his goods with the temple, which ascribed any yield over and above the cost of the original articles to him. Possibly the merchant may only have deposited enough of his goods with the temple to cover his initial outlay and may have kept the rest of his profits as working capital (Crawford 1973:238). Either way it is difficult to see the role of the temple as being a bank in the modern sense as deposits would not have been lent at profit, especially in the absence of "money". Rather deposits were taken and in some way a charge was made for this deposit.

²⁵ [Online]. Available at http://www.cdli.ucla.edu/search/archival_view.php?ObjectID=P220982 [Accessed 23 August 2014].

²⁶ [Online]. Available at http://www.cdli.ucla.edu/search/archival_view.php?ObjectID=P020362 [Accessed 27 August 2014].

Trade can be divided into internal inter-city trade and external foreign trade. Cities in south Mesopotamia lacked the same raw materials. As a result they developed manufacturing capabilities and acted as middlemen in the dispersal of imported articles. Cities like Telmun lacked commodities, such as barley, of which south Mesopotamia had a superfluity and so trade became a natural progression (Crawford 1973:238).

However, we can conclude that these categories of trade had features in common; both seem to have been financed by the temple acting as lender both for the temple and probably for private individuals as well. The trade seems to have been carried out by specialists of varying degrees of importance or wealth. Some are referred to as 'great merchant', some merely as 'merchant'. Transport was by boat whenever feasible and by donkey overland. There is no reference to any sort of relay system for changing donkeys en route given the distances involved was a probability (Crawford 1973:238).

5.3 3RD DYNASTY OF UR - UR III PERIOD

The income of the temples seems to have come from the temple-land cultivated by persons responsible to the temple and from rental of the land leased to temple personnel, which was partially paid in silver. In addition there was income from fishing and cattle farming. There is mention in the texts of "gifts" to the temple, which possibly were not of a voluntary nature, such as the delivery of goats in settlement of land rent. The temple undertook trade with neighbouring states, which was managed predominantly by its appointed representatives. Excavations, reported by Sir Leonard Woolley, (Woolley 1934) show archaeological materials indicating relations with the flourishing cities of the Indus culture and texts show connections existed with Elam and Telmun, the modern island of Bahrain in the Persian Gulf. Finds at Ur and Lagaš show extensive foreign trade networks, evidenced by the abundance of valuable implements and works of art (Falkenstein 1974:793).

5.3.1 Temple personnel

Steinkeller maintains that the Ur III economy operated according to a “quota system”, which determined each individual’s obligation vis-à-vis the state, depending on his specific social and occupational position. During the period of their employment, state dependents were supplied with grain, wool and oil allotments. The higher-ranking personnel were provided with the plots of arable land. After their particular obligation or work-duty was fulfilled, they had complete freedom to engage in an independent economic activity (Steinkeller 2004:94).

To give a specific example, foresters who managed and exploited the vegetation growing along river and canal banks, operated in family groups and worked for the state during half of the year. Their pact, apart from timber, was to produce various grasses and a spice-plant called *gazi* in Sumeria. Their remuneration was in barley, oil and wool and they were provided with the plots of arable land. It is probable that during the remainder of the year these individuals worked exclusively for themselves, harvesting the same kinds of products. From this Steinkeller deduces that they exchanged or sold those products on local markets (Steinkeller 2004:96).

5.3.2 Barter trade

A regular male worker received 60 litres of barley every month throughout the year, an amount that should have left him with a surplus. He could use that surplus to exchange the barley for other products. It can be conjectured that the temples (and palace) expected the people to exchange barley for other products in some sort of market perhaps employing a bartering arrangement. This exchange, which was important to temple (and palace) dependents, consisted of an exchange of goods and services for other goods and services. Silver in the quantities suggested could not have played a major role in this market (Widell 2005:397).

Barter trade is seldom in equilibrium. Barter and countertrade transactions are found in modern international trade transactions. Typically, concluding the

transactions needs brokers with expertise in handling a string of contracts or turning the range of products into cash. The brokers expect a substantial disagio for facilitating the deal and taking risk. Disagio is the commission paid by the exporter to the broker to recompense the broker for assuming the transaction risk (De la Rosa 2011:274).

The situation in this period would be as complicated – for example assigning a value in dates for a goat. An added complication is that most participants would have been illiterate. In a local exchange system the best method of reducing these problems was to establish a system that involves so-called “commodity money”. A value was assigned to a commodity that was popular, widely accepted and easily divided. Barley would have fulfilled these criteria and a local exchange market could have come about comprising temple dependents, together with independent agents who ensured a regular demand for barley, possibly working in a similar way to modern commodity brokers. The grain allowances of the dependants remained more or less fixed throughout the history of ancient Mesopotamia, this in spite of unforeseen circumstances which could interrupt supply (Widell 2005:398).

However the temple still acted as a stabilising force in the economy and remained a provider of capital for business transactions as well as for the population’s basic needs. An archive from Ur shows that the Nanše temple itself financed sea trading with Makkan, directly employing the seamen and traders (Postgate 1972:814).

5.4 OLD BABYLONIAN PERIOD 2003-1595 BCE AND OLD ASSYRIAN PERIOD 2000-1740 BCE

As mentioned the Ur III state contained large temple estates that were probably worked by people of slave or semi-free status. Postgate (1972:818) interprets much of this material as describing the hire of casual labour. At least part of the temple estates were worked by sharecroppers (Postgate 1972:818). During the Ur III Period temple estates provided wage employment for the small farm owner and land for sharecropping by the landless farmer.

However by the mid Isin-Larsa Period, the situation was changing. Ownership of land was now in the hands of private individuals, with a consequent reduction in temple estates. Accordingly opportunities for employment and sharecropping, which had previously existed for private individuals, were diminished (Stone 1977:283).

It could be interpreted that such structures are inherently unstable and lack the flexibility needed to offset the unpredictability of agriculture in the southern Mesopotamian plain. During the earlier Ur III Period temple estates provided the ability to respond to changes in circumstances. When the estates broke down, the future of the small farmer became precarious. Factors, such as inequalities in land and water, could have led to an increase in debt, aggravated by frequent division through inheritance arrangements with a consequent fragmentation in holdings. In the last resort, the hard-pressed farm owner could sell some of his property but this would result in a loss of the income that could be derived from its ownership (Stone 1977:284).

5.4.1 Changes in temple personnel: merchants

During this period we see the beginnings of the independence of merchants from the "Great Estates" where they start to become self financing. However, there were important differences between the south and the north. It is instructive to compare the trade in Babylon with the Anatolian merchant colonies from Assur referred as the "Telmun-trade" by Oppenheim (1954:7)

5.4.1.1 Southern Mesopotamia

In the southern part of Mesopotamia, which by this stage included most of the Persian Gulf, trade was in private hands, although payments made by the traders to the temples suggest that the temples were still involved. There is evidence that over-land merchants borrowed their capital from the temple, although texts suggest that they more often turned to the palace or to wealthy private houses for support of this kind. Whether the temples were facilitating trade, or merely making loans to avert hardship, it is possible that through

establishing the temple, either by design or organic growth, the population centre created a sort of central financing entity from whose capital the community, which supports it, can profit (Postgate 1972:814).

Texts, under the volume UET 5,²⁷ show the role of the town of Ur as the “port of entry” for copper into Mesopotamia during the time of the Dynasty of Larsa. The copper was imported by boat from Telmun. This "Telmun-trade" was in the hands of a group of seafaring merchants - called *alik* Telmun. It seems capitalists in Ur took garments to the island in order to buy copper. Telmun itself served as a "market place," and would have traded in raw materials from Makkan (possibly modern Oman) and Meluhha (possibly Indus valley). The connection to the temple and the evidence of this trade can be found in tablets, which come from the archives of the temple of the goddess Ningal and list votive offerings. It is possible that returning sailors offered the deity a share of their goods perhaps in thanks and/or as a tithe (Oppenheim 1954:7).

Wording in the texts show the creditor of the transaction refusing to share the possible losses of the enterprise. The wording of clauses suggests a partnership type contract. They show that the *tamkarum* (merchant) would not only expect to see the invested capital returned but also interest and an equal share of the profit yielded by the business venture. In other examples, the financier refused to share the possible losses or other outgoings. In these cases the *tamkarum* received a fixed return for his investment, instead of sharing the entire profit. The Telmun *tamkarum* would probably have worked within the framework of a central structure and be subject to taxes and duties but without enjoying any military or political protection (Oppenheim 1954:13).

a) *Legal continua*

It is useful to reflect on the similarities to the *commenda* contract. As private partnerships carrying limited liability were unknown in classical Rome, the

²⁷ [Online]. Available at http://cdli.ucla.edu/search/archival_view.php?ObjectID=P414905 et al [Accessed 24 August 2014].

origin of the *commenda* is believed to be either in Byzantium or Arabia but similarities to the facilities found in Mesopotamia in this period can be recognised.

The *commenda* contract had a sleeping partner known as the *commendator* who advanced capital to a travelling associate, known as a *tractator*. Its essential feature was that the *commendator* risked only the capital advanced because he was not liable for any other losses. The contract ended when profits were distributed after the merchant returned (Hickson and Turner 2005:2).

The *commenda* flourished across Europe after its introduction into Italy but in particular it was used in overseas trade. Its success has been attributed to its being a convenient tool to circumvent restrictive usury laws, or as a convenience to reduce capital risk (Hickson and Turner 2005:2)

These early structures continue to the present day, especially in maritime contracts. The Code of Hammurabi (§ 236-240) as translated by King (1910b:31), describes a type of insurance for shipping contracts. These have come to be known as bottomry facilities. During the later Greek Period, maritime law was provided by the *Lex Rhodia (nauticum foenus et Lex Rhodia de jactu)*, codified by the Byzantine Emperor Justinian²⁸. This specified that if merchandise was thrown overboard for the purpose of lightening a ship, the loss would be made good by the assessment of all goods being transported for the benefit of all parties (Scott 1932:207).

However, according to Scott (1932:270), the *Lex Rhodia* was a comprehensive maritime law code which:

... prescribed rules for the guidance of the officers and crews of vessels, and their passengers; penalties for misconduct of those in authority and their responsibility in case of negligence; and the forms of Bills of Lading, charter-parties, loans on bottomry and other contracts growing out of the prosecution of commercial transactions.

²⁸ Book XIV, Title II of the *Digests of Justinian*, (a part of *Corpus Civilis*) is entitled "Concerning the Rhodian Law of Jettison"

This equitable principle formulated by the greatest sailors and traders of antiquity; inherited by the Rhodians, a people scarcely inferior to them in maritime skill and enterprise; and transmitted to posterity by Roman authority and example survives in localities where one would least expect to encounter it. The *Lex Rhodia de jactu*, which the Romans borrowed from the Phoenicians, is now in great observance among the tribes of the Sahara as the customary mode of distributing the losses incurred by caravans crossing the desert between the company owning the camels, or what in railway language would be called the plant, and the passengers or owners of goods.

Despite this, the only maritime law legacy which can be credited to *Lex Rhodia*, with reasonable certainty, is the cargo jettison rules (Scott 1932:270). However, mindful of a general caution on maritime law, we can perhaps find a continuum in this ancient practice first documented in the Code of Hammurabi to present-day English maritime law referred to as general average.

As mentioned above, the southern part of Mesopotamia did not have access to any natural resources and they used their agricultural products and by-products for export. The main means of financing the expeditions was silver (Van de Mieroop 1992c:196).

b) Private investment facilities

The trade was organised by private merchants. Various individuals invested to finance the expedition. Each contribution was probably small, probably to reduce the risks to each investor in the event of the expedition ending in disaster at sea. For example, when silver rings, headbands and baskets were assembled by the merchant Ea-nāṣir, each of the investors typically provided one of the objects (Van de Mieroop 1992c:196).

When larger sums were invested the financiers sometimes stipulated that they would not share the losses, i.e. that they had to be repaid whatever the fate of the expedition. In an example of this contract Lu-Meslamtaë and Nigsisa-nabdiri received from Ur-Ninmarkika one kilogram of silver (in the form of) 1,500 litres of sesame oil and thirty garments for an expedition to Dilmun (Telmun) in order to buy copper there, capital of a partnership. At the safe

return of the expedition the creditor will not recognise losses. By mutual agreement they (the debtors) will satisfy Ur-Ninmarkika with the just price of two kilograms copper for each eight grams of silver. They have sworn together by the king. It can be seen that there was a guaranteed return to the creditor, with the merchants delivering a set amount of copper. Of course the investor's profit did not increase if the trading expedition had been more successful than expected (Van de Mieroop 1992c:196-197).

Merchants were thus able to finance expeditions by taking out loans. These facilities sometimes included a clause stipulating that repayment was due only when the merchant returned home safe from his expedition. It is possible that this arrangement included some type of insurance policy. The interest rate in these facilities was never specified but we may assume that they were higher than in the usual loan structure found in the example given above. The creditor could therefore expect a high yield on his investment when the expedition was successfully completed but in case of ruin the merchant had some kind of insurance, as the capital he had borrowed need not be repaid. As we have seen with the *Lex Rhodia* similar agreements were common in Greek times first seen in Rhodes in the eighth century BCE, continuing through fourth century BCE Athens, later codified by Justinian and echoes still being found in general average in English maritime law. It is likely that the ancient Babylonian traders tried to protect themselves in a similar fashion (Van de Mieroop 1992c:197).

Thus although the trade was undertaken by private citizens, the large institutions of the temples and the palace maintained some control over it. Originally the Ningal temple had the right to levy a 10% tithe on the imports of the Telmun traders. The disbursements included a selection of the materials imported into Mesopotamia, semi-precious stones, shells and copper. From the reign of Warad-Sin onwards, it seems that the palace took over the control over the trade. The correspondence of one important trader, Ea-nāšir, shows that substantial amounts of copper were paid on his account to the palace but this cannot be taken as direct evidence of taxation by the palace, Hence forward, it is likely that this important aspect of the economy was regulated by

the palace, although still undertaken by private citizens (Van de Mieroop 1992c:197). (The role of the palace in finance will be discussed in more detail in *Chapter Six*).

5.4.1.2 Northern Mesopotamia

In the north, the Anatolian merchants from Assur were independent entrepreneurs working in a foreign location. The merchants were self reliant and needed to work with a variety of city rulers in changing political situations. It seems that in contrast to the Telmun trade, the temple authorities in Assur played a minor role in the trade with Anatolia. As with Telmun trade, the temples received votive gifts from the merchants. However, it is the mention of '*ikribum*'²⁹ in many texts that raises a question of temple involvement in trade. Evidence from texts points to the Assyrians trading in Cappadocia as independent businesspersons, not agents of temple or palace (Barrell 1998:44).

a) *Ikribū facilities*

City authorities, whether temple or palace based, may not have played an active role in the successful long-distance trade with Anatolia. However, with regard to taxation their control over the movement of goods was certain. It could be said that the king at Assur placed more emphasis on ritual than on active governorship. Thus the nature of the trade and the seemingly lesser role of the authorities in the business would indicate that the Anatolian trade was the result of private enterprise and that control rested in the hands of a few wealthy entrepreneurs or *ummeānū* (Barrell 1998:40).

However, while the temples not only received many valuable votive gifts and offered storage facilities, it can also be said that they were nevertheless commercially involved. To return to the term *ikribū*, the texts show considerable references to amounts involved termed *ikribū* suggesting that

²⁹ Money or goods pledged by a vow to a deity. (*CAD*, s.v. *ikribu*, 7:62). Could be seen as a long-term investment made by the temple.

the word does not only refer to goods dedicated to a temple or deity, presumably to ensure the success of a trading operation; but can also refer to shipments of silver or the merchandise part of the profits of which had been vowed to a temple. It is possible that *ikribū* in such cases means that the merchandise or the silver belonged to a temple that had been dispensed to a trader, either as a commercial loan, or by means of a *commenda*-partnership, (as mentioned above a sedentary investor, known as the *commendator*, advanced capital to a travelling associate) or by way of investment in an enterprise. In some instances silver and gold, the proceeds from merchandise called *ikribū* and sold in Anatolia, were not given to the temple upon arrival in Assur but were used by the merchant in question to make new purchases to equip a new caravan. The temple apparently received its profits, share or assets only after a longer period of trading, which means that it probably engaged in long term investments (Veenhof 1977 113-114).

b) Merchant finance

In the north the trade was financed by private investments with only the occasional reference to temple funds. However, these were established agreements between investors and merchant houses and not confined to a single venture (Barrell 1998:14).

The investors were known to have been referred to as *ummeānū* but it is not entirely clear which word was used to designate the manager or *tractator*, as described above. Some of such men were referred to by the term *šamallā'um*, the normal Old Babylonian designation for a travelling agent, a man who was given a *kisum*, "purse" (Larsen 1977:126).

The enabling text suggests that there was some kind of official document, which was probably kept in the files of an administrative office in the capital. In a private contract duties and responsibilities were spelled out and rights were stated. The owner of the document held it as long it was valid and it was usually returned to the obligated party when he had fulfilled his duties according to the text of the contract. The obligated party usually sealed the

document in the presence of the witnesses. In the text we find that the rights and obligations of both *tractator* and investors were defined (Larsen 1977:132).

It is probable that the success of the Old Assyrian trade was enhanced by being a private venture resting in the hands of a few wealthy *ummeānū*. It is also possible that the ruling class promoted the trade because they were investors in the deals and because they supplied most of the merchant class independently and not as agents of temple or palace (Barrell 1998:44).

5.5 NEO-ASSYRIAN PERIOD 934-609 BCE, NEO-BABYLONIAN PERIOD 626-539 AND EARLY ACHAEMENID PERIOD 550-400 BCE

Private and temple households continued to play the leading role in first-millennium Babylonia. The Achaemenid kings owned large amounts of property in Mesopotamia but the needs of the royal economy were partly covered by temples, which were obliged to pay considerable revenue to the state (Dandamayev 1996:198).

5.5.1 Assyria

Northern Mesopotamia and Syria, including Israel, the Northern Kingdom were dominated by the Assyrian empire with a centralised structure. The economy was influenced by these political changes. Long-distance trade throughout the Empire now occurred within the same political entity and imperial policies of tribute collection may have made internal trade obsolete (Van de Mieroop 2002a:81).

Indeed even Judea, a territory not under the direct control of Assyria but within its sphere of influence, found itself providing tribute. In 734 BCE Hezekiah's father, King Ahaz, stripped the temple of all its silver and gold, as well as all the gold and silver in the palace treasury and sent it to Tiglath-Pileser III. Then some 30 years later, in 701 BCE, Hezekiah was required to deliver 30 talents (or 900 kg) of gold and 800 talents (or 24,000 kg) of silver to Sennacherib (Röthlin 2009:60).

Thus Assyria with its extensive centralised footprint provided a market that may well have led merchants from Phoenicia and elsewhere to source products in more distant regions such as Spain (Van de Mieroop 2002a:81).

5.5.2 Uruk

Eanna the temple of the goddess Istar in Uruk and Uruk itself could be considered a temple city with Eanna at its economic centre. This temple owned most of the land in the rural environs of Uruk, although private land ownership also continued there. Extensive areas belonging to the Eanna temple were turned into date-palm plantations (Dandamayev 1996:199).

5.5.2.1 Temple personnel

Only an insignificant part of Eanna's lands was cultivated by temple slaves. The temple leased out land to free tenants and was often forced to employ seasonal workers. The procedure would be to lease out much of its land to "rent collectors" who were responsible for delivering a fixed annual amount of produce to the temple. Most of the management of the temple's date-palm groves and grain fields would be undertaken under the control of these officials. As suggested, their role was to supervise the collection of rent and lease the land rather than cultivating it themselves (Dandamayev 1996:199).

Other than slaves most artisans worked voluntarily, under contract in exchange for wages in currency and food ration of dates, barley, beer, etc. The temple was an employer of a variety of skilled workers including numerous jewellers, leather workers, blacksmiths, bronze-smiths, carpenters, builders, weavers, bleachers, potters, engravers of seals, launderers and others. The temple also practised exclusivity; the top officials of Eanna specified that "artisans of Eanna" (carpenters, blacksmiths, engravers of stones, jewellers, etc.) would be required to work solely for the Eanna temple and none other. Evidently, they would lose their jobs in Eanna if they

concluded an analogous agreement with another temple (Dandamayev 1996:200)

Prebendaries of Eanna derived their income by working for the temple as brewers, butchers, doorkeepers, for specified periods of time. Many citizens held temple prebends, which could be sold or assigned to other citizens (Dandamayev 1996:200).

5.5.2.2 The role of the temple

The temple's role in the Uruk region's overall economy was extensive, engaging in business operations and international trade, especially to import metals from abroad. Documentary evidence shows that the Ebabbar temple played a similar role in the Sippar region. It possessed extensive land holdings, engaged in lending, business and trade and exchanged its surplus production for metals or other commodities that it did not itself produce; probably on a barter type arrangement. It also used rent collectors in leasing land to tenants and employed artisans, free craftsmen and kept slaves. The temple also hired artisans from other cities when local workers were not available in Sippar (Dandamayev 1996:200).

5.5.3 Temple finances

While evidence is patchy it seems that for most other temples the major source of income consisted of the tithe - approximately one-tenth of the taxpayer's income. All free members of the population paid tithes to the temple nearest to where they held their land or other source of income. In this way temples could also be dependent on the private economy (Dandamayev 1996:201)

5.5.3.1 Store of value

Numerous tablets show that the administration of the great temples was continuously receiving amounts of silver of varying size, which the official and private faithful bestowed. Silver used as currency was of poor quality and

there was no reason to assume that payments for religious (and fiscal) purposes were made with a less debased metal. On the contrary, the numerous precautionary clauses embodied in contemporary business documents had the effect of reserving the better alloys for private commercial transactions (Oppenheim 1947:116).

In order to introduce uniformity in the silver used by the temple and which would be of higher quality than that received, the temple administration used to hand over the incoming silver (*irbu*) to the smiths of the sanctuary at the end of each month. The temple foundry could smelt all the miscellaneous silver cuttings, rings, wires, objects, etc., into silver ingots of a standard size and fineness, the silver coming from revenues was described as *la pi-it-qu*, "unsmelted" (Oppenheim 1947:117).

In this way temple could also introduce a guarantee of quality into the economy. However, since the Mesopotamian economic system was basically agricultural, payments were mostly made in primary commodities, which could not be dropped into the cash box of the Privy Purse. Thus the officials guarding the cash box by extension become assayers having some of the same duties of the modern day factor under Scottish law. They had to evaluate the barley, dates and other products, which the farmer delivered to pay his taxes. Moreover, it must be assumed that the ever fluctuating silver value of these commodities had to be established periodically. This, of course, entailed some sort of publication of the rates of exchange at regular intervals, much as a modern "commodity exchange" publishes its list of quotations (Oppenheim 1947:119). It could be speculated that these "factors" played a role in the valuations.

5.5.3.2 *Debt*

Neo-Assyrian legal documents show that agreements were drawn up in the manner of debt notes. For example, real loans or promises for future deliveries of goods and labour offerings, or dues were set out. Given the underlying economic pattern, the agricultural milieu of the notes was apparent

as barley often had to be repaid at the threshing floor. The style of the grain loans of the period suggests that the palace and the temples used them as a means to distribute some of their stock to private individuals (Van de Mieroop 2002a:82)

There were instances where the fields were worked by individuals fully dependent on the temple; otherwise the land was leased to tenants who owed dues and rents on a share-cropping basis. Where the temple share of the harvest fell short debts were created and these debts required temple permission for late payment, or a loan was created. The temples found that the agricultural yield could be considerable and thus needed to find a way to turn part into silver. This process required time, as crops were consigned on credit to intermediaries who sold them. For the temple itself, labour was in short supply and in order to alleviate the shortages credit was issued to those in need who entered into indentured service (Van de Mieroop 2002a:83).

As mentioned above agriculture was the basis of the economy and the substantial land holdings by the temples were leased to tenants who paid rents and other dues. The inevitable arrears in payments overwhelmed the tenants who predictably ran up debts. The temples embarked on large-scale leasing of land to private rent farmers. The most well-known examples were the large entrepreneurial companies such as Egibi, Nūr-Sîn and Murašû. It was these individuals or their families who became the creditors to the temple tenants. The latter often pledged the land they worked as surety for a loan. Natural and political disturbances could exact turmoil on these tenants. For example, a possible explanation for the increase of debt notes in the Murašû archive in the years 424-423 BCE was because of military conflict and the consequent drafting of large numbers of farmers in the army, many of whom defaulted on their loans in consequence (Van de Mieroop 2002a:74).

5.5.3.3 *Duties*

In considering the temples, it should be acknowledged that besides carrying out the administrative and domestic duties already mentioned they also

undertook ecclesiastical duties. Within this context, offerings and stipends took on particular importance. To take the example of the Eanna of Uruk, rendering service to the temples was bound by promissory notes. These notes were also used as a basis for paying for shepherds' animal feed or the work of labourers on building sites. Ecclesiastic or administrative work in the temples was not often mentioned in family archives; instead we find reference to persons who have held the positions or who have performed duties related to the religious cult (Dos Santos 2006:9).

In summary it can be concluded that in the Neo Babylonian Period, the temple had great privileges and there was strong economic pressure for the private owners of land to renounce their freehold in favour of the temple in return for security and exemption from particular burdens. It is possible that private individuals may have participated, wholly or in part, in the sale of land to the temples for these reasons (Saggs 1954:33).

To return to the example of Eanna, the temple was an extensive land holder. The administrative control of all the temple estates appears ultimately to have been the responsibility of the *šatammu* official, although the form of control may have included several intermediaries between those officials and the farmer. In turn, some large estates were under the control of their own officials. Thus, for instance, much of the land in part of the region of the Takkiru canal was controlled by a certain Ardia who let out parts of it to smaller farmers (Saggs 1954:34).

5.6 CONCLUSION

The economic importance of the temples of ancient times from the earliest beginnings is well understood. The Babylonian shrines are a good example; Mesopotamian temples, besides being religious centres, were also law courts, schools and archive depositories. In financial terms they acted as banks and mercantile institutions. Their contribution to the Babylonian economy was significant. In financial transactions the position of the Babylonian temples could be seen as similar to modern national banks but they carried on their

business with the added weight of a semi-official authority (Bromberg 1942:77). In need they could also act as a lender of last resort not unlike a modern reserve bank.

A good example of finance at work was that at Sippar, the temple of Šamaš, the sun-god. This Mesopotamian temple existed for about three or four thousand years and this longevity in the banking sphere meant it could perhaps be described as one of the first financial organisations to be created (Bromberg 1942:77).

Eanna was already an influential temple in Sumerian times and some texts indicate that the temple was as ancient, or more ancient, than the city. In theory, all the land originally belonged to the god. It passed into other hands by seizure by officials and by conquerors. Continuing through to New Babylonian times, it is possible that some of the land owned by Eanna may have been in its continuous possession since Sumerian times. Subsequently land would have come into the temple's ownership by purchase, as forfeits for an unsettled obligation, or as private gift or royal grant (Saggs 1954:33).

It is likely that significant parts of the arable land in southern Mesopotamia were controlled by the temples for much of the third millennium BCE. As the temples were seen as the dwellings of the gods, the senior temple administrators could be perceived as acting on behalf of the gods. By extension the city and its surroundings were considered as the domain of the gods. However, the palace came to set up secular control over the temple estates and this trend continued and grew beyond the end of the third millennium BCE into the Ur III state (Falkenstein 1974:800).

However, it is important to note that the proof that the temples of the early period in Mesopotamia existed in the absence of political authority, is imprecise. Indeed the data also suggests that the authority of the palace grew throughout the third millennium BCE. Furthermore, in all periods there is evidence that there were non-institutional households.

By the end of the third millennium BCE, the palace had acquired control over many of the institutional estates of the various temples. Nevertheless in practical terms, the administration of these institutional assets was still dependent throughout this period on the presence of entrepreneurs and craftsmen who were the heads of individual non-institutional households.

It is perhaps fair to say that the financial importance of the temple was immense. We may never know if they held some exclusive rights over the economic life of the Mesopotamian city in the very early period. However, there can be little doubt that by the time of the Neo-Babylonian and early Persian Periods, acting with private entrepreneurs, they continued to enjoy a key place in financial life. This is significant because it is during this period that the Mesopotamian region evolved from a group of city states to supra regional empires. That the temple was able to adapt to these changes, in the Mesopotamian political and economic dimension, can only increase our appreciation of the financial impact the temple enjoyed throughout this period.

CHAPTER SIX

THE PALACE

6.1 INTRODUCTION

The communal endeavour in maintaining the irrigation system meant that the palace and temples logically controlled the land and its use. The dominant economic and political status of the institutions of the city-states was in evidence by the second half of the fourth millennium. As a corollary, the centralisation of the administration and accounting led, by the third millennium, to a sophisticated and developed structure of land management and tenure (Cripps 2006:26-27).

Some relatively small amounts of "private" land could be found, i.e. land recorded in the texts as transferred from their possession by "private" households. Otherwise arable land was held directly by the temple or palace demesnes or, on their behalf, by "private" households allocated sustenance (*guku*) land, or under rental agreements. By implication there was a close interdependence between the palace and temple demesnes, which perhaps gave rise to a unitary tenure system. Their joint landholdings might then be considered to be the state demesne (Cripps 2006:27).

6.1.1 Store of value

Underlying any economic system is a store of value; in this period, this meant material which could be stored without losing value and retrieved when necessary. Gold and silver, have long been considered signs of wealth, collected and stored in palace treasuries by most rulers and used as a medium of exchange (Röthlin 2009:64).

Gold was available in substantial quantities in western and southern Arabia and mined in various places in eastern Egypt and Nubia. Alluvial gold was also found in Egypt where small nuggets were washed down by the waters of the Nile River (Röthlin 2009:63).

However, in the Ancient Near East, the predominant material was silver and was used as the common currency; indeed word for the metal, in Akkadian, came to have the equivalent meaning of money. It was used not only to pay for goods but also as a store of value; goods were weighed against silver and it was common for merchants to travel with their scales to enable them to weigh merchandise against pieces of silver (Barrell 1998:10).

There were some instances where gold was known to have been used as a medium of payment, for instance, during the Age of Mari but the evidence is more positive in favour of the metal's employment for decorative purposes. During Late Bronze Age in Syria, Palestine and Mesopotamia gold became the standard in trade but it is possible that the metal's relative scarcity during the Middle Bronze Age was as a direct consequence of the limited connection between Western Asia and Egypt, the chief supplier of gold (Sasson 1966:166).

6.1.2 Palace personnel

The temples and the palace were the chief employers of the general population of the city-states; we could say that the major part of the population was employed full time by them in a large variety of occupations in agriculture, in trades and other lines of work. In the earlier periods, these people were sustained directly by the temple or palace with rations of barley, oil and textiles. In this way they became dependents of either a temple or palace (Cripps 2006:37).

The contrast with the later Assyrian empire can be observed, despite the palace still continuing to hold an enormous amount of power and owning huge

tracts of land, nevertheless by now it did not represent the entire state economy (Van de Mieroop 2004:55).

Turning to the population, the roles within the various types of households could not be categorised neatly. An individual could take care of the affairs of an institution, while at the same time managing those of his own household. The two roles blended, often without strict delimiters. Using modern terminology, there were no real nations in ancient Mesopotamia but often diverse territories held together by the ruler (Van de Mieroop 2004:55).

6.2 EARLY PERIODS – PRIOR TO 2400 BCE



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Museum no.	AO 03004
Accession no.	
Provenience	Girsu
Excavation no.	
Period	ED IIIb (ca. 2500-2340 BC)
Dates referenced	Enmetena.00.00.00
Object type	cone
Object subtype	
Material	clay
Language	Sumerian
Genre	Royal/Monumental
Sub-genre	witness
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Figure 7: Clay cone with text

Description: The text on this clay cone is also attested on a clay cylinder and on two vessel fragments. It relates a series of conflicts during the Early Dynastic III Period over land and canal management in the Eden district between Lagaš and Umma, the latter a neighbour to the north along the Tigris. It is written from the perspective of Lagaš during the reign of Enmetena, Ensi of Lagaš.

[Online]. Available at http://cdli.ox.ac.uk/wiki/doku.php?id=umma_lagash_border_conflict [Accessed 21 November 2013].

Mesopotamian historians now tend to see early social organisation as a set of three major institutional arrangements: the great estates of temples and palaces and the private sector. The suggestion is that the formation of society in this way was articulated to refute the model of a monolithic (or dominant) mode of production in which the temple-state of early third millennium times gave way to the despotic palace-state of the late third millennium (Yoffee 1995:300).

6.2.1 Mesopotamian economic structures

The clean model of separate lines of authority can be broken down to explain how royal officials came to manipulate temple property, how temples profited from royal support and how community members often contracted with both temples and palaces. It is helpful to consider the temple's lands as supporting the need to care for and feed the gods, while the palace-estates arose from a combination of land purchases and seizures but it is equally apparent that social institutions were permeable and that individuals played multiple and varied roles, undertaking profitable business activities where necessary and cooperating and competing as circumstances changed (Yoffee 1995:300-301).

Mesopotamian scholars tended to regard Mesopotamian states as centralised, controlled by strong kings, with bureaucrats controlling the circulation of goods and services. However, Yoffee (1995:300) now maintains that there was no Mesopotamian state as such only a series of city-states. The empire of Akkad and the Ur III state, which came later, did not last and city-states once again gained ascendancy. Nevertheless, it was these large centralised states that produced large buildings and conducted military campaigns that brought numerous and exotic materials into Mesopotamia. These kings required onerous taxation from conquered provinces, established a substantial bureaucratic system and mobilised slave labour to build temples, palaces and waterworks (Yoffee 1995:300).

6.2.1.1 *Development of economic and social infrastructure*

In the Early Dynastic Period irrigation begins to be well organised with large-scale artificial canals being found. Later in this period, there is evidence of the continued enhancement of these large-scale irrigation systems with flow regulators and reserve basins (Cripps 2006:9).

In conjunction with practical building work, social and political relations transformed the city-states in the last part of the fourth millennium BCE. Monumental architecture on a large scale is found for the first-time in such areas as the temple complexes at Uruk - the Eanna precinct itself covered 6-7 hectares and included several temples, a possible palace, a sunken court and other large structures (Yoffee 1995:284).

The larger settlements with populations of say 25,000 were *de facto* city-states, often at war with each other and often over water supplies, as in the Lagaš-Umma conflict. The rulers of the city-states begin to control, either by directing or by harnessing the available resources, the provision and maintenance of irrigation schemes, as evidenced by several royal inscriptions of the period. This royal involvement in major irrigation schemes is continued by the Old Akkadian kings and by the rulers of the Ur III city-state (Cripps 2006:9).

The building works also engendered the need for record-keeping devices, such as cylinder seals and bevelled-rim bowls (most plausibly interpreted as ration containers). Cuneiform writing appears, mainly concerned with administrative accounts but also included some lists of professions and geographical names. While they primarily supported the growing need for the bureaucracy, these lists are seen as attempts by scribes to organise the Mesopotamian world and to instruct future generations of scribes in the art of writing (Yoffee 1995:284-285).

In northern Mesopotamia the situation was similar. Recent work and excavations carried out in northern Iraq, Syria and south-eastern Turkey, for

instance, at sites such as Tell Brak and Hamoukar over the last twenty five to thirty years have demonstrated that complex urban, literate states flourished there by the mid-third millennium BCE, especially the excavations at Tell Brak are now fleshing out our picture of Syria in the mid-to-late third millennium (Zettler 2003:25).

In addition archaeology at Ebla shows that the site was occupied from the 4th millennium BCE onwards and the period of its greatest wealth and power was in the mid 3rd millennium onwards (Zettler 2003:25).

6.2.1.2 Urbanisation and centralisation

The Ebla texts suggest that by the early twenty-fourth century northern Mesopotamia was a highly urbanised society. Extensive city-states, about 20 miles apart, were increasingly brought together by military action and treaties into larger regional entities. Among these Ebla, Mari, located on the Euphrates near the Syria-Iraq border and Tell Brak, the ancient city of Nagar, became important. The texts contain references to other important northern Mesopotamian states: Harran and Emar on the big bend of the Euphrates. They also include references to an array of smaller but well organised societies linked to the more powerful states through socio-political and economic ties (Zettler 2003:25).

Cripps (2006:11) asserts that the creation of large agricultural estates may have been occasioned by these major irrigation schemes and available texts suggest that these demesnes were predominantly in the ownership of the governing institutions of palace and temples. Corvée labour was levied by palace and temples to dig and maintain the irrigation systems and service agriculture at harvest and other times as well as to build city walls, temples and man the army. The remuneration of corvée labour with rations and a land parcel was widely attested in the texts of this period and thus the tenure of land by service (the holding of *šuku* or "subsistence" land) was much in evidence where the land was held from temple or state demesne. The movement to rural populations from the countryside to within the city walls,

also apparent in this period, far from leading to an abandonment of the land, transformed farmers into city dwellers commuting each day or so to the fields, in a suburbanisation of agriculture (Cripps 2006:11).

The ruler of the city-state lived in the *é-gal* "big house" or palace. Large earth buildings are found within the Eanna temple precinct at Uruk and could probably be seen as a "palace" of the Early Dynastic Period. In the north, such as at Mari and Ebla, there are more examples of defined palaces contrasted with temples, which are little more than shrines attached to the seat of government at the centre of cities (Cripps 2006:20).

It could be said that the central institutions of the Early Dynastic city-state were the temple and palace households existing alongside each other. The palace households had possession of their own lands, possessed wealth and possibly managed them in the same manner as the temples. In due course the palace demesnes of the former rulers of the city-states may have been confiscated by the Akkadian kings. They introduced the practice of allocating large agricultural estates to sympathetic supporters. By the time of Naram-Sin, we begin to find a powerful, centralised monarchy controlling vast territories reaching beyond the accepted periphery of Mesopotamia and the institution of monarchy becomes all powerful (Cripps 2006:25).

6.2.1.3 Commerce

During the Sargonic Period holders of state offices probably took advantage of their positions to engage in commercial activities on their own behalf. In due course these holders would not necessarily trade themselves but entrusted commodities to official trading agents who traded on their behalf. Texts record deposits of silver or other valuables while others seem to be records of reserves with an agent over and above mere deposits for safe-keeping. Other state officers were very active in business on their own behalf and even kept the records in their offices rather than at their homes. For example a certain Zu-zu, an official at Gasur, appeared in records of various loans and debts of fats, barley, livestock and silver (Foster 1977:33).

This business agent grew into a profession. Called the *dam-gàr* he was probably was not solely a state agent. It is found that these men could do work for the state and occasionally received grain and animals from the state, perhaps for personal use. Some agents seemed to be well off, having one or more servants or slaves, making gifts and offerings of metal and animals. By contrast some agents or their sons could be state dependents, possibly liable for menial labour service. There may have been some sort of professional or trade organization for the *dam-gàr* certainly there is mention of a "chief trading agent" (*dam-gàr-gal*) (Foster 1977:34).

From early in the third millennium, rewards for sections of the population created a type of tenure dependant on the institutional demesnes. Land which could include orchards held in this form of tenure were styled as *šuku* or sustenance plots and matched supplies, which sustained semi-free citizens during their conscription to military service, agricultural work or maintenance of the irrigation system. Such lands were "measured off" from the holdings of the great institutions (Cripps 2006:40).

The tenure of these properties was determined by service, for instance, a corvée obligation owed to the city-state either temple or palace. The holder of the *šuku* plot has possession of land through freehold, rights to its usufruct and certain rights of disposal of the land. However, the demesne holder will retain a share in the ownership not only to enforce the service obligation but also, perhaps, to ensure the proper cultivation and safeguarding of irrigated land (Cripps 2006:40).

6.3 3RD DYNASTY OF UR - UR III PERIOD

The Ur III state gave rise to a period of unification of Mesopotamia and was subdivided into provinces, which roughly corresponded, in terms of their territorial extent, to the former city-states. Each province comprised, firstly, the province proper, constituting the earlier the city-state and was run by the province's governor, bearing the title of an *ensik* and, secondly, the crown

sector, otherwise the military, which was subordinated to the central government and was run by the local generals (*šagina*). The crown sector was extended to include large rural estates belonging to the members of the royal family and the highest of officialdom of the kingdom (Steinkeller 2002:114).

6.3.1 Economy

In effect the occupants of the state were dependant on the palace and were supported economically by the state either directly, as in the case of the military organisation, or indirectly, through the provincial economies. The state's support came through distribution whose form and economic value depended on an individual's place in the society and was dependant on the continued performance of services for the state. Members of the higher and middle ranks of the society were granted allotments of arable land, still designated as *šuku*, "subsistence land," as found in the earlier periods. Other members of the society were supported through distribution of commodities (Steinkeller 2002:115).

Extrapolating the model it can be said that all arable land, including the holdings of temple estates, constituted the property of the king. It was through *šuku* that the land was distributed by the crown among the dependents of the state, depending on their social position and profession in exchange for services but excluding slaves and the lowest ranks of the working class. A state dependent was an *éren* and although the term is usually applied to the lowest-ranking dependants of the state, to give it a broader significance it could be taken to mean any subject of the king. Even the members of the royal family ranked as *éren* vis-à-vis the king (Steinkeller 2004:93).

Šuku land was managed differently when it was controlled by the palace (and temple), to the way it was handled when outside of such environments. The *šuku* plots, held by the dependents of the palace, were tilled *en masse* by that institution itself, through the use of its own plough-teams and corvée labour. After deductions for various items, for instance seed-grain, use of draft

animals, cost of labour and irrigation taxes, the income from the fields was subsequently divided among the individual *šuku* holders based on their designated lot size and the average yield from the cultivated area. These examples could be found at places such as Lagaš and Umma, within the economic sphere controlled by the governor and his administration (Steinkeller 2002:115-116).

Steinkeller (2004:93) speculates that all the economic and human resources were integrated into a single socio-economic organism subordinated to one ruling body. This seems to be a monolithic state but the basis of the system is individual households linked together by a network of mutual rights and obligations. In sum the households form a single pyramidal structure, at whose top stands the palace (Steinkeller 2004:93).

The economic role of the palace was thus extremely important when Mesopotamia became politically unified under Ur III. Steinkeller (2002:114) argues that since all farmland was owned by the palace, either directly or through the temple estates, there was virtually no room for private enterprise. Private landownership may have existed but texts providing the evidence for this have not been discovered at the present time. It thus remains speculation as to whether or not privately owned fields existed beyond these areas.

6.3.2 Finance and credit

Supporting our knowledge of the financial life of the period, there is a huge body of documents related to institutional loans. These loans were referred to as *še-ur₅-ra* loans (see also *Chapter Three*), translated as “barley loan,” and can be considered as a system of advances, usually interest-free that the central administration would make to its dependents, as well as to the various compartments of the provincial economy. The texts were predominantly discovered in Lagaš and Umma. They record both the advances and their subsequent repayment. Steinkeller (2002:116) is quite certain that, rather than being a commercial, profit-oriented venture, the *še-ur₅-ra* system was meant to serve as a safety-net, protecting the dependents of a given institution from

economic hardship, the advances largely eliminating the demand for private credit, since the cultivation of *šuku* land was done for the benefit of its holders by the granting institution. This negated the need for an individual *šuku* holder to look for agricultural labour and to create a debt burden such as an interest-bearing loan (Steinkeller 2002:116).

From this we can see that the problem in considering credit in this period is to determine whether creditors worked on their own behalf or on behalf of the palace (or temple). However, considering the matter by region, in Southern Babylonia the economy was dominated by the large estates, leaving little room for independent economic activity, while in Central and Northern Babylonia where palace control over agricultural property was less significant, private credit agreements were more common. Loan texts for the Ur III Period derive primarily from Nippur in Central Babylonia or from archives that seem to have a Northern Babylonian background, for example, the SI.A-a and Tūram-ili archives (Van de Mieroop 2002a:67).

Overall credit facilities in the Ur III Period were found in two areas of the economy, the agricultural sector and that of the merchants. In agriculture the question of land ownership becomes fundamental. In the south, if land was owned by the palace and either farmed directly by its workmen or assigned as sustenance fields to dependents, much of the grain and other produce harvested reverted to the palace (Van de Mieroop 2002a:67).

6.3.3 The role of the merchant, the *bala*

During this period the *damkar* continued to play a major role in the transfer of provincial wealth to the central administration. The Umma *damkar* played an important role in the Ur III *bala*. The *bala* was a means by which regional wealth was could be redistributed for the benefit of the over-all religious and palace system of the Ur III monarchy. The Umma *damkar* undertook a different role to the later Old Babylonian Sippar counterpart. Though both belonged to the province, the Umma *damkar* primarily worked for his own provincial administration while the Sippar *damkar* was in direct, accountable,

contact with the central palace in Babylon. However, now and later both groups continued to play a role in the transfer of local wealth to central institutions (van Driel 2002:22).

The *bala*-system, which encompassed the entire Ur III state, could be considered the central system where massive amounts of products from the provinces — livestock, cereals, reeds, timber, etc. were collected for redistribution. The archive of an overseer of merchants, Tūram-ili, mentions the funds he used to derive from the *bala*. If he used assets from that immense flow of resources to finance traders, he would not have needed access to other sources. One also could take the term *bala* in its more usual sense of “to turn over, to exchange,”³⁰ and only this context could be seen as similar to the Old Assyrian *naruqqu*, an investment for merchants where the goods contributed were exchanged for others. (Note: Old Assyria is considered in the next section). In the Ur III Period merchants placed contributions into a fund, which could be used as security to finance the acquisitions of foreign goods. The state could be a major contributor to that fund, or even be the sole one in the case of particular merchants in our record but others could participate in this activity as well (Van de Mieroop 2002a:68-69).

The system of redistribution became a mode of exchange that required an institution having access to substantial resources. Numerous texts show that the palace had extensive agricultural land holdings, which formed the basis of the economy and distributed much of its income to thousands of dependents, beginning with the king down to the baby of a weaver. These ration texts document the issue of barley, wool, clothing and oil to long lists of people who seem to have been fully reliant on the palace for their survival. From these records, the conclusion is that the palace controlled all productive resources

³⁰ The Pennsylvania Sumerian Dictionary.
[Online]. Available at <http://psd.museum.upenn.edu/epsd1/nepsd-frame.html>
[Accessed 25 January 2014].

and that the majority of people survived from their redistribution (Van de Mieroop 2004:59).

However, this model could understate the complexity of economic life even in a centralised state. Texts show that some groups, such as craftsmen were given rations for only part of the year. During the remainder of the year they would have needed an income and may have hired themselves out to the palace for remuneration. Possibly they were private businessmen with their own private customers. Despite the palace's control over agricultural resources there may have been tracts of privately owned land, for example in a province such as Lagash. What can be said is that redistribution was a significant activity possibly co-existing with other systems of exchange while recognising that institutional archives did not record property holdings outside their purview (Van de Mieroop 2004:59).

6.4 OLD BABYLONIAN PERIOD 2003-1595 BCE AND OLD ASSYRIAN PERIOD 2000-1740 BCE

Early in the second millennium, the redistribution system broke down and the great estates used less direct ways to provide for their dependents; subsistence fields were allocated to the population or they could work the fields as sharecroppers. Although there are no texts detailing the ration system in Old Babylonian Ur, it may have survived in some fashion but its role was greatly diminished in comparison to the situation in the third millennium (Van de Mieroop 1992c:107).

In the early second millennium the physical palace was located in the capital cities of the successive dynasties of Isin, Larsa and Babylon but some type of royal residence may have existed at Ur, even if the physical remains are not evident. Thus when the Sumerian term *e-gal* "palace" appears in the texts, we do not know whether it refers to an actual building, or to the palace administration as an institution (Van de Mieroop 1992c:107).

However, when Hammurabi conquered the south, the administrative functions of Ur were removed. Ur became part of a province, covering most of the southern area of Sumer from Lagaš to Ur. Hammurabi's high representatives held office in Larsa. While their functions were manifold and varied, they seem almost to have been the personal representatives of the king. Fields were either assigned to people as subsistence fields as rewards for their services to the crown, or they were parcelled out to tenant farmers who paid rent or provided a service to the king in return for the use of the land. Orders relating to numerous aspects of the province's administration, covering military, legal and financial matters were given. Hammurabi was the superior civil administrator of the region and seems to have micro managed the affairs of state; letters to subordinates cover matters regarding Ur in detail, ranging from the sending of a cook to take care of the offerings in the city, to agricultural matters such as the dredging of the Euphrates and the supply of water to Larsa and Ur (Van de Mieroop 1992c:112).

6.4.1 The role of the merchant, tax collecting

The palace of Babylon instituted in the south a system for the collection of taxes that relied on merchants. The association of merchants, Akkadian *kārum* (Van de Mieroop 1992c:112), was independent from the palace and consisted of private citizens. However, the merchants of Larsa played a central role in the organization of tax-collecting as tax-farmers and, although Ur had its own 'overseer of the merchants', the city played a secondary role to Larsa (Van de Mieroop 1992c:113). Three overseers of the merchants were active in Ur; Sîn-muštāl, Ili-iddinam and Ili-išmeanni and they may each have been responsible for a different quarter of the city, or for a different region under the administrative control of Ur. Texts survive for the activities of Sin-muštāl who dealt mainly with the trade in fish, which is easily understood, as Ur was close to the large fishing grounds in the marshes (Van de Mieroop 1992c:114). (Note: "Overseers of the Merchants" and their interaction with the palace have been discussed in *Chapter Three*).

The Babylonian kings used the merchants as *de facto* tax-collectors. The palace obtained silver and barley, the merchants obtained access to natural products, which they could market for a profit. In the seventeenth century BCE the merchants of Sippar were also used by the palace to market its own surplus of wool, oxen and sesame. Local bureaucrats of Ur were still employed by the Babylonian kings but their role was greatly reduced compared to the situation in previous centuries with the local administration of Larsa being the most prominent in the south (Van de Mieroop 1992c:114).

The collection of taxes from their subjects was a major concern for the kings. For instance, there were various kinds of taxes mentioned in the Sippar texts, such as the *nemettu*, the *igisû* and the *illku* and different individuals collected these taxes (Harris 1968:732). This is probably because the taxes served different purposes; the *nemettu*, a kind of license fee, was a tax paid in kind and imposed on various officials and craftsmen. The *igisu*, paid in silver, was imposed on high officials, for instance, the Overseer of the Merchants. The *illku*, also paid in silver, was imposed not only on persons who held royal holdings but also on the College of Judges (Harris 1968:732fn47). References to taxes and tax collectors are found from the reign of Hammurabi and increase in number and variety with time. Despite the attempts of the palace at Babylon to centralise tax collection, it was not wholly successful. Letters to the city administrators of Sippar show of delinquent taxes and the failure and unwillingness to deliver the taxes (Harris 1968:732).

Various officials also supervised the king's barley, which came in as taxes and went out as palace loans or as provisions for workers, troops and animals that were supported by the palace (Harris 1968:732).

6.4.2 Justice and the law

The king was also the highest judge of the land. Justice was dispensed through royal judges and was open to all. The king's decrees were enforced by soldiers and they were considered a sufficient threat that, texts show,

decisions were changed about the use of a field before the soldiers arrived (Van de Mieroop 1992c:117).

If circumstances necessitated it the king could issue an edict abolishing all debts. A tablet housed in the British Museum (BM 78259), gives an example of this edict. It was issued by king Ammisaduqa of Babylon (reigned 1646-26 BCE) in his first year (Van de Mieroop 1992c:117). As the text is only partly preserved, the exact meaning is not clear but the general function of the edict seems to have been to restore the economic balance of the state. Paragraphs 4 to 9 of the edict regulates debts incurred by private citizens; those who took loans out of need were freed from repayment, while those who borrowed for commercial enterprises were bound by the contract. The private moneylenders who held the debt caused the indenture of private citizens. This was not beneficial to the state, which required their labour and taxes (Van de Mieroop 1992c:118).

Indeed law codes rarely dealt with matters of "public" law as understood today. Instead there are the royal expressions of "truth," "justice," "equity," and these form the basis of mediation between the privilege of the sovereign's free will, including possible institutional abuse of that privilege and his moral but also practical obligation, to ensure a minimal defence against the misfortunes of the lowest strata of the population: the widows, orphans, oppressed and the poor, to quote the formulaic wordings of the royal edicts (Zaccagnini 1994:244). The Akkadian expression *míšaram šakānum*, "to establish justice," in the Old Babylonian Period technically refers to these edicts of remission of debts (Zaccagnini 1994:244 n. 2).

In this way Ammisaduqa's edict served his own interests. Other second millennium kings of the dynasties of Isin, Larsa, Babylon, claimed to have issued such edicts, probably with a similar intent. The documents from Ur that can be associated with these edicts do not deal with debts of silver or grain but with real estate and temple prebends (Van de Mieroop 1992c:118).

6.4.3 *Palastgeschäft* and finance

Economic activities of this kind constitute a "*Palastgeschäft*." The activities conducted in the context of a "*Palastgeschäft*" by individual entrepreneurs were always directed toward promoting the interests of the palace while recognising gain for the entrepreneurs. There was element of risk in these undertakings but importantly it was limited by the simple fact that most of these entrepreneurs were part of the institutional network within which they served as officials of the palace (Renger 1984:39).

The merchants would distribute the goods of the palace but as we have seen the palace could be slow or lenient in claiming its silver. (See *Chapter Three*). This delay was typical not only of palace "loans," but also of other "loans" in which the creditor, for humanitarian or commercial reasons, lends at risk - temple loans, *usatum* loans and partnership in joint ventures. In these cases the creditor will need to wait until he can be sure that the silver can be paid back. This may take years, as part of the economic activity of *Palastgeschäfte* (Stol 1982:148).

A specific example of the economic activity can be shown in the group of texts, which show that fish, dates, garlic and wool were sold at one-third of their value. Fish had to be sold on the market as soon as they had been delivered by the fishermen and the entrepreneurs facilitated this. They sold the merchandise on the market at the current price but guaranteed the palace one-third of the value of the products. The risks or profits remained with the entrepreneurs while the palace could lend at 33⅓%. This is why the products could be "sold" to the entrepreneurs at one-third of their price. The sellers were the Overseers of Five, members of the *kārum*. (cf. *Chapter Three*) and the men who purchased the goods must have been wealthy and of independent means (Stol 1982:148).

6.4.3.1 Sharecropping

Therefore the great estates of Babylonia, the temples and the palaces, made extensive use of credit in order to manage their agricultural resources. The palace owned landed estates with fields and orchards, had herds of cattle, sheep and goats and controlled waterways and marshes where fish was caught. The utilisation of these resources was achieved through a system of sharecropping. Farmers, herdsmen and fishermen ran their activities in return for a share of the proceeds. Growers had to provide a contracted amount of cereal produce or a set share of the yield to the palace but could retain the remainder. In the same way herdsmen had to increase the herd by a predetermined number and set amounts of dairy products, mainly cheese and ghee but wool could be included (Van de Mieroop 2002b:163). Again the excess of production in animals and produce became their own and they took care of herds that consisted both of their own animals and of those of the institutional owners. Fishermen were given access to fishing grounds belonging to the palace for a set amount of catch. Excess catch was their reward (Van de Mieroop 2002b:164).

The palace was paid with the produce obtained by sharecroppers giving an abundance surplus of perishable and other goods such as cereals, dairy products, wool, animals and fish, which were consumed only in limited amounts by the palace. The surplus needed to be converted into easily storable silver, giving rise to entrepreneurs as intermediaries. They arranged the contacts between the palace and the producers and between the institutions and the consumers. Underlying these transactions was credit (Van de Mieroop 2002b:164).

6.4.3.2 Transactions with wool

In the northern city of Sippar from the first half of the seventeenth century, transactions with wool have been studied in detail by Charpin (1982:25-65) and Van de Mieroop (2002b:165) provides an outline of the structure showing that five steps were involved, diverging where he feels it is appropriate. (NB

the article refers to both the palace and the temple) (Van de Mieroop 2002b:164).

1. In late winter considerable amounts of wool were delivered to the palace, the *bit akītim* “house of the New Year’s festival”, probably referred to a designated storage area sensibly located perhaps near where the shearing took place. The palace would retain its share of the wool and in turn the shepherds departed with their part share. It is possible that many such buildings existed, which together were considered to represent the palace’s total wool collection (Van de Mieroop 2002b:164).

2. The palace would need to sell the surplus wool for silver or exchange it for other goods it required, managed by intermediaries who also were overseers of the merchants (Babylonian *tamkarum*). These intermediaries occupied a position between the palace and private economic spheres where an entrepreneur would have worked through palace intermediaries (Van de Mieroop 2002b:164).

3. At this stage the wool was still in the possession of the palace and was now passed on for distribution to private entrepreneurs who received it on credit for payment in the future (Van de Mieroop 2002b:164). As the palace could not obtain its silver immediately, it was necessary for the intermediary of the wool, probably facilitated by the overseer of merchants, to parcel the produce and distribute it through a series of smaller transactions. The entrepreneurs received the wool on credit from the palace suitably documented. The texts often state that the silver had to be paid to the palace in a manner probably similar to an “on demand” loan still used today namely, a loan, which is repayable on demand (i.e. without prior notice), rather than on a specific date. The “loan” document (a tablet) was presented at the time as proof that the silver was owed (Van de Mieroop 2002b:165).

The tablet became transferable on receipt and from the wording could be fully negotiable; from the wording it is certainly a bearer bond as the silver is to be paid “to the bearer of the tablet” (BM 81591, old Babylonian clay tablet from

Sippar or its vicinity). This is not an unusual clause in contracts from northern Babylonia from the reign of Hammurabi and indicates that a loan or claim for payment in the future of whatever nature could be transferred from one creditor to another. Underlying the transfer it is possible to conclude that a debt was settled that was not related to the original wool transaction. By providing the goods to entrepreneurs on credit, the palace was saved undertaking the work itself (Van de Mierop 2002b:166).

4. The silver was obtained and the loan repaid to the palace intermediaries by the entrepreneurs. The settlement of the obligation would take place after the wool originally had been delivered, for example in one case two years passed before a partial payment was made. As the payment was not complete there was flexibility to restructure repayments until final maturity (Van de Mierop 2002b:166).

5. Finally, the intermediaries settled the debt to the palace in Babylon in silver. As with the entrepreneurs, it seems that these men could take a long time to pay the palace what it was owed (Van de Mierop 2002b:167).

Credit introduced liquidity into the distribution of the natural resources belonging to the palace. The texts (BM 80644) express the transactions as loans and accordingly the intermediaries would have borrowed the goods. The above example sets out wool transactions but other texts exist for sesame and cattle (Van de Mierop 2002b:167).

Looked at end to end these facilities began as wholesale transactions where wool was dispensed in bulk by the palace to intermediaries on credit and ended as multiple small retail credit facilities to the entrepreneurs. At each stage a float³¹ was probably important and especially to the intermediaries who seem to have delayed payment of silver to the palace for as long as

³¹ In this context "float" is the amount of currency available to trade. Countries can manipulate the worth of their currency by restricting or expanding the amount of 'float' available to trade. [Online]. Available [http://en.wikipedia.org/wiki/Float_\(money_supply\)](http://en.wikipedia.org/wiki/Float_(money_supply)) [Accessed 27 January 2014].

possible. It is interesting to speculate that behind these delays the float could, in turn, generate revenue.

A similar system was also followed in southern regions. In this instance, the sellers of the goods were obliged to pay one-third of a nominal price of the goods upon receipt and another third at a later date, after they had been able to distribute the goods and receive the silver in exchange. The final third of the payment was forgiven and represented the profit for the work involved. The palace provided a loan, introducing liquidity into the system (Van de Mieroop 2002b:168).

6.5 NEO-ASSYRIAN PERIOD 934-609 BCE, NEO-BABYLONIAN PERIOD 626-539 AND EARLY ACHAEMENID PERIOD 550-400 BCE

We have seen in *Chapter Three* that two important families were involved in a range of business activities in the middle of the first millennium; the Egibi family in Babylon and the Murašû family in Nineveh.

It is through the activities of private entrepreneurs such as the Murašû family that we can better understand the role of the palace as the families acted on its behalf even though the palace economy is not well documented in this period. It is through these activities that it can be inferred that the palace retained its important role. However, in this period we see the role of private economic activity playing a significant part as compared to the activity indicated in the temple archives (Van de Mieroop 2002a:74).

Agriculture remained the basis of the economy and both palace and temples enjoyed extensive holdings. These were leased to tenants who owed rents and other dues, arrears in payments remained one of the main reasons why people ran up debts. In turn there was large-scale leasing of land to private rent farmers and these individuals or their families were the ones who became the creditors to the institutional tenants. The latter often pledged the land they worked as surety for a loan (Van de Mieroop 2002a:74).

Assyria did not enjoy natural resources; all her metals had to be acquired from other countries. The copper could have come from the mines in Cyprus and the iron from Syria, Asia Minor and Jordan, which was a major iron-producing region. Locating the Ancient Near East's source of tin has proven problematic. Afghanistan and the Taurus mountains have been suggested as possible sources but south-western Spain was noted for its tin, silver, iron and lead deposits (Röthlin 2009:86-87).

A treasury well stocked with metal hoards ensured a country's economic self-sufficiency in the Ancient Near East. Metals were necessary for the production of agricultural implements, tools and weapons of war. The palace in the Neo-Assyrian Empire would have inherited a treasury well-stocked with gold, silver, copper and bronze from the kings of the economically successful Middle-Assyrian empire. However, continual expansion of the empire meant the needs of the palace continued to grow and as further buildings were erected the contents would have reflected their wealth, status and accomplishments (Röthlin 2009:86).

6.5.1 The Murasû family: Nippur

Credit was issued by the temples and by private individuals. However, transactions originated by the palace economy are not well documented but we can assume that they took place via the activities of private entrepreneurs such as the Murašû family, which acted on its behalf (Van de Mieroop 2002a:74).

However, the Murašûs were possibly just one firm among many, which undertook economic activities including the exploitation of land and water through a hierarchy of farms and there are traces of this system on royal land and on the fiefs of feudal tenants of the palace. It could be concluded therefore that the development of the economy came through the outsourcing of rights as a practical solution to the problem of exploitation of vast and scattered possessions (van Driel 1989:204).

A common feature of the Murašû archive was the renting of land from members of the royal family and the high functionaries of state. It worth noting that the Egibis' archive (see below) contained examples of the role of private firms, over a long period of time, in the exploitation of the (probably scattered) possessions of high-ranking persons. The firm received a two thirds share against the landlord's one third suggesting that these contracts were profitable and the ascent of the earlier Egibis could be related to their role as 'agents' for the institution called "the house of the crown prince" (van Driel: 1989:217).

Murašû texts suggest that ultimately the king was effectively the exclusive owner of water rights. This could be indicative of the fact that only the palace had the power and the means to manage the exploitation of major land and water resources, quite unrelated to theoretical considerations of ultimate ownership (van Driel 2002:192). From the texts it can be further seen that only the palace had the resources to undertake the construction of a major canal. The palace could make use of *corvée* labour on an appropriate scale. Once the canal was completed it generated an income stream, the resultant wealth could allow the palace to instigate a policy of further agricultural expansion. As such the palace appeared in an elaborate system of leases and sub-leases, principally in the Murašû texts in the Achaemenid Period (van Driel 2002:189).

6.5.1.1 Loans and credit

We have seen in *Chapter Three* that the owners of military "fiefs," so-called "bow land," *bit qašti*, had a high level of indebtedness. They owed the king military service or compensatory payments but frequently were not able to meet their obligations through their own efforts. The result was many of them turning to the Murašûs who acted as middlemen and possibly operated with the consent of the royal administration (Jursa 2002:212).

Babylonia also became the centre of trade networks that extended over the entire Ancient Near East. The economic undertakings by palace and private citizens led to a significant level of credit transactions. We have seen in

Chapter Three, a new type of document appearing, called *u'iltu* in Akkadian, often translated as “promissory note.” It records an obligation to render a service or make a payment for one of many different reasons which are often not stated. The notes contain numerous types of arrangements in which payment is to be made at a later date (Van de Mieroop 2002a:74).

6.5.2 The Egibi family: Babylon

The Egibis used the financial products of their time including advances and collections, forward purchases of crops and various delivery commitments. They could not, however, be called bankers in the modern sense as the firm did not lend money at interest but purely as a self-contained business for their own account (Wunsch 2002:247).

They did, however, provide financial and legal services in other ways. Nabû-ahhē-iddin, a second generation Egibi provided services for king Nebuchadnezzar’s son-in-law Neriglissar arranging for him to purchase a valuable house from a bankrupt estate. He also dealt with his creditors and arranged for wealth transfers and the supporting records to be drawn up. In his capacity as royal judge, he also received and discharged deposits of silver held in a trust arrangement. The deposits are reported to have been returned in leather-bags with intact seals. Nabû-ahhē-iddin could use a deposit or part deposit for his own purposes and would then attract interest (Wunsch 2002:248).

6.5.2.1 Tax administration

From at least the second half of Nabonidus’s reign down to the Achaemenid Period, the Egibis appear to have played a major role in the tax administration in the district of Babylon (Wunsch 2002:246).

During these years Itti—Marduk-balātu a third generation member of the Egibi family who was also the head of the family maintained close relations with the royal officials responsible for tax revenues. He regularly travelled to places

where the Persian court and army were gathered, presumably in pursuit of such business. The few texts recording these journeys show him transferring money on behalf of, or directly to, officials who are known to have dealt with tax matters. Wunsch (2002:247) therefore assumes that the Egibis employed a substantial part of their financial resources in transactions that involved the crediting and collection of taxes.

6.5.3 Water management

With an agricultural economy and in the environment of southern Mesopotamia water and water management was immensely important.

In the Neo-Babylonian Period we begin to see the leasing of agricultural assets of every nature. Van Driel (2002:190) speculates the owners of water resources, rivers and canals, also exploited these resources, directly at first, before they made them the object of a lease. Generally, leases were always arranged, guaranteeing water rights, by locating one of the short sides of a field on some water course, thus implying access (van Driel 2002:190).

6.6 CONCLUSION

The economic importance of the palace throughout Mesopotamia history is well documented. They had the resources both financial and in labour to undertake the massive infrastructure projects needed to manage an economy where rainfall was uncertain and effective water management required intervention.

The texts suggest that the authority of the palace grew throughout the third millennium BCE and furthermore we can speculate that by the end of the third millennium BCE, the palace had acquired control over many of the institutional estates of the various temples. (See also *Chapter Five* On the Temple)

As with the temple we can also say that the financial importance of the palace was immense. There can be little doubt that by the time of the Neo-Babylonian and early Persian Periods, while acting with private entrepreneurs, the palace enjoyed a key place in the financial life of Mesopotamia.

The palace seems never to have acted alone, during the Old Babylonian Period the palace used merchants extensively to collect taxes and to market the surpluses produced on palace owned land. The agricultural surpluses were given by the palace to the merchants who converted them into silver for the treasury.

Palaces arranged trade finance facilities to merchants. Commodities were made available enabling them to undertake profitable trade transactions. The income generated should at least be sufficient to repay their creditors but ideally a surplus would be created giving the merchant a profit on the venture.

CHAPTER SEVEN

BEER AND BREWING



Figure 8: Early writing tablet recording the allocation of beer.

Probably from southern Iraq, Late Prehistoric Period, 3100-3000 BC
British Museum



Figure 9: Lapis lazuli cylinder seal; inscription; showing banquet scenes; two seated figures drinking by pipe or straw from a large vessel
British Museum

7.1 INTRODUCTION

Agriculture was critically important to the Mesopotamian economy. It should not be surprising that both domestic and international finance involved agriculture in some way. Agricultural finance is a huge topic on its own and beyond the scope of this dissertation. However, given its importance to the economies of the periods under consideration, it is instructive to look at a particular manufacturing process and the development of the financing needed to support the industry and the spin off of facilities that were spawned by commercial activities. By choosing the brewing industry we give an example of a critically important element of the agricultural industry.

The earliest evidence for domesticated grains dates around 8000 BCE, coming from Tell Aswad, Jericho and Nahal Oren in Israel. Excavations at these sites have given us a few grains of barley, wheat and lentils morphologically different from wild strains. Earlier Natufian sites have contained sickles, grinding implements and wild type seeds but no definite evidence of domestication (Webber 1995).

The earliest direct evidence of beer consumption comes from a stamp seal from Tepe Gawra, northwest Iraq, dated at 4000 BCE, showing two figures drinking beer using traditional straws and a container, similar to the two figures in Figure 9. Beer comes to feature prominently in many later Sumerian and Mesopotamian texts and art. Some texts of note include a song celebrating the dedication of a Sumerian tavern and the oldest recorded recipe, the Hymn to Ninkasi, which happens to be for beer. A daily ration of beer amounted to about 1 litre of beer comprising about 2% alcohol, which was consumed from a serving vessel through a large straw. Typically these would be clay and reed but it was likely that the nobility used silver and gold equipment (Webber 1995).

Cereals that contain certain sugars can undergo spontaneous fermentation due to wild yeasts in the air. As recently as the 17th century in Belgium,

flowers were added to water to make “low beer” i.e. low strength³² and it is possible that beer-like beverages were independently developed throughout the world soon after a tribe or culture had domesticated cereal. As will be shown later in this chapter, some scholars consider brewing as playing an integral part in the development of agriculture.

It is in the literature, rather than in the archaeology and economic records of the ancient Near East that beer leaves its greatest mark. The manufacture and consumption of beer occasionally leave traces in the material record. However, they are certainly less in number than the artefacts associated with wine production (Homan: 2004:86).

According to the Epic of Gilgamesh, beer drinking was part of what made us human: Enkidu does not know of eating food or of drinking beer.

They placed food in front of him,
they placed beer in front of him;
Enkidu knew nothing about eating bread for food,
and of drinking beer he had not been taught.
The harlot spoke to Enkidu, saying:
"Eat the food, Enkidu, it is the way one lives.
Drink the beer, as is the custom of the land."
Enkidu ate the food until he was sated,
he drank the beer-seven jugs!-- and became expansive and sang with joy!
He was elated and his face glowed.
He splashed his shaggy body with water,
and rubbed himself with oil, and turned into a human.³³

Beer was the national drink in Mesopotamia and was consumed by all classes in society. Beer's reputation was in part due to climactic and agricultural reasons, as grapes were more difficult to produce than cereals and wine often had to be imported from areas such as Palestine, Phoenicia and Greece. Similarly, the phrase "bread and beer" was a metaphor for food and drink throughout much of Mesopotamian history (Homan 2004:85).

³² Visit to the Huisbrouwerij De Halve Maan Brugge on 07_12_12.

³³ Old Babylonian version Tablet 2. Translated by Kovacs MG 1998

Unlike wine, beer does not improve with age and it is typically consumed immediately. From this we can conclude that beer appears less frequently than wine on ancient economic documents because, as a general rule, people traded wine and grain as opposed to beer and grapes. By extension, jars with seal inscriptions labelling wine far outnumber those of beer. Beer was rarely stored for more than a few weeks and the entire process of brewing could be achieved with a single jar (Homan 2004:86).

7.1.1 Food preservation

Fermented foodstuffs give rise to acidic conditions, produce lactic acid bacteria, as well as the alcohol produced by the yeasts and they can inhibit the growth of other micro-organisms. The fermenting process acts as a means of preserving food so that it will keep for months in place of days - a very important advantage for early peoples, providing a food supply through non-growing months. Additionally, when dried, the fermented food will keep even longer, up to years, as the low water activity and the acid conditions prevent the growth of almost all organisms. In the earliest periods, the fermentation of beer was easily achieved and allowing for the investment in preparation time it was more than compensated for by the production of an enhanced food source. By way of contrast, the production of bread requires the grain to be finely ground, requires kneading and shaping of loaves and requires a large oven for baking (Webber 1995). Webber (1995) quoting Hesselstine (1979) says that a food source that does not require fuel for its processing is a particular advantage in areas like the Ancient Near East and much of Africa where wood is a valuable and a fairly scarce resource (Webber 1995).

7.2 EARLY PERIODS – PRIOR TO 2400 BCE

The oldest evidence of beer brewing in Babylonia reaches back to its origins. The available material is large and detailed giving us a good understanding of the work of the Sumerian and Akkadian brewer (Lutz 1922:86).

7.2.1 Deities involved with beer and grain

The importance of beer to the life of Mesopotamians can be inferred from the number and significance of the deities involved with beer and grain.

The farming-based cities lay to the north and east and had, as protector deities, grain goddesses like Ninlil, Ninbarshegunu and Nissaba. The main grain crop in Mesopotamia during this period was barley. Wheat is not an easy crop to grow in irrigation-dependent lands such as those of southern Mesopotamia because salt has a tendency to build up in the soil. Barley, on the other hand, is much hardier and will grow in a variety of types of soils. The Mesopotamians used barley for making bread and, more importantly, beer (Stuckey 2008:1).

7.2.1.1 *Female deities and beer*

Nissaba had a long history and her lineage too was extremely distinguished. She was the daughter of the sky god and an earth goddess and her sister was Nin-Isina, a revered healing goddess. In another tradition Nissaba was eldest child of the Sumerian leader of the gods (Stuckey 2008:7).

However, Ninkasi, the ancient Sumerian patron goddess of beer, was the chief brewer of the gods and she dealt with the production of beer. With this background, in ancient Sumer, brewers were usually female. Women made beer at home for immediate consumption, since it did not keep. It is possible also that temple brewers were priestesses of Ninkasi. Perhaps because they brewed the beer, women were often tavern keepers. For instance, Siduri, a minor goddess whom Gilgamesh met at the end of the earth, was a divine tavern keeper (Stuckey 2006:2).

Ninkasi was worshipped by ordinary people and was also venerated officially; at Nippur and also at the great city of Ur and other cities. Libations of beer, her sacred substance, were poured out to the gods and jars of beer were placed before their altars for them to drink (Stuckey: 2006:3).

An important textual source for the production of beer is the so-called Hymn to Ninkasi. This work is a type of mythical poem or song dedicated to Ninkasi, the goddess of brewing, a goddess in the Sumerian pantheon. In the three surviving copies, the hymn is accompanied by another poem, in the style of a drinking song, probably dedicated to a female tavern-keeper at the opening ceremony of her tavern. The hymn itself contains a description of the brewing process (Damerow 2012:2).

7.2.2 Beer production

However, it should be mentioned that despite the elaborate description Damerow (2012:2), does speculate that the procedure of brewing is not conclusively described and may not have happened. The hymn merely offers an incomplete record of the individual steps. For instance, there is no clue as to how the germination of the grain was interrupted at the right time. It can only be guessed that the barley was layered and that the germination was stopped by heating and drying the grain as soon as the root embryo reached the right size. Despite the termination in the process, the evidence does point to a fermented brew. Modern re-creations of the brewing process attempt to show the fermentation progression. For example, in 2006, a brewing experiment was carried out by archaeologists from the Ludwig Maximilian Universität in Munich together with brewing experts from the Center of Life and Food Sciences Weihenstephan at the Technische Universität München (the Tall Bazi experiment), with the intention of reconstructing the ancient brewing processes. Using cold mashing, the archaeologists managed to produce a brew of barley and emmer and adjust the alcohol level by changing the percentage of water. When ground malt and water was mixed in a proportion of approximately 1 to 8 it produced a beer with a low percentage of alcohol and perhaps this ration could be seen as the basis of a staple foodstuff in ancient Mesopotamia.³⁴

³⁴ Provided by Max-Planck-Gesellschaft [Online]. Available at <http://phys.org/news/2012-01-fermented-cereal-beverage-sumerians-beer.html> [Accessed 05 November 2012].

Again using the above text, in the early 1990s, Fritz Maytag of Anchor Brewing San Francisco California and Dr. Solomon Katz of the University of Pennsylvania set out to reproduce this brew by deciphering the ancient clay tablet. Thick loaves of bread called *bappir* were baked from several grains. Mixed with honey, the loaves were then twice baked until a muesli-like consistency was achieved. It is possible that the Sumerians could store this mixture for later use. These loaves could then be added to a mash with a large addition of malt to ensure a proper conversion of starches. The mixture was then allowed to cool naturally. The sweet liquid was strained away from the grains and transferred to fermentation. Yeast was added and yielded a beer of 3½% alcohol by volume.³⁵

The Mesopotamians used Ninkasi's beer for religious rituals, as a base for medical potions and as their normal brew. Indeed, it was a staple of the diet through all strata of society from temple personnel to low level peasants. In a diet with limited variety it was regarded as a nutritious food, comprising proteins, vitamins and carbohydrates. In addition, "because the alcohol killed many detrimental micro-organisms, it was safer to drink than water (Stuckey 2006:4).

The most widely available beer (Sumerian: *kaš*, Akkadian *šikaru*) in Babylonia was, like that of Egypt, prepared from barley (*še'um*) and also spelt (*aš-a-an*). Beer was used extensively. Essentially the method of the brewing was connected with the baking of bread loaves. For example in the Sumerian beer recipes, which go back to c. 2800 BCE, we meet continually with the word *KAŠ + NINDA*, meaning the "beer-loaf". The Sumerian brewer, was the *lù-KAŠ + NINDA*, i.e., the "man of the beer-loaf", perhaps indicating the close relation of the brewer to the baker (Lutz 1922:86).

³⁵ [Online]. Available at <http://beeradvocate.com/articles/304> [Accessed 22 October 2013].

7.2.3 Types of beer

The importance of the brewing industry from these early beginnings can be seen in the variety of beers on offer in Sumer and show how multi-faceted and indeed specialised was the industry of the Sumerian and Akkadian breweries. To give a few examples we find *kas-gig*, the "black beer", *kas-si*, the "red beer", *kas-sig*, "fine-beer", *Kaš-aš-an-na*, or *kaš-aš-an-na =u-lu-ši-in*, Akk. *u-lu-ši-in-nu*, "spelt-beer", *kaš* "barley-beer", *kurun-babbar* "fine white beer", *kurun-gig*, "fine black beer", *kaš-sag*, "prime beer", *kaš-sag-aš-a-an*, "prime spelt-beer. We also find beer styled as content *kaš -20-qa*, "20 qa beer", *kaš -30-qa*, "30 qa beer", *kaš -40-qa*, "40 qa beer", *kaš-sag-aš-a-an -mah =ulušinmah*, Akk. *ulušinmahhu*, "fine spelt beer". In addition to these we also find a large number of so-called mixed beers, as for instance, *kaš -a-sud*, "beer mixed with water", also called *kaš -bir* (Lutz 1922:86).

A special kind of beer was brewed called *kaš-nag-lugal* "the royal beverage" was brewed. As the name suggests, it was meant for the king and can be distinguished from the common beer, which was called *kaš-lu-gal-la*, "the beer of man". The cheapest beer of the earlier period was the "black beer", *kas-gig*, which was prepared using barley only (Lutz 1922:87).

We can see that beer was consumed by labourers as well as priests and kings and it has been argued that this drink, in particular that known as *kaš du*, "regular beer," was more akin to the Slavic *kvass*, with an alcohol content of usually less than 1%. By comparison modern beers achieve, on average, a strength of from 4-6%.

Englund (2001a:28) speculates that in the Uruk III Jemdet Nasr Period (3100–2900 BCE), lists of goods found in grain texts might represent precursors of the offering texts of the sort known found from the later 3rd millennium BCE in which a full palette of provisions for deities or revered elites was registered. Such offerings, which could be presented over time, were known as *sá.du₁₁* rations. Furthermore the goods and even occasionally the sequence in which

they were registered, that is, bread and beer, sheep, fish, dairy products and fruits, paralleled those found centuries earlier (Englund 2001a:28).

In the brewing process itself, there were signs depicting various types of beer jugs. For instance, *DUGa KAŠa* was an all-purpose description of containers of beer, particularly in the protocuneiform texts from Jemdet Nasr. The sign combination can qualify jars of differing sizes or, more likely, beers of differing brewing strengths. However, texts with calculated grain capacities of the barley and malt employed in brewing beer delivered in averaged containers only provided rough indications of the amount or strength of beer in specific jars (Englund 2001a:34).

7.2.4 Beer as a foodstuff

The discovery of fermentation probably happened early in the Neolithic Period, going hand in hand, if not hastening, the increased understanding and manipulation of grains. Increasing population densities and the resulting need to reduce the contamination of water supplies is likely to have encouraged the search for cleaner alternatives as found today in many parts of the world where the local beer or a cola drink is safer than tap water (Joffe 1998:297).

Indeed it is possible that brewing could have preceded bread making. Mangelsdorf (1953:519) states that a better case might be made for an earlier utilisation of cereals for brewing than for bread-making. He goes on to say that this was because the earliest grains available in the Near East were more suitable for beer-making than for food. Perhaps, he speculates, the earliest beer was less sophisticated than modern beer and was made from ungerminated grains by fermenting the small amounts of sugar, which occur naturally in cereals. Such a beverage would have had a very low alcoholic content and should perhaps appropriately be called not a beer but a gruel; in other words not an alcoholic beverage but a food (Mangelsdorf *et al*

1953:520). Similar techniques can still be found, for instance, as recently the 17th century in the Low Countries as an easy method of cleaning water.³⁶

However considering the origins of agricultural techniques, Braidwood (1953:515) has stated that the inhabitants of Jarmo in Northern Iraq lived in square multi-roomed houses built of pressed mud with mud-ovens and baked-in clay basins sunk in the ground. As Jarmo is one of the earliest Neolithic agricultural sites the question arises for what purpose were the ovens used? Mangelsdorf (1953:520) speculates that the earliest cereals were used neither for brewing nor for baking but as popped or parched grains. Heating grains in this way removes the glumes making digestion by humans possible. The glumes can be removed either by popping at high temperatures and cleaning. The practice would also have meant that the grains could be easily masticated and as a bonus became quite palatable (Mangelsdorf *et al* 1953:521).

It is easy to imagine that the next step would be to grind the grains coarsely and steep the resulting meal in water creating a type of gruel. The practice of making gruel might easily have led to brewing and baking, since gruel may undergo mild fermentation, an important factor in both brewing and baking (Mangelsdorf *et al* 1953:521). The relatively low-alcohol brew could be preferred as a sanitary option to the available drinking water.

From these early beginnings and for whatever reason fermentation developed, by the time we reach the Sumerian Period, beer was used both as a nutritional and certainly as a recreational beverage (Neumann 1994:325). Beer also played an important role in ritual ceremonies, as a liquid for drug mixtures and also as a means of cleaning cloths. Beer was consumed in private households and also in public taverns (Neumann 1994:325).

³⁶ Visit to the Huisbrouwerij De Halve Maan Brugge on 07_12_12.

In summary, Sumerian civilisation became established around the temple and beer became an integral part of temple ritual and economy. It was the popular drink and a staple of diet throughout two millennia of the Sumerian-Akkadian tradition. Estimates say that around 40% of all cereals grown went into brewing at one period. Not only was beer offered as part of temple service, it was also drunk copiously in taverns where beer drinking was not necessarily only seen as being a part of the daily diet.

The brewing industry is also a massive consumer of water. The brewing process uses at least three litres for every litre of beer produced.³⁷ However, when compared to the total required for crop growing and distribution anywhere from 61 to 180 litres is required, depending on which country the ingredients are produced in. A recent report of the Water Futures Partnership,³⁸ a collaboration between the SABMiller brewing company and the World Wildlife Fund (WWF), studied the water footprint at SABMiller's operations and in river habitats in four countries: Peru, Tanzania, Ukraine and South Africa where it was reported that it takes a total of 180 litres of water to produce one litre of beer in Tanzania, while in Peru the total is 61 litres. Although, operations vary considerably from country to country, in each case at least 89% of the total water usage of the country goes to the cultivation of ingredients such as hops and barley.

7.3 3RD DYNASTY OF UR - UR III PERIOD

During the Ur III Period the most important employer was the state. The enormous number of persons engaged in work for the palace and the temples, together the state sector, highlights the need for a remuneration system when "money" as understood today did not exist. The basic type of payment was the distribution of rations. There would have been two types of distribution; firstly, normal rations consisting of barley, distributed monthly and a wool

³⁷ Visit to Huisbrouwerij De Halve Maan Brugge on 07_12_12.

³⁸ [Online]. Available at http://www.wwf.org.uk/what_we_do/working_with_business/?4204/WWFSABMiller-report-tackling-water-scarcity-together [Accessed 19 November 2012].

distribution once each year and secondly, there were some variations from normal rations, consisting of bread, flour or emmer instead of barley and of a garment instead of wool. In addition to this form of remuneration, fields were assigned as subsistence allotments. The state sector could also use available free workers in its labour force or more formally placed work orders with free craftsmen. Hired labour was employed in field agriculture, cattle-breeding, craft, transportation and in irrigation works (Neuman 1994:323).

Barley was vital to the economic life at Ur. It is possible that the fields were cultivated with barley as the main crop, which besides being one of the staple ingredients of the Mesopotamian diet was used to make beer and bread. Again it is probable that barley was widely available, as it often appears in the business correspondence from Ur, sometimes in large amounts. It was also used as a commodity for inland trade. There are many texts that list the issue of grain to several people but it is usually impossible to determine whether the texts derive from public or from private archives and consequently it cannot be said with certainty which category of persons made the issues. However, we can say that the temple employed people to process the cereals. Millers were among the temple personnel and possibly large mills were used to provide the flour needed for the food of the temple dependents (Van de Mieroop 1992c:173).

According to Neumann (1994:323) beer was a means of compensation for work that did not belong to the regular rations or to the variations mentioned above. Beer belonged to the so-called extraordinary rations, issued either when the beverage was available in abundance or on special occasions. Other types of extraordinary rations consisted, for instance, of oil, meat, fish, milk products, fruit and vegetables (Neuman 1994:323).

One of the most important groups of texts concerning beer as a means of compensation for work is the group of the so-called messenger texts from Girsu and Umma says Neuman (1994:330) quoting McNeil (1970). These texts record the payment of rations to officials, employees and conscripts of

the crown. As a rule, the rations listed in the messenger texts consisted of various amounts of beer, bread, onions, oil and spice (Neuman 1994:330).

Thus, it can be said that in the Ur III Period beer as a means of compensation for work was issued only irregularly but it played more than a passing role as a part of the remuneration system of that time (Neumann: 1994:323).

Having this special dispensation in the remuneration enforces the special place that beer had in the economy from the beginnings during the Sumerian Period and leading through to the Ur III Period. From consideration of beer as “payment”, growth of credit based on beer must be but a short step.

In the tavern people could enter into contracts. An Ur III private legal document, says that a credit contract was drawn up “(in) the house of Ur-LI, the tavern keeper” (Neumann 1994:326). This mixing of business and pleasure can be seen in modern times where the origin of Lloyds of London (insurers) was in the coffee houses that developed in the City of London in the seventeenth century.

However, in financial terms when considering small retail sales such as occurred when tavern-keepers sold beer, consumers, it seems sensible to conclude that consumers would be known to the tavern keeper and thus would not have needed to “pay” on the spot but could run up a slate, much as is done in bars today. As mentioned above, these tavern keepers were frequently women otherwise known as ale women (*sābītu*) (Hudson 2004:115).

These debts would have been settled on payday and are sometimes known as Payday Loans but Mesopotamia’s “cash” would be the crop itself and thus in the rural areas payday would have occurred at harvest time. Doubtless as well, there would be crop shortfalls from time to time, which would have generated a debt and in the absence of another form of payment, for example, money, would need to be settled against future harvests. By contrast, in the tavern, debts to the ale women for beer would be run up during the year and would be settled at harvest time (Hudson 2004:123).

7.4 OLD BABYLONIAN PERIOD 2003-1595 BCE AND OLD ASSYRIAN PERIOD 2000-1740 BCE

An important source for brewing can be found in the codex Hammurabi. This is also an early example of the regulation of the industry.

7.4.1 Regulations

Examples of the regulations in place are included the Codex Hammurabi. For example § 109 of the Codex Hammurabi says:

If conspirators meet in the house of a tavern-keeper, and these conspirators are not captured and delivered to the court, the tavern-keeper shall be put to death.

While § 108 says:

If a tavern-keeper (feminine) does not accept corn according to gross weight in payment of drink, but takes money, and the price of the drink is less than that of the corn, she shall be convicted and thrown into the water.³⁹

Beer was obtained from the local tavern or “cookshop.” Both establishments were found in this period; the *bīt s̄ābîm/s̄ābîm*, “the house of the male/female inn-keeper”, or the *bīt nuhatimmim*, “the house of the cook”. Cookshop operators and inn-keepers had to be properly registered and licensed. They had to pay a tax in silver (*nēmattum*) to the palace in the district to which their respective villages operated and the *rabiānū* (mayors) of these villages were responsible for the proper implementation of the regulations relating to their registration and the payment of their tax (*nēmattum*) (Renger 1984:85).

7.4.2 Rural money lending

From this we can see that the mechanisms of selling beer in effect put the inn-keeper into the role of a rural money lender. We could speculate that an enhanced role grew from an informal function of the tavern found during the

³⁹ Translated by King LW 1910:21.

Ur III Period. Oppenheim (1970:19f) has postulated that, during the Old Babylonian Period, in the rural areas, there was evidence for a sort of local 'bank' serving the free farmers and even supplying the ration by providing them with credit and food while they were waiting for the cereal harvest and by helping them to convert their rations (typically beer) into other commodities. Strictly this institution was not a bank as we would understand the term today nor even moneylender but the keeper of a local tavern (*sābītu*, the ale woman) or of a cookshop (*nuhatimmu*) and bakery. As we have seen this was a profitable activity and these people had to pay license fees in silver to the government (Oppenheim: 1970:19f). In Old Babylonian texts it is shown that free labourers or seasonal workers required additional foodstuffs to supplement their wages. Similarly, officials, menial servants or other people in the employ of the institutional households who received rations (generally consisting of barley or bread, beer, oil and clothing or wool) had to supplement their diet and satisfy other daily necessities from other sources, usually by exchanging some of their wages or rations for what they needed (Renger 1984:65).

In our times the history of modern banking has similar origins. Thus where value is kept for other reasons, for example goldsmiths in seventeenth century London, credit can be given against deposits of gold held. Some of these businesses developed into our modern banks.

7.4.3 Beer as ration: redistribution

The redistribution of accumulated staple goods in the form of daily or monthly rations consisting of barley, beer and wool left open the need for a great variety of goods and objects. Others came to fulfil these needs, for example the vendors, peddlers and traders of sundry items (*sahertum*). These small business people represented a viable means of distributing goods through channels other than those offered by the redistributive system of families or neighbours (Renger 1984:81). It can therefore be said that peddling and vending were undertaken by persons who made it their regular business. Their business would have comprised - on written evidence - processed or

prepared foodstuffs or beverages, e.g. roasted grain, cooked food, oil and beer as well as salt and alkali and spices. The extent of their activities appears to have been limited or determined by factors inherent in the socio-economic system of the Old Babylonian Period. Importantly the business would have facilitated redistribution (as with the ration system), which governed the relations between the central institutions like temple or palace and considerable parts of the populace; and reciprocity, which governed life between individuals, usually living in kin-related groups in the villages and hamlets of the countryside as well as in urban settlements (Renger 1984:114).

However, a problem arose as beer does not keep very well in Mesopotamia, a day or two at most. If someone lacked beer he could turn to “beer-bread” and prepare his own beer. This was actually recreated by the Anchor Steam Brewery (see above) where a beer of about 3.5 % by volume was produced. It is known that modern cask beers of less than 5% by volume do not store for long periods. However, most commonly, beer was obtained at the tavern usually by “paying” with barley.

7.4.4 The *nadītum* and the tavern

§ 110 of the Codex Hammurabi specifies that “if a “sister of a god” (*nadītum*) open a tavern, or enter a tavern to drink, then shall this woman be burned to death.”⁴⁰ The documents concerning the Old Babylonian *nadītum* are important in any consideration of finance in that a large group of women coming from influential families formed a special class of priestesses who lived in separate city districts called the *gagûm* (CAD, s.v. *gagû*, 5:10), often translated as cloister.⁴¹

This could be interpreted to mean a *nadītum* as a “sister of a god” should not be seen in a place of doubtful reputation. However, according to Lahtinen (2008:19)⁴² quoting Roth (1997), §110 fits into a group of laws, which deal with economic relationships and where, for example, there is no

⁴⁰ Translated by King LW:1910:21.

⁴¹ The role of *nadītum* has been discussed in more detail in Chapter Eight.

⁴² Note the “*kortversion*” has been used and referenced accordingly.

mention of prostitution, an activity that was supposed to occur at the tavern. Laws relating to prostitution commence at §178 and onwards. The offender was specified as being a woman devoted to a god but not necessarily residing in a *gagûm* a case that called for special treatment as defined in § 110. Her offence, according to Roth (1997), was either opening a tavern in the sense of establishing a business, or entering it possibly to lend beer and grain at interest. The reason for limiting the *nadītum*'s access to these business areas was perhaps to protect the *sabītum*, the female tavern-keeper and the *tamkārum*, the merchant normally engaged in lending money to tavern-keepers, from unfair competition. This was because the *nadītum* often possessed wealth, prestige and social standing and not because of any apparent disagreeable characteristic of the tavern clientele. The dramatic form of execution prescribed for the *nadītum* could mean that she, by competing with the *sabītum* and the *tamkārum*, in some way violated social trust (Lahtinen 2008:19).

Nevertheless, there does remain the alternative simpler possible interpretation that as the *nadītum* resided in a *gagûm* and was of superior social standing she should not be seen in taverns.

In our time, in the UK, such matters could be looked at by an institution such as the Competition Commission and perhaps similarly rejected as unfair competition on the part of the *nadītum* women. Nevertheless there is a persuasive clue here that the *sabītum* was a true entrepreneur or self employed business woman as we would understand it today.

7.5 NEO-ASSYRIAN PERIOD 934-609 BCE, NEO-BABYLONIAN PERIOD 626-539 AND EARLY ACHAEMENID PERIOD 550-400 BCE

This period saw that transition of brewing beer using barley in the Ancient Mesopotamian times to using dates in the Neo-Babylonian times (Stol 1994:155-183). This change in food and brewing technology started to be seen during the eighth century BCE (as shown by Neo-Babylonian administrative texts). From this period beer was made with the fruits of the

date palm - not to be confused with palm wine, which is fermented palm tree sap. However the practice of brewing a number of distinctive localised beers continues with beers also being produced in certain areas; for instance, the Mari texts reveal that there was an indigenous, bittersweet beer called *alappanu*, which was made from pomegranates (Hornsey 2003:82).

7.5.1 Beginning of male involvement

A further change seems to be found with the gender association with women prior to the Old Babylonian Period being partially transformed in Mesopotamia, when a mass production industry was implemented and males began to dominate the state-run business. Even so, women continued to produce beer on a smaller scale in their homes (Homan 2004:85) but as a business model, women trading as tavern keepers seem to have continued from its early origins through the later periods of Mesopotamian history. However with the change to a male dominated industry in later periods, for instance, in this Neo-Babylonian era, a rich man could provide his female slave with the means to establish a tavern (Stol 1995:137). It would be reasonable to assume she managed the business on his behalf.

7.5.2 Beer and finance

The importance of beer and its financing continued. For example, in the Persian Period the Murashû firm sublet its leased lands to tenants, along with livestock, implements and seed. In particular one contract records that ten free persons and one slave were obliged to brew 5,825 vessels of beer of one *kur* each (all in all, 10485 hectolitres - a metric unit of volume or capacity equal to 100 litres) in return for wages and provisions. The customer supplied the brewers with 5,825 *kur* of *dates*, vessels and other necessary items. Apparently the beer was to be sold (Dandamayev 1996:201-202).

Beer came to be used as rations and was delivered in vessels of varying capacity. The largest vessel used for both barley and date beer was named

dannu surviving as a loan word in both Aramaic and Arabic. The smaller vessels were also used for oil and ghee (Stol 1994:155-183).

Taking into account the changes made from the earlier periods, in the Neo-Babylonian Period a person needed “bread, beer, salt, cress oil and garments” whereas in the Old Babylonian Period the daily portion of (barley) beer was sometimes 1 *qa* but more often 2 or 3 *qa*. In the Neo-Babylonian Period we sometimes hear of 1 *qa* or 2 *qa* of white beer per day but somewhat more often we hear of 3 *qa*. Often the exact bread ration was also given as the same quantity as beer (Hornsey 2003:81).

Prices for beer were only given for *dannu*-vats. From the texts it can be calculated that one vat of white beer would have cost $\frac{1}{2}$ shekel of silver. The price of one vat of sweet beer ranged from $\frac{1}{2}$ to 2 shekels. “Beer” (*kaš-sag*) cost $1\frac{1}{2}$ shekels per vat and a customer paid no less than $4\frac{1}{2}$ shekels of “white-silver” - probably a silver of inferior quality. - for one vat of “beers” (Stol 1994:155-183).

As we have seen in earlier periods and using the example of *kaš-sag*, beer continued to be placed in various categories. Beer could be “new” or “old”. In one text, the phrase “one year old beer” could be interpreted as meaning that “old beer” is more than one year old. Beer could also be bad (*bīšu*) (Hornsey 2003:82).

7.5.2.1 *The trade in beer*

According to Stol (1994:155-183), a good example of the trade in beer it can be seen from a fairly unique text that 200 vats of sweet beer were delivered by the Eanna temple of Uruk to the royal palace in nearby Abanu for the needs (called *šušbuttu*) of the king Cambyses. This visit in 528 BCE also placed an obligation on the Eanna-temple to deliver substantial quantities of food for the meals of the king and his court (meat, cereals, spices, milk and as mentioned the beer). His beer was made of dates. Another passage, outlined

by Stol (1994:155-183), reports on a ship bringing *kaš-sag* to Abanu (Stol 1994:155-183).

There are the numerous short administrative texts about the issuing of beer to various people, primarily skilled workers. An interpretation of these texts does suggest a considerable trade in beer. Texts from Sippar always refer to the *ummānu*, craftsman, artisan” (CAD, s.v. *ummānu*, 20:111–14)). By extrapolating the information contained in those texts, we can recreate the activities of a large group of skilled workers from Uruk. To take one example and consider it in more detail, Gimillu son of Ardija, received the beer, possibly from the *bīt hare*. He distributed it, in the first place, to various skilled workers specified but also to hirelings, workers (*šābu*), people doing jobs in the Raqqat-Šamaš irrigation district, shearers canal diggers farm hands, architects (*arad ekalli*) (CAD, s.v. *arad ekalli*, 1A:211), messengers and scribes. We can follow him in his role as a beer distributor throughout the reign of Nebuchadnezzar II. However, by the time of Nabonidus he was also involved in metal distribution. Another example shows that his colleague Ina-šilli-Nergal was in charge of the distribution of flour (Stol 1994:155-183).

Another text, a contract of the time of Xerxes, describes the hiring of a certain brewer named Nabû-ušallim for the purpose of preparing mixed beer for the enjoyment of the god Nabû.

It reads:

300 clay jars of beer for the repast of the god Nabû, belonging to Rimût-Bêl, the son of Iddina- Nabû, the descendant of Ilu(?) -abušu(?), he has given for preparing unto Nabû-usallim, the son of Nabû-aplu-iddin, the descendant of Lakuppuru. For the keg Rimût-Bêl shall give to Nabû-ušallim 78 *qa* of barley and 6 *qa* of cassia-spice. Then he shall mix the kegs to the amount of 300, execute (it) and give (the kegs) for the cellar(?) of Rimût-Bêl and of Marduk-balatsuiqbi, beginning with the month of Kislev of the 36th year according to his document. He shall stand good(?) for(?) the correct delivery of good mixed beer before the cellars (?) of Rimût-Bêl and of Marduk-balatsuiqbi. He shall stand security for it that the offering of the repast (of the god Nabû) suffers no delay and for Nabû-ušallim shall give nine kegs unto Rimût-Bêl. Therefrom (!) Nabû-ušallim has received from the hand of Rimût-Bêl 80 *gur* of barley and the remainder of the barley in Barsip(?) Rimût-Bêl shall give to Nabû-usallim. The

cassiaspice(?) Rimût-Bêl shall give to Nabû-ušallim in 1 *gur* Rimût-Bêl shall make with Nabû-ušallim. In the house of Rimut-Bel, which is closed up, Nabu-usallim shall dwell. He shall take care of the work of repair of the walling (Lutz 1922: 92-93).

For three years he shall cover(?) the roof. The work of tiles, cane and beams, as much as Nabu-usallim shall make in the house of Rimût-Bêl, which is closed up, Nabû-ušallim shall reckon up to the charges of Rimût-Bêl. For and house furniture, which Rimût-Bêl shall entrust to Nabû-ušallim in the closed-up house, Nabu-usallim is responsible. Nine jars, 18 clay-kegs two *bukannu*, one mixing machine of cane, one of cane, one belonging to Rimût-Bêl are entrusted to the disposition of Nabû-ušallim (Lutz 1922: 92-93).

Thus under the terms of this contract the brewer was hired for a period of three years to prepare mixed beer for the god for which he received raw materials certain quantities of barley and cassia-spice. In return for his labour he was given a house with its furnishings together with the brewing equipment and was held responsible for its care and maintenance (Lutz 1922:93).

It is interesting to note that the delivery of the kegs originates with Rimût-Bêl and presumably would need to be returned at the end of the contract although the terms of the contract do not specify this. Perhaps over this lengthy period normal wear and tear including breakages would be implied. In any event, when considering the gain, the contract must have been significant.

7.5.2.2 *Murasû and Egibi families*

During a contiguous period in Babylon to the later Murashû firm, members of the wealthy Egibi family put other people to work in joint ventures. Ishunnatu, a female slave of one of the family members received vessels of dates etc. from her supervisor, each item being valued in silver on which she had to pay interest. Another text adds that she had to pay “the rent of the house’ herself. Calculating the investment in silver was a necessary procedure in estimating the value of each rental. It is also fascinating to learn that slaves of the Neo-Babylonian Period were often allowed to indulge in considerable commercial activities as the example of the Murashû House in Nippur above shows, using

part of the huge quantities of dates they purchased for the brewing of beer, sometimes in great quantities (Stol 1994:155-183).

7.5.3 Beer as ration: distribution

The practice of providing beer as rations also continues. We have considered the example above of Gimillu son of Ardija who possibly undertook a business activity in beer and at the least must have sought a suitable reward for his endeavours. However, a narrowed down examination of the text shows that he received the beer, distributed it, in the first place, to various specified skilled workers and then to ordinary workers (*ṣābu*). Stol (1994:155-183), suggests that Gimillu and his successor were not private entrepreneurs but served the state as brewers and distributors of the beer to a variety of workers, including officials coming from Babylon.

From this period we can now see the emergence of the earliest cases of formal arrangements involving beer production in its entirety. For example, implements were received as a share in a partnership or as working materials for setting up a brewery or tavern. Again, the dowry that a wife received from her father sometimes contained the basic ingredients for brewing beer, the vats and the racks; but if additional equipment was provided it could be concluded that she could have been starting a professional brewery. All this stock was necessary to open a tavern according to Roth (1989), as quoted by Stol (1994:155-183).

7.6 CONCLUSION

From the available evidence there can be little doubt about the importance of beer production in Mesopotamian society. This seems to have been true from the early beginnings in the Neolithic Period and continued throughout the period under consideration in this paper.

The evidence of modern brewing shows that a huge amount of water is needed in the brewing industry (a ratio of water to beer of about 3:1 seems to

be the minimum required just for the brewing process. This ratio does not take in account the water usage for crop growing (in the study undertaken by SABMiller) and there is no reason to doubt that this would also have been the situation in Mesopotamian times. Water management in Mesopotamia required a huge commitment, from canal building to maintenance, irrigation and distribution systems. The documentation available is silent on the point but there can be no doubt that without financial support emanating from a centralised state infrastructure, water management systems could not have been possible. We can conclude that in the matter of water utilisation beer as a major beneficiary and consumer of water must have had an important economic function to perform.

Regardless of whether agriculture began to serve beer production or cereals for consumption, it soon became a vital element in the diet of the people. Later evidence can confirm this. In 21 CE, Strabo recorded seeing 'wooden *pithoi*' (vats) in Northern Europe. 'The Celts are fine coopers,' he wrote, 'for their casks are larger than houses.' Beer (more correctly "ale") would have been a vital element in the diet of the peoples in Britain and all of Northern Europe and Scandinavia. These were harsh times and the diet of the average inhabitant of the British Isles must have been appalling. Typhoid and cholera abounded. Water was foul and polluted and was safe to drink only when boiled and made sterile during the process of brewing. Bread and beer, both rich in vitamin B, were crucial parts of the early British diet and helped keep at bay many diseases. Beer was drunk by men, women and children. When the first strong brew was finished, the grains would be mashed again to produce a weaker 'small' beer. Small beer continued to be used for centuries. It was used for everyday drinking and was enjoyed at breakfast by all members of the family.

Beer became so important that in absence of "money" in modern terminology it became a substitute payment in kind and from this financing became important when loans would be repaid at harvest time. Even retail financing on a smaller scale, probably for individual purchases, first seems to have

emerged around beer-making and specifically was found in the taverns. Another interesting aspect was that the lending conducted by women (*sabītu*) and beer dispensed would have been repaid in barley, the *de facto* currency of the time.

From what evidence remains, it seems that the basis of finance as part of the brewing industry continued from Sumerian times to the early Persian Period. On a retail level lending was controlled by ale women. By the early Persian Period the process involved the backing of large firms, the Murashû and Egibi being two well known families, which in turn led to the development of a more formal structure in the industry almost certainly in return for a suitable reward. The growth of the industry in the later period and the involvement of firms in large scale manufacturing led to the increasing involvement of men with women continuing to provide beer for the home.

This does not mean that formal structures were not in place during the Sumerian Period but that specific evidence is not available to us at this time. We can conclude that good organisation was present as early as the Old Babylonian Period because licenses to brew beer had to be obtained from the government in return for a payment. Issuing and management of any form of tax by issuing licenses, requires a high degree of state participation, together with a supporting bureaucracy including detailed record keeping.

CHAPTER EIGHT

WOMEN IN FINANCE

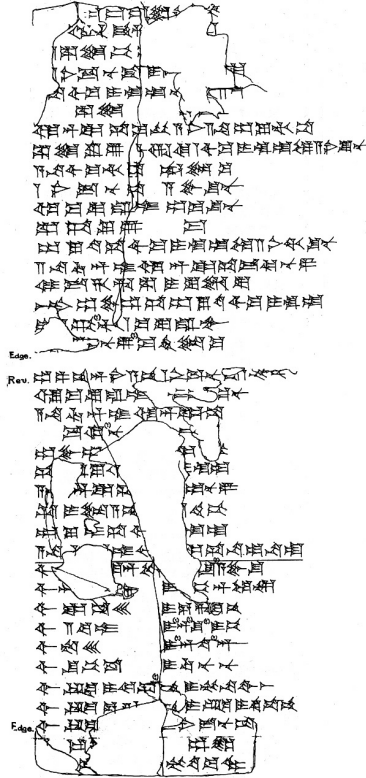


Figure 10: Clay tablet; complete; duplicate text of a lost testament of bequest by a woman (a "naditu"?); Old Babylonian; repaired. Brit Mus 1888,0512,Bu.187AN558726 BM 078316

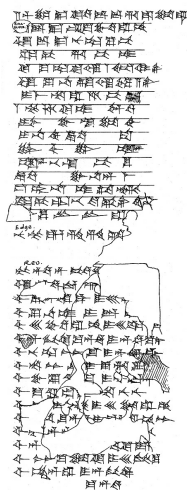


Figure 11: Clay tablet; nearly complete; purchase of threshing floor by a woman; Old Babylonian. Brit Mus 1888,0512,Bu.50AN582458 BM 092517



Figure 12: Painted fired clay statue of a woman south Mesopotamian provenance such as Isin. Brit Mus 1972,0122.1AN32515

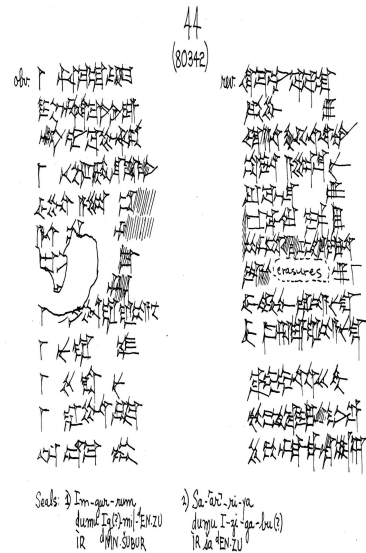


Figure 13: Clay tablet; nearly complete; proceeding confirming "ugbaltu" status of a woman; seals; Old Babylonian. Brit Mus 1891,0509.480AN562964

8.1 INTRODUCTION

There is a tantalising glimpse of the financial life of women from divergent and fragmentary sources of documents at Mari in the Old Babylonian Period. Batto (1980:233) notes that VIII 73 is a loan document of grain to a woman called Masmara. Since the grain is to be returned "on the day of the harvest, at the threshing floor," Masmara must have possessed fields of her own from which she would be able to fulfil the terms of the contract. Sadly nothing else is known about this woman and thus no firm conclusions can be drawn beyond the legal capacity of women to contract (Batto 1980:233) and importantly for this chapter to borrow in her own name.⁴³

Falkenstein (1974:13) has postulated that the development of civilization in Mesopotamia was closely connected with the growth of temples.⁴⁴ In his view this led to the creation of a temple-centred state during the Sumerian era. In the idea of the Sumerian temple city that he has put forward, including the period of the third dynasty of Ur, women could independently hold temple posts and as such they also benefited by appointments from the temple. In general, he maintains that it is valid to say that a woman occupied an unusually favourable position in the system of the temple city. The wife of the city ruler was repeatedly attested as the independent administratrix of the Baba Temple and it was characteristic of Sumerian religious practice that women could hold important positions (Falkenstein 1974:14).⁴⁵

However, situation of women had apparently already deteriorated somewhat by the Ur III Period (Falkenstein 1974:13) but, it seems that women enjoyed a higher status in the Old Babylonian Period than in succeeding periods. From the documents found at Mari and other documents it could be concluded that the women of Mari were equal to men before the law in such matters as adoption, loans and deposits (Batto 1980:239). A woman could contract in her own name and the terms of the contract allowed her to borrow, to all intents

⁴³ *Sābītu* (ale women) including acting as "bankers" are discussed in Chapter Seven.

⁴⁴ The role of the temples in finance has been discussed in more detail in Chapter Five.

⁴⁵ Wives could also be given as security for a debt as seen in Chapter Three.

and purposes unsecured, i.e. merely to give an undertaking to repay on the day of the harvest and serve as a witness to a contract. She could receive an education and even be a scribe. Despite these advantages, Batto (1980:238) concludes that women did not participate in the land tenure system to the extent that men did. Women generally were usually considered part of their fathers' or husbands' households and were in many ways legally subordinate to these males. The land tenure system can be expected to reflect these circumstances (Batto 1980:238).

This chapter will explore the financial role of women.

8.2 EARLY PERIODS – PRIOR TO 2400 BCE

Early administrative texts of the reign of Lugalanda and other rulers in Sumer during Lagash's great age of international trade and prosperity belonged to the *e-munus* "house of the woman" and could indicate the private business activities of the royal wife. For example, Baranamtara, the wife of Lugalanda, sent woollen clothes and silver to Tilmun and sold copper imported from Tilmun in the neighbouring city of Umma. Further evidence shows that for her estates, Baranamtara purchased choice cattle in Elam.

8.2.1 Women in finance: the wife

It is possible that the next ruler Urukagina expanded the royal "house of the woman" renamed it the "household of goddess Bau", gave it ownership of vast amounts of land confiscated from the former priesthood and placed it under the supervision of his wife, Shasha. Texts show that Shasha exchanges barley for the wool of the "people of distinction" in the temple.

Other texts show that other royal wives also participated in the importation of significant quantities of raw copper from Tilmun. Dimtur, the wife of a predecessor of Lugalanda, Enentarzi, is found on lists of people, animals, estates and various objects. Furthermore Dimtur still appears in the administrative texts during the first year of Lugalanda's reign, possibly suggesting that she was able to continue her business. There is also a text

that shows the “wife of Shubur the administrator” transacting directly with the e-munus for sheaves of reeds and parcels of land, perhaps indicating that it was not just royal women who were undertaking business transactions but also that these important women could transact direct with the e-munus. Indeed it also worked the other way as other texts inform us that royal women sold fish to merchants (*damkars*) (Silver 1995:54).

8.2.2 The *lukur*-priestess

Continuing with this period in Sumer, further texts show that the wives of rulers and governors made loans, owned sheep and were involved in the clothing industry. Drehem or ancient Puzrish-Dagan, was the best known city of the so-called redistribution centres of Nippur, situated about 10 kilometres to the south of Nippur. King Shulgi’s wife, Simti, a *lukur*-priestess, played an important role in the administration of Drehem’s sizeable livestock economy. A text from Lagash adds that clothing and wool belonging to Simti has been “inspected”. Several tablets from Drehem itself record that the daughter-in-law or wife of a governor (*ensi*) conducted inspections of sheep (Silver 1995:54-55).

There is another example of a *lukur* of king Shu-Sin (2037—2029 BCE) named Kubatum who was active in Uruk’s commerce. She served as a receiving agent for a certain Gazana, possibly a government agent who dealt in substantial quantities of wool, grain and goat’s hair (Silver 1995:54-55).

The origin and continued function of the *lukur* is not clear but Lahtinen (2008:14) indicates that the earliest references to the Sumerian *lukur* date is from the Early Dynastic Period (2600-2300 BCE). Her religious position was uncertain but she did not have a *gagûm* like the later Babylonian *nadîtum* (see below) (Lahtinen 2008:14).

However, as we have seen, even from an earlier period, a woman did not have to be a member of the royal household to succeed in the business world. This continues into the third millennium when what has been interpreted as

private documents from Lagash show women as buyers and sellers capable of owning garden lots and houses (Silver 1995:55).

8.2.3 Women in commerce

In Sargonic Mesopotamia, a Sumerian woman called Ama-é engaged in diverse commercial activities receiving extensive land allotments from the state, probably on a rental or other contractual basis and dealt in real estate, metal and grain. She invested her wealth with various agents. In addition through businessmen she undertook various activities entrusting food, aromatics and wood to one, probably as an investment and to another silver. Additionally she had bought and sold wool in large quantities (Foster 1977:33). Foster summarises this by saying that “there is no reason to believe her career was exceptional as women appear in other Sargonic texts.” In one of these, for instance, a merchant pays out silver to women who had consigned goods to him for trading.

A woman named Ninmelam, possibly the wife of the governor of Umma, supervised transactions in gold, leather, wool and cloth. According to Parr (1974:92), the tablets from Nippur reveal that Ninmelam’s dealings in wool and cloth were “on a substantial scale” (Parr 1974:92). We could conclude that it may be the status of these women as business women was only because they acted as “agents” of their husband. Nevertheless it is important to note that women were able to transact business in their own name and were accepted as such by the counterparty.

8.3 3RD DYNASTY OF UR - UR III PERIOD

8.3.1 The *lukur*-priestess

The *lukur* women continued to operate into the Ur III Period (2100-2000 BCE) and it is possible that they also had some administrative function at the court (Lahtinen 2008:14).

Although their exact status is not clear, in business and finance these women appeared to have had important roles at the time. We have seen how the *lukur* of king Shu-Sin (2037—2029 BCE) Kubatum, was active in Uruk's commerce acting as a receiving agent for Gazana. Silver (1995:55) indicates she may possibly have been a government agent who dealt in substantial quantities of wool, grain and goat's hair.

8.3.1.1 *Lukur-kaskal*

Scholars have translated the word *naditum* into Sumerian as *lukur*, (CAD, s.v. *lukurgallu* (a woman dedicated to the temple), 9:240) but the Sumerian *lukur* of the 3rd millennium had a different status to the *naditum* in Sippar or even Babylon. During this period there existed a category of women called *lukur-kaskal-(l)a* 'the *lukur* of the road' (or 'march', or 'campaign') who was a concubine of the deified king. Subsequently, when the kings were no longer deified, this category of women disappeared forever and the category was not re-introduced with the later deification of king RimSin I (Diakonoff 1986:234).

Jacobsen (1987: 57 n. 2) goes further suggesting that the *lukur-kaskal-la* was a 'handmaiden' who accompanied a man on journeys (*kaskal*) away from home to look after his comforts, a lexical equivalent with Akkadian *šugitum* while, on the other hand, Silver (1992:193), speculates that she had her own establishment at often visited localities on the journey.

The interpretation of the *lukur-kaskal* as having an establishment at frequently visited points on the highway is consistent with what Jacobsen (1987b: 57 n. 2) describes as the conventional terminology "woman (in charge) of an office". Thus the secondary wife or *lukur*⁴⁶ might be a person of substance, an administrator or a businesswoman (Silver 1992:194).

Additionally the *lukur-kaskal-la* appear on votive offerings, addressed to a god/goddess with a wish for the 'life' of some person important to the

⁴⁶ *Lukur* can be used these texts as the short form of the full title *lukur-kaskal-la*. (Leick 2003:290 n. 1)

dedicator and indeed the practice had been well established since the Early Dynastic Period. The important point was that the offerings were costly and thus should reflect the prestige and wealth of the donor. To judge from seal inscriptions, it can be surmised that certainly aristocratic women had access to both property and political influence. Unsurprisingly, they were among those who presented personal votive gifts, with an example being found as late as the reign of the last king of Isin, Sînmagir (1827–1817) in the Old Babylonian Period. In this case a woman called Nuṭṭuṭtum erected a whole building (*e-šutum*) for the life of the king and her own life. She describes herself as the beloved, *lukurkaskal-la*, of the king and also the mother of his heir (Leick 2003:148).

Leick (2003:148) deduces that several facts emerge about *lukur* women; there could be more than one at the same court; they sometimes bore children to the king; they were always called '*ki-aga*' ('beloved') and importantly for this study they disposed of sufficient funds to make costly offerings on their own and their king's behalf.

The impression gained of the *lukur* women becomes important when we compare them with the *naditum* in the next section. The evidence of the bilingual lexical lists is, as it is frequently when considering titles, vague. The term *lukur* is correlated with *qadištum* and *batultum*, terms which are also ambiguous. These denote some function in the temple organisation, of which nothing more definite can be said than that the women so designated were set apart for the service to a god. Importantly they are also shown as *naditum* (Leick 2003:148).

8.3.2 Non titled women

Turning to poor women, Adams (2008:11), examining the single city of Umma and the province of which it was the capital during the Ur III Period, presents us with a view on non titled women. The status of women labourers was low. It is difficult to establish the numbers of such workers since most women were

listed only as *geme*₂⁴⁷ and left anonymous in the records. It appears that at least the recorded aggregate was in the order of 500-700, strongly suggesting, he feels that a very high proportion of women were primarily engaged in their own subsistence pursuits and resided with their own families. Gangs of women were frequently sent off into laborious field clearance and other unskilled cultivation tasks (Adams 2008:11).

Giving further consideration and reflecting on full-time labour service of *geme*₂, Adams (2008:12) says that remuneration levels do not seem to be constant or clearly specified but quoting Studevent-Hickman (2006:93-94) indicates that levels fall within the range of 30-40 *sila*₃ per month. This appears to be too low for a woman to support herself, at least in the long run. As many women worked for many years in this way, bringing their children to work with them until their adolescent years, we can speculate that these women must have lived with and had the support of family members, contributing such field gleanings as firewood in addition to their very modest earnings to their families' collective incomes. The work itself was recorded as the milling of grain into different gradations of flour and, working in textile weaving establishments, concentrating on the two most inferior grades of wool (Adams 2008:12).

The apparently limited utilisation of women's labour is striking, especially when contrasted to what was occurring simultaneously in the neighbouring province of Girsu-Lagash where the cities were the location of a huge centre of high quality wool textile production, employing in excess of 15,000 individuals, overwhelmingly women (Adams 2008:12).

⁴⁷ *Geme* (worker) Old Akkadian, Lagash II, Ur III, Early Old Babylonian, Old Babylonian, unknown) wr. *geme*₂; *gi*₄-in "female worker" Akk. *amtu*. The Pennsylvania Sumerian Dictionary. [Online]. Available at <http://psd.museum.upenn.edu/epsd1/nepsd-frame.html> [Accessed 25 January 2014].

8.4 OLD BABYLONIAN PERIOD 2003-1595 BCE AND OLD ASSYRIAN PERIOD 2000-1740 BCE

While in the Ur III Period we can only speculate, albeit persuasively, on the role of women acting independently in business and finance, records show that in this period we find a more clearly defined and independent role for women. For example Silver (1995:60) quoting Van de Mieroop (1992c:217) reports that in Old Babylonian Ur married couples “might obtain loans jointly and sometimes the contracts included the clause that the solvent party will repay the loan, which suggests that the wife acted as a full partner and had financial resources of her own” (Silver 1995:60).

At Mari, extensive palace archives dating to the eighteenth century, including receipts for taxes in kind (grain) were unearthed from the firm of a woman named Addu-dūri. She may have held palace lands in tenancy and was known to have served as a hearing officer in legal disputes concerning real estate and deposits of money. There are other examples of women serving as guarantors of sold land at Khafajah (Silver 1995:56).

8.4.1 Women in business

There are documents from the periods of the Yaggid-Lim and Šamši-Adad dynasties.

8.4.1.1 Zibbatum

The text of ARM 10, 108, as well as ARM 10, 107, shows a letter was sent by Zibbatum, a lady otherwise unattested elsewhere, in Mari's archive to Abba(y)a.

In ARM 10, 108, Zibbatum reminds her 'brother' that when she came to Mari requesting a field, 15 *ikū* (acres) of land were given to her in Tizraḥ, in the district of Terqa a city discovered at the site of Tell Ashara on the banks of the middle Euphrates in Deir ez-Zor Governorate, Syria. After writing a second time, this land was 'released' in her behalf. This second act of generosity, however, created difficulties as it would appear that an unnamed

ENGAR/ikkarum (farm bailiff/farmer) came to seize the field. Zibbatum in turn requested that a tablet be sent confirming her control over the 'released' field (Sasson 1976:406).

Sasson (1976:406) speculates that Zibbatum's problem with the *ENGAR/ikkarum* occurred, not when the field was given to her (*nadānum*), (CAD, s.v. *nadānu* (*to, give, to make a payment to offer a gift etc*) 11 Part1:42) but when it was 'released (*wuššurum*)' (CAD, s.v. *uššuru* (*released*) 20:309), on her behalf without, apparently, the evidence of written documentation. The *ENGAR/ikkarum*, representing the interests of the palace, arrived to remove the field from under her control (Sasson 1976:406).

Batto (1980:223) explains that in this text it is clear that Abba, as an official of the crown, placed the field at the disposal of Zibbatum in two distinct stages. In the first stage he merely "gave" (*nadānum*), the field to her; in the second stage he "released" (*wuššurum*) that same field to her. The second situation was obviously the more advantageous from the viewpoint of the beneficiary except that Zibbatum would have already had the usufruct of the field at the time when it was "released" to her (Batto 1980:223).

The texts concerning Zibbatum show that during the Assyrian Period women were the beneficiaries of both subsistence allotments and permanently deeded royal land grants. Batto (1980:227) concludes that the policies pertaining to land use would appear to have been constant throughout the Old Babylonian Period at Mari, with women enjoying privileges very similar to those enjoyed by men. These women also bore the burdens of taxation as a result of their tenure of palace lands.

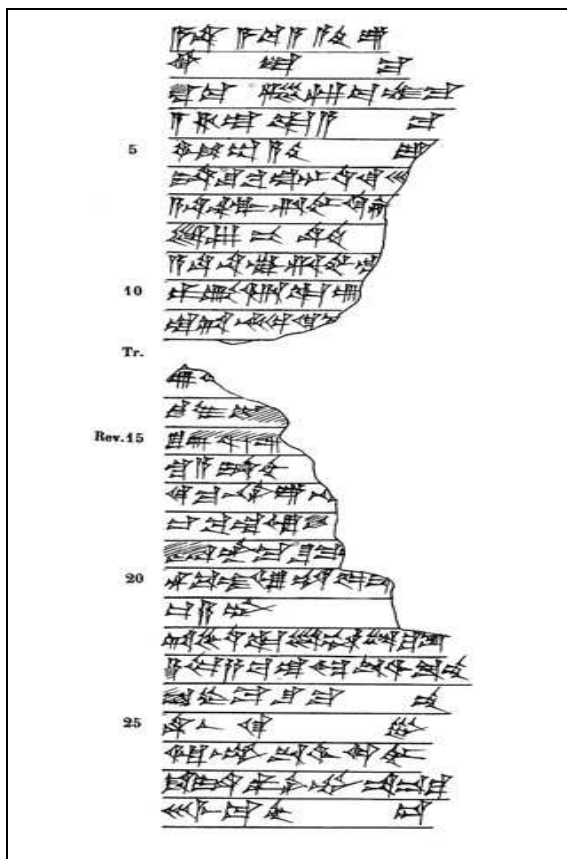
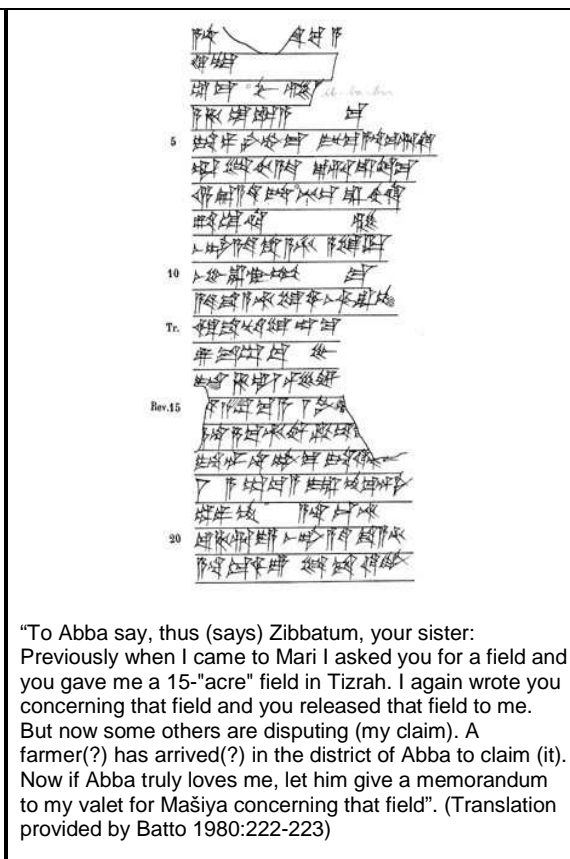


Figure 14: A drawing of a cuneiform transcription⁴⁸



"To Abba say, thus (says) Zibbatum, your sister: Previously when I came to Mari I asked you for a field and you gave me a 15-"acre" field in Tizrah. I again wrote you concerning that field and you released that field to me. But now some others are disputing (my claim). A farmer(?) has arrived(?) in the district of Abba to claim (it). Now if Abba truly loves me, let him give a memorandum to my valet for Mašiya concerning that field". (Translation provided by Batto 1980:222-223)

Figure 15: A drawing of a cuneiform transcription⁴⁹

Publication	Publication
Primary publication: ARM 10, 107	Primary publication: ARM 10, 108
Author: Dossin, Georges	Author: Dossin, Georges
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Owner: Der-ez-Zor Museum, Syria	Owner: Der-ez-Zor Museum, Syria

⁴⁸ [Online]. Available at http://cdli.ucla.edu/search/archival_view.php?ObjectID=P350071 [Accessed 21 November 2013].

⁴⁹ [Online]. Available at http://cdli.ucla.edu/search/archival_view.php?ObjectID=P350072 [Accessed 21 November 2013].

8.4.1.2 *Addu-duri*

Further evidence comes from another woman Addu-duri. She was a powerful woman and ranked amongst the highest officials of Mari under Zimri-Lim. Batto (1980:237) assumes that Addu-duri also held extensive palace lands in tenancy - there exist several receipts for taxes in kind received from her "house" *ina bīt*. There is a presumption that persons paying such taxes do so by virtue of their tenure of crown lands.

It can be seen that women enjoyed both *de jure* and the *de facto* participation in the agrarian economy of Mari. However it is unlikely that women enjoyed equality with men. Women were shown to be less frequently involved in private economic transactions and in the tenure of state lands, Batto (1980:237) argues that there was evidence of institutionalised discrimination. It was possible that women were also discriminated against in the quantity and quality of their individual holdings. For example, the field of 15 "acres" (*ikū*) which Zibbatum received was considerably smaller than any of those attested for men where holdings ranging from 50 to 1,000 *ikū* were seen. However, the value and productive capacity of a field was determined by a number of other factors for example, proximity to irrigation works, fertility of the soil and the type of crop that can be grown. Nevertheless, Zibbatum's allotment still appears to be somewhat small (Batto 1980:238).

Additionally it cannot be assumed that the majority of women enjoyed such privileges. The women who received palace lands appear to have belonged to the upper echelons of Mari society. The same could be said of men many of whom who appear in the royal archives and lived far removed from masses who subsisted far removed from the court. Additionally it may be concluded that women did not participate in the land tenure system to the extent that men did. This is not surprising as we shall also see in the section on the *nadītu*, women were usually considered part of their fathers' or husbands' households and were in many ways legally subordinate to these males. The land tenure system can be expected to reflect these circumstances (Batto 1980:238).

8.4.1.3 Atrakatum

In the letter (ARM 10, 90), Atrakatum writes to king Zimri-Lim. Firstly, Atrakatum defended herself against charges of monetary problems where she had to pay a judgement against her by utilising part of her sons' inheritance. Secondly, Atrakatum describes being evicted from her house and ends with a request for the king to release to her a field and garden (Batto 1980:225).

ARM 10, 90

	<p>Translation lines 22-37</p> <p>Another matter, concerning my house. Iddin-Annu had a claim(?) against me, whereupon they have evicted me from my house and let that one take possession of it. If it pleases my lord, may my lord spare me grief; let them restore my house to me. Even though my father and my mother did not bequeath me the field and garden, I request (them) of my lord. May my lord give instructions that they release the field and garden to me. May my lord... my bond</p> <p>(Translation provided by Batto 1980:226)</p>
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Figure 16: A drawing of a cuneiform transcription⁵⁰

Publication	
Primary publication:	ARM 10, 090
Author:	Dossin, Georges
Publication date:	1967
Secondary publication(s):	LAPO 18, 1185
CDLI no.:	P350054

⁵⁰ [Online]. Available at: http://cdli.ucla.edu/search/archival_view.php?ObjectID=P350054 [Accessed 21 November 2013].

Batto (1980:238) suggests that these women received royal land allotments, were legally independent, unmarried and free of paternal authority. As we have seen, Atrakatum indicates that she paid part of her debt from money belonging to her sons who lived with her (ARM 10, 90 17-19). It is possible that Atrakatum was either divorced or, more likely, a widow. This may mean that her sons were minors and were still under her care, which explains how she could dispose of part of their money when these assets were gained by inheritance from their father. If we can correctly deduce that Atrakatum was not currently married then both the terminology of her letter as well as her actions indicate that she was now a legally independent person and the head of her own household (Batto 1980:239).

Using these examples and making reasonable assumptions, particular general conclusions emerge. Men clearly occupied the predominant role in the possession and use of land, both in the private and public sectors. However, men's predominance stemmed from their cultural position as heads of the household, not from any legal incapacity of women *per se*. Women could and did own property in their own right, acquiring and disposing of it as required. Women civil servants also participated in the land tenure system at Mari, performed similar roles to men and they were supported from palace resources in a manner similar to the men. Like the men, women civil servants also received subsistence allotments or held the deeds to the land in perpetuity, enjoying both the privileges and the obligations that came with such land grants (Batto 1980:239).

The surviving records show us that business women were found in many other locations in Mesopotamia. For example, the business dealings of a number of women (e.g., Winnirke, Tulpunnaya) were prominent in the Nuzi texts, which reveal that women purchased land and gave loans (Silver 1995:56).

8.4.1.4 *Iltani*

In the archive of Iltani documents from Karana (current Tell al Rimah), in northern Mesopotamia within the period of Assur trade there are 1500 letters concerned with cloth, together with supporting correspondence and records suggesting that textiles were an important business. The local ruler's wife, Iltani, operated a textile firm employing twenty-four production workers, including fifteen women and nine men. Her textiles were distributed locally and were exported, with the assistance of her husband, to Babylon, Assyria and Anatolia (Dalley 1977:155) and in addition the records show that Iltani had dealings with several women participating in the textile business.

8.4.1.5 *Sumunnabi*

At about the same time in Alalakh, the king's sister, Sumunnabi, participated in diverse business activities, including lending, exporting barley and purchasing houses, vineyards and slaves (Silver 1995:55).

8.4.2 ***Nadītu* women**

According to the CAD, the *nadītu* was a "woman dedicated to a god, usually unmarried, not allowed to have children and usually living in a "gagû", (CAD, s.v. *nadītu*, 11 Part 1:63). A *gagû* is described as a building or section of the temple district, reserved for the women of the *nadītu*-class (CAD, s.v. *gagû*, 5:10). This brief description merely points to the important and unique role these women had in the economic and business life of the period.

Harris (1963:122 n. 2) suggests that the *lukur*, could be the Sumerian equivalent to the Akkadian *nadītu*. However, as we have seen in the Ur III Period the *lukur* was for the most part connected with the king and the court and from this it can be inferred that the *lukur* of the pre-Old Babylonian Period was superficially different from the *nadītu*. There was no community of *lukur* women living together as did the *nadītus* and it is not known if there was any relationship between the cloister of the Ur III Period and the *lukurs*.

Furthermore, the *lukur* of the Ur III Period could have been, in addition to the roles mentioned previously, a member of the administrative staff of the king, perhaps concerned with his personal care and that of his entourage. We do not find this function in the Old Babylonian Period. Where both roles are similar and where we find an overlap, besides in the business activities of both sets of women, is in the seemingly fundamental qualification of the *nadītu*, as with the *lukur* that neither woman could marry and bear children (Harris 1963:122 n. 2).

8.4.2.1 Sippur texts

Much of our understanding of the *nadītu* and the *nadītum* women comes from Sippur texts. However, these texts do not describe the rights and activities of the male segment of its population, which could suggest *nadītu* texts do not fully reflect the Old Babylonian economic activity at Sippur. Contracts from Sippur show that, although men were participants in some of the transactions, in nearly 70% of the texts one or both participants were women, in most cases described as *nadītus*. As *nadītus* at Sippur resided in *gagû*, it is possible that the tablets were conveniently located, at the time of discovery, in a single location giving a weighting to the business activities of women not seen in Sippur at large (Stone 1982:50).

8.4.2.2 Nippur texts

It would be beneficial to contrast this with Nippur where approximately five hundred contracts are available and of these only about 50 relate to *nadītus*. The excavations at Nippur are such that these contracts cannot have been derived from a single area. By contrast therefore, at Nippur, we could consider the *nadītus* within the broader business context of the city (Stone 1982:51).

8.4.2.3 Gagû “cloister”

At both Nippur and Sippur the *nadītus* were able to engage in economic activities like men. At both Nippur and Sippur a specific area of the city was set aside for the *nadītus*. As mentioned above, at Sippur we know that this

took the form of a cloister, an area from which men were excluded (Stone 1982:56). This institution, was unique in the ancient Near East and was called *gagû* in Akkadian and is translated as "cloister" to reflect its spiritual origin. Collectively the *nadītus* were a group of women, perhaps one hundred or more in number housed in the *gagû* who were "the fallow (women)" and they entered the cloister on reaching puberty and lived a sequestered life there until death. Why an institution prohibiting marriage and childbearing and thus in antithesis to the family-centred Babylonian society emerged at this particular period is a question which remains unanswered. The Old Babylonian *gagû* undoubtedly had its antecedents in a much earlier period but it would appear that its peculiar form and organisation had matured by this time (Harris 1963:121).

Stone (1982:65) speculates that it may have developed as a response to the social and spiritual needs of the time. Possibly the daughters of tribal leaders, constrained by endogamy and rank, often had difficulty finding a suitable spouse. Entrance into the *gagû* would have provided a viable alternative. The god would supplement the protective role already played by her brothers, while the economic opportunities would free her from want and allow her to establish an independent household. Her view is that it is not surprising that the *gagû* whose membership included the sisters and daughters of many of the more influential men of the city and who came from wealthy families, would therefore come to play a significant role in the community (Stone 1982:65).

However, unlike Sippar the cloister at Nippur is less clear where the area is simply described as the "place of the *nadītus*" (*ki-lukur-ra*). In addition, men were not unheard of as owners of house plots in this area at Nippur. These differences may be related to the fact that different gods were involved. Whereas the *nadītus* from Sippar were usually dedicated to the god Šamaš those from Nippur were dedicated to Ninurta. What is clear is that the *nadītus* at Sippar received their property through inheritance either from their fathers or from another *nadītu*, while those at Nippur received gifts of property from

their father but were apparently excluded from the inheritance process (Stone 1982:57).

Despite certain ties and obligations to the cloister, which originally could have been religious in nature, the *nadītu* women, did live and function as private individuals. They played a significant role in the economic life of their communities as lessors of their vast real estate holdings and as creditors, lending out money and commodities (Harris 1963:122).

It was this dual role of being on the one hand members of wealthy and influential families, while on the other belonging to the *gagû* that gave the *nadītu* a unique position during this period of being the only members of society with ties to more than one social institution. The records of their economic transactions reflect this dual role, as they exchanged property with both their kinsmen and with other *nadītus*. Stone (1982:67) speculates that men could and did exchange property with members of other lineages but using the offices of the *gagû* they could also channel the transactions through their *nadītu* sisters and cousins (Stone 1982:67). Lahtinen (2008:17) points out that there were many examples of *nadītus* whose fathers and/or brothers were judges, mayors, “overseer of the merchants”, or “overseer of the *nadītus*”. Some of these men bore two titles, such as judge and “overseer of the merchants”, although perhaps not during the same period of time (Lahtinen 2008:17).

Stone (1982:69) suggests that at Sippar, the minor importance of temple offices in that city allowed the *nadītu* institution to attain its full economic potential and that the economic importance of the Sippar *nadītus* was significant, for instance, through the process whereby the *nadītus* gained control of private real estate. By the end of the Old Babylonian Period, much of the real property of Sippar was apparently in the hands of a few families and these were families that were dominated by *nadītus* (Stone 1982:69).

It is likely that the institution began by fulfilling spiritual and social needs and those later economic functions, for instance, of individual property ownership

radically altered the socio-economic landscape and with it, the economic potential of the *nadītu*. The original social controls that had perhaps resulted in the establishment of the *nadītu* institution were slowly relaxed, while at the same time *nadītu*s were encouraged to play a more active part in the economy (Stone 1982:70).

8.4.2.4 Betrothal gift

Lahtinen (2008:17) advises that when a girl entered the *gagû*, she and her father received a betrothal gift (*biblum*), or bridal gift (*terhātum*) from the *gagû* administration and though it was never followed by a wedding, she then lived in the *gagû* just the way a girl who was to get married often lived in the house of her future father in-law before the wedding was consummated. It could be seen that the young *nadītu* on entering into the *gagû* received from her father, a gift actually called “dowry” (*šeriktum*). However, this dowry was not obligatory and a girl had the right to become a *nadītu* even if her parents could not support her. Indeed matters reached a head during the reign of Hammurabi as so many women started to become *nadītu*s of Šamaš without bringing with them any dowry that Hammurabi’s son and successor, Samsuiluna had to legislate against it, demanding that each girl who wished to enter the *gagû* received a dowry or some other support from her family (Lahtinen 2008:17).

8.4.2.5 Finance and Lending

In detail the economic texts in Sippar dealt mainly with the purchase of property (land, houses, parts of houses), the leasing of such property, the lending of barley and of silver and the purchase and hiring of slaves. The lending of dates or the purchase of livestock is mentioned rarely. Supporting and complimentary to the economic texts are the legal texts recording gifts/inheritances, adoptions and litigations (Lahtinen 2008:25).

A major part of the texts are dated and most of those are from the reign of Apil-Sîn (1830-1813 BCE) through the reign of Samsuiluna (1749-1712 BCE).

It is much earlier, beginning with the reign of Immerum that we see the *nadītu* women begin to actively engage in business transactions. Among field and house purchase contracts, we see a concentration of contracts from the reign of Hammurabi (Lahtinen 2008:25).

A number of contracts, concerning loan activity, were executed by the *nadītu*. Barley loans form the highest number of contracts, while silver loans only form about a quarter of the facilities, with one example of a loan involving dates. The loan amounts do not appear to be very large and we do not know the underlying reasons for these loans, except in one case where silver was lent to buy barley. The barley loan was probably equivalent to certain amounts of silver and was to be used as money, not for eating or sowing (Lahtinen 2008:27).

Lahtinen (2008:27) mentions that it is possible that some women were commissioned by the temple to lend out barley and silver as most of the contracts involve only one of a few *nadītu* and she appears frequently. Thus Lahtinen speculates that it is possible that only one *nadītu* acted as creditor at any given time. However, in addition, those *nadītu* who were wealthy could also act as guarantors for people who needed to borrow money and we also have two examples of *nadītu* depositing money with merchants, another group of people known to have engaged in money lending (Lahtinen 2008:27).

8.4.3 Status of the *nadītu*

Lahtinen (2008:29) also speculates that the *nadītu* were profitable in their own right as skilled businesswomen, building up a fortune, even if only a small one. This would have been important to a woman, since she often had no-one to depend on for her sustenance when she grew old. Without children of her own, she could adopt a manumitted slave or take on a younger *nadītu*. Perhaps another adult, a relative for example, could agree to take care of her until her death on condition that the adoptee inherited some property. It is possible therefore that this property, came to her as a result of successful business ventures rather than by inheritance (Lahtinen 2008:29).

To summarise, *nadītu* were a group of women, in most cases living within the walls of a *gagû*, conducting the full range of business activities, providing loans and acting as guarantors and possibly investing the proceeds of their profitable ventures in property. Some of the *nadītu* of Šamaš in Sippar were wealthy women, buying expensive property and acting as creditors, lending out varying amounts of silver and barley. The degree of independence must certainly have varied from person to person. Some women co-operated with their fathers, some had their business managed by their brothers and others had full influence over their own affairs (Lahtinen 2008:30).

In due course the *gagû* and with it the *nadītu* declined. Stone (1982:69) thinks that when temple offices became exchangeable property, their freedom from traditional alienation restrictions made possible the establishment of direct economic ties between male members of different lineages. These direct ties were apparently preferable to the indirect ties provided by the *nadītu* institution. By the time of Hammurabi's conquest of Nippur in 1763 BCE, these new possibilities had resulted in a decline in the importance of the *nadītu*. For the last twenty years of Nippur's Old Babylonian occupation, the city's private economy was dominated by a large, loosely integrated group of temple office holders, for whom kinship was of less significance in economic matters than institutional ties (Stone 1982:69).

8.5 NEO-ASSYRIAN PERIOD 934-609 BCE, NEO-BABYLONIAN PERIOD 626-539 AND EARLY ACHAEMENID PERIOD 550-400 BCE

8.5.1 The dowry

A father could give a dowry and this remained the wife's property. Her husband had the right to manage it but the total value could not be diminished. The children of the woman or the heirs appointed by her could inherit the dowry. It was possible that part of the dowry, the *mulūgu* and the *quppu* ('the basket') (CAD s.v. *quppu* 13:310 A.3c) could be used by the wife at her discretion. This could therefore be considered the private property of the woman. Other sources of private property were gifts by her father or her

husband. The *quppu* seems to have been customary throughout the Babylonian era, for instance, her own property was ceremonially bound in the 'hem' of her garment and continues into the Neo-Babylonian Period where it was kept in her 'basket'. An Old Babylonian text further states that “the silver of her bride price was tied in her hem (*qannu*),” meaning that it was handed over to her (CAD s.v. *qannu* 13:83 B.3). Through the ownership of private property women could become actively involved in business; they were even allowed to buy immovables. There are a number of instances within the laws of Hammurabi showing married women acquiring their own property (*sikiltum*). However, a woman could also be held accountable for the debts contracted by her husband (Stol 1995:133).

8.5.2 Inheritance

Turning to inheritance the usual practice in the Neo-Babylonian Period was division of the estate by male offspring, sometimes equally and sometimes with the eldest son taking a preferential share. When there were no surviving sons a man's heir would be his brother. Thus if a man as the head-of-household wished to provide for a daughter or wife, he specified in his will which of the properties were to be excluded from the general estate and the parties to whom the properties were bequeathed. In this way it would be the residue ("everything in town and country") that then went to the usual male heirs. Beside a bequest in the will, the head-of-household could also assign certain rights to a specific property to one specific person (usually but not necessarily his wife). For example, he could assign a life interest in a house to his wife. Such assignments might be made under pressure from the wife herself or from another party concerned with her affairs, to secure and protect her future in anticipation of the absence of the husband (Roth 1991-1993:8).

For example a certain Gimillu and his wife Tappašar found themselves by 527 BCE without an heir to inherit their estate and without someone to manage their affairs in their declining years. Gimillu therefore adopted as heir Iddin-Nabû a member of his extended family, turning over to him the administration of his business concerns and receiving in return the guarantee of a place to

live and ample provisions for the rest of his life. It may have been possible that he could not include Tappašar in his negotiations with Iddin-Nabu, as after Gimillu's death, Iddin-Nabû came to his own arrangements with Tappašar. She was to receive the interest income from a thirty shekel loan and retained the right to live in a wing of the house pledged for that loan as long as the loan remained unpaid. Beyond this, she had no basis for claiming a continuation of the rations received by her husband. When the debtor repaid his debt, she would receive the thirty shekels but also meant she would have to vacate her part of the property. She would be enabled by the agreement to take any of the house-hold items assigned to her by Iddin-Nabû. Beyond that Tappašar would have no further rights to the property and it would not therefore be regarded as in any way as being "joint" in the modern sense. It would therefore be important for Tappašar to ensure that she was part of the original arrangement with Iddin-Nabû (Roth 1991-1993:13).

If it was indeed the case that there was no recognised legal right of a Neo-Babylonian widow to remain in the home once it became the property of the husband's heirs, then the husband would have needed to make explicit provisions to allow their wives the right of abode after death for a period; hopefully for the rest of her life (Roth 1991-1993:26). This may seem to make matters difficult for the widow but it could also be said that there may not have been pressure for change from the wider community through arranging for the heirs to provide shelter for the widow.

However, many women did have property from their dowries and by utilising these funds, if sufficient, they were not dependent on their husbands' action to secure their rights after death, including the right of abode (Roth 1991-1993:26).

8.5.3 Women in business

There are examples of business women during this period.

8.5.3.1 *Ina-Esagilaramât*

Ina-Esagilaramât was the wife of Iddin-Marduk. She is another example of a woman conducting her own business affairs as well as playing an active role in her husband's diverse commercial ventures (Silver 1995:56). Roth (1991:28 n. 26) acknowledges this but puts forward the idea that she may have been 'fronting' for her husband "in an attempt to hide the true ownership of his assets". In response, it should suffice to note that this "hidden property trick" could succeed only in an environment familiar with independent transactions by married women (Silver 1995:56). It is interesting to note that the father of Iddin-Marduk was in debt and there were numerous creditors to satisfy before the sons could take the inheritance. This led the father of Ina-Esagilaramât to intervene to safeguard his daughter's dowry, claiming that the dowry was improperly subject to claims of the creditors and demanding that it be restored. In settlement Iddin-Marduk substituted seven slaves in lieu of seven minas of silver of her dowry (Roth 1991:24 n.10).

8.5.3.2 *Wife of Bêl-iddina*

The wife of a certain Bêl-iddina who may have been a widow at this point was shown as delivering quantities of dates. A further text reveals that a receipt was given to Nergal-uballit, a son of Bêl-iddina and his mother for payments of debts. The last document of the series was a promise to pay barley, while there were still old debts of Bêl-iddina's outstanding. This indicates that women could also become creditors even if in this case such credit may not have been given cheaply, as the wife and son in all probability had to depend on such credit being given (van Driel 1989:211).

8.5.4 **Assyrian trade**

Looking at Assyrian trade a brief example of similar arrangements are found during the Neo-Assyrian Period. Tablets found in Assur and which date roughly to the seventh century, in the reign of Assurbanipal or later, show an archive consisting of names, both male and female, all connected to amounts

of grain and money. Some have interpreted this to be a list of people who financed a trade enterprise. However Teppo (2005:104), referring to Radner (1999:101-126) indicates that she thinks that these are balance sheets for trading expeditions and are probably a list of persons receiving parts of merchandise brought back from an expedition because so many different individuals are mentioned. The key fact, however, is that these women were involved in the trading expeditions in some way (Teppo 2005:104).

Other women acted as agents, possibly some would have acted on behalf of their male relatives or husbands but most women seem to have been doing business on their own behalf although they may needed permission from their husbands/male relatives before making any contracts. Either way what is certain is that there are women who are engaged in various economic contracts and we can conclude that that they were agents. However, we cannot go further and ascertain the reason why these groups of women became businesswomen in the Neo-Assyrian society (Teppo 2005:106).

8.6 CONCLUSION

There is no doubt that women played an important role in the finance during the whole of the period under consideration. They were able to enter into business deals and enter into financial contracts including, giving and receiving loans, acting as guarantors, undertaking agency duties and acting as sureties.

What is less certain is whether they acted alone or in some way on behalf of their husbands/brother/sons or male heirs, either as a formal agent or given the absence of extant texts on an informal and perhaps ad hoc basis. Whichever scenario is to be considered, there can be no doubt that the wider business and financial communities accepted that women could undertake transactions under their own name.

Nevertheless, there are three important examples where it is certain that women acted alone and not directly on behalf of their husbands/brother/sons

or male heirs. Firstly we find the *sābītu* women, secondly the *lukur* women and thirdly the *nadītu* women.

Sābītu women have been discussed in *Chapter Seven* but in considering their financial role we can see that to begin with they commenced their activities to fulfil a need, namely the brewing of beer. While they came to offer comprehensive financial services and even played a restricted as role “banker” to the community, it is probable that they had no economic role outside of the brewing environment. As we have seen brewing was an important constituent of the Mesopotamian economy and by extension these women, collectively, would have had a significant role in the economy of Mesopotamia. Some weighting must be given to the religious dimension as suggested by the Hymn to Ninkasi, which is also in the style of a drinking song, probably dedicated to a female tavern-keeper (see *Chapter Seven*).

Lukur women are perhaps harder to compartmentalise. We find Simti, a *lukur*-priestess, playing an important role in the administration of Drehem’s sizeable livestock economy whereas we also find the *lukur-kashal-(l)a* “the *lukur* of the road”, which could suggest that these women had their own establishments along certain routes. Within the terms of her office her business judgement would have been important. The religious position seems to be less certain but it is likely that the *lukur* of the road did not have a *gagû* like the later Babylonian *nadītum*.

The role of the *nadītu* women of Sippar is reasonably clear; they lived and conducted their affairs within the precincts of the *gagû* but within these boundaries they appear to have had an almost unique authority relative to the other periods under consideration. We have seen that they commenced their activities for religious reasons and soon developed an economic and financial function possibly but not exclusively to facilitate transactions for their male relatives. As the structures changed, for instance around the religious dimension so the need for the *gagû* fell away and with it the need for the *nadītu* women.

The circumstances at Nippur are less clear where the “cloister” is simply described as the “place of the *nadītus*” (*ki-lukur-ra*). In addition, men are not unheard of as owners of house plots in this area at Nippur. These differences may be related to the fact that different gods were involved. What is clear is that they again played a significant role in the economic life of their communities as lessors of real estate holdings and as creditors, lending out money and commodities.

These three classes of women and especially their unique financial operations arose in particular circumstances, probably initially having a religious and social component.

Outside of these offices, women in finance were always significant but over time and as the religious and social dimension changed the financial standing of women becomes less clear. However, there can be no doubt women played an active role in the financial life of Mesopotamia throughout the period under consideration. What is less clear is whether women in the later periods and outside of the formal arrangements could undertake independent financial transactions as the *sābītu*, *lukur* and *nadītu* women had been able to or whether they were in some way acting as “agents”, either formally or informally, or a combination of both for their male relatives including adopted “sons”.

CHAPTER NINE

CONCLUSION

9.1 INTRODUCTION

This dissertation has attempted to try and establish the progression and development of the financial instruments, products and personalities involved, by examining the progression of trade and financing techniques through the periods. Reductionism enabled complex phenomena to be considered and allowed for a comprehensive description while taking into account the period involved (2000 years), the complexity of the financial products found across the periods and the geographies – northern and southern Mesopotamia.

By retaining a consistent timeline and continuum through each chapter beginning with earlier Sumerian financing techniques, progressing through periods of major financial development, for instance, Ur III, Babylon and Assyria and concluding with the early Achaemenid Period, patterns become apparent, which enable conclusions to be considered.

9.2 ACHIEVING THE GOAL OF THIS RESEARCH

To facilitate the examination of the hypothesis various questions were posed and based on an amalgamation of the information gleaned from the analysis in the chapters, answers have been suggested.

As set out in section 1.2a) above, the following key financial questions were considered as common to all chapters:-

- How significant is the theology of the time in introducing an abstract notion of interest?
- Was interest only a penalty payment in the event of non-payment of the original facility?

- In turn did this mean that there was a “rental” aspect to the facility that in the case of non-payment of interest the debtor would rent the property from the creditor?
- How close are modern ideas of “interest” to ancient practice?

Besides these questions and to further support the hypothesis, the aim of the research incorporated analysis of various business activities. The role of temple and palace and the role of merchants and money lenders and private enterprise were examined, with a chapter each to consider the role of women in private enterprise and brewing, a vital agricultural industry.

The significance of theology was explored in *Chapter Five*. The impact of the temples on the economy from the earliest beginnings through the Babylonian Period to beginning of the Persians was substantial. Mesopotamian temples, besides being religious centres, were also law courts, schools and archive depositories. As an example of this the Mesopotamian hymn to Šamaš was unusually explicit regarding the conduct of weighing practices. The chapter looked at their role as an early form of bank - in need the temples could act as a lender of last resort not unlike a modern reserve bank and as mercantile institutions.

From commencement, beginning with the Sumerian Period, the temple would have controlled the economic surplus. Private households were important but while it is likely that production existed alongside that of the temples, the activity seems to have been orientated towards subsistence needs. Commercial activities were also undertaken at the request of the temples and this role probably could have originated in Sumer in the third millennium BCE.

During the Ur III Period, texts show the income of the temples apparently coming from the temple-land proper, cultivated by persons responsible to the temple and from rental of the land leased to temple personnel which was partially paid in silver. In addition there was income from fishing and cattle farming. The temple undertook trade with neighbouring states, managed

predominantly by its appointed representatives and provided loans to merchants to finance their trade ventures. They provided merchants with commodities to enable them to trade at an adequate profit sufficient to repay their creditors while creating a surplus corresponding to a profit for themselves.

We can conclude that the role of temples extended well beyond the gathering of “interest”. They were a fully functioning part of the economic and business life of the ANE during the periods under consideration.

However, it is interesting to observe that this involvement of the religious centre in the business and economic life continues beyond the Mesopotamian era. There is a contrasting view in the example of Thomas Aquinas in the thirteenth century who wrote that there is something shameful and sordid about commerce. The change from the Mesopotamian Period, in this instance, is quite stark; religious orders were forbidden to involve themselves in any business of this description.

Indeed, even in our own time we have the example of The Archbishop of Canterbury, Justin Welby, accusing bankers of having "a culture of entitlement" in a scathing critique of the City's ethical and professional standards.⁵¹

Chapter Four assessed the origins of an attribute of credit, which developed throughout Mesopotamian history. When an obligation became due to an institution, for instance rents on fields granted in usufruct and were not settled, the arrears were deemed to have been “loaned” to the debtor. As non payment now became by default a “loan”, then an amount of (silver or goods) “lent” needed to be repaid with an increment added to it. It was through this mechanism that the concept of interest seems to have been initiated. By the late twenty-fifth century BCE, the arrears in payments owed to the institutions

⁵¹ [Online] Available at <http://www.theguardian.com/business/2013/apr/27/archbishop-canterbury-criticises-bankers-city> [Accessed 22 January 2014].

became treated as advances, on which interest could be charged. This interest on a loan could be regarded as equivalent to a fee charged, for example, to a herdsman who grazed his animals on rented fields. This may explain why the rate of interest on barley loans was set at 33% by the law codes. This is equivalent to the rental fee on the use of a field for farming, which often was set at a third of the yield.

Interest rates remained stable; the rate did not change from the early third to the early first millennium but were excessive by modern standards. For example in Babylon it was at the rate of 1 shekel per mina per month equating to an annual rate for a loan of 20% for loans repayable in silver and at the rate of shekels per mina for three months corresponding to an annual rate of 33.33% for grain loans. Rates were higher in Assyria, ranging from 25% to 33.50% for silver loans and up to 50% for grain loans.

Rates set in this way, rather than being expressed as a percentage as used in modern finance, could be understandable in the context of lending being a function of the transaction rather than the modern idea of banks being separate, profitable, entities from the entities carrying out the transaction itself. For example, the need for loans arose before the harvest and this repayment was expected, not on an annualised basis as we would expect today but after the harvest. It became important, therefore for the harvest to be successful when barley would then be in plentiful supply and the amount owed could be repaid. A poor harvest would almost certainly lead to a consequential loss of land to creditors. Indentured service was almost certain to follow and with it the possible enslavement of members of the debtors' families. Modern banks can look at returns being based on other criteria such as capital employed. This is different functionally to Mesopotamian finance where lending is undertaken as part of the transaction giving returns which would be considered usurious in modern finance.

We can conclude that from the earliest periods commercial loans were functionally distinct from agrarian lending. They were expressed in silver

whereas agrarian loans were denominated and repayable in barley or other crops (but could be valued in the silver equivalent). In addition, the calculation of the commercial rate of interest was standardised at 12/60ths per year and would not be expressed as a percentage i.e. 20%. However, this is substantially lower than the rate charged for agrarian loans, typically barley, of a third to half the value of the nominal principal or in modern terminology 33.33% up to 50%.

Chapter Four explored the facilities whereby the owner of the house acquired the legal title by credit purchase, which gave the option of turning a *de facto* rental arrangement into ownership provided the occupier continued to repay the debt. On final repayment title will pass.

The same chapter, as well as *Chapter Three* from the perspective of the merchant, investigated the early development of promissory notes. An interpretation of the penalty clauses give a strong indicator of the desire of the creditor to recover the principal and interest, rather than the labour or land of the debtor. Texts show that creditors were satisfied if unpaid debts did lead to the repayment of the principal plus interest, especially as many of the debtors were prominent members of the hierarchy of the time and these men were unlikely to be forced into default for their land or labour.

We have seen in *Chapter Two* that the word for interest, *mash*, was also the term for calves, giving the idea of giving birth and growth. It is interesting to interpret our modern concept of interest as being the “growth” of money. Using money as the example, interest therefore is payable by a borrower to the lender as a reward for the use of the money. However, interest could also compensate for the use of other assets.

Chapter Three considered the relationship of merchants to the great estates, temples and palaces, underpinned by laws such as the Code of Hammurabi, which pointed to the role of the merchant as a money lender. These institutions provided loans to merchants to finance their trade ventures and

also provided merchants with commodities to trade at a profit sufficient to repay their creditors and while creating a surplus to correspond to a profit for themselves.

During the course of the periods under consideration, merchants gained considerable economic power and access to significant quantities of silver. In practical terms and given the leads and lags in the collection of taxes by the palace the merchants could use the silver for their own profit.

A development familiar to modern trade finance was initially utilised in the Assur trade where we begin to see in a small number of contracts containing a clause, similar also to those attested in Old Babylonian bonds, stating that "the bearer of the tablet is the creditor". As modern trade finance depends on negotiable instruments, so negotiability appears important to merchants in the Ancient Near East. We can surmise that the holder of the tablets may not have been involved in the original transaction but, as a note of caution, it is difficult to show that the tablets themselves were transferred.

During the Neo-Babylonian Period, the main instrument for recording debts was the promissory note, a negotiable instrument still underpinning modern trade finance, sometimes referred to by its Akkadian name, *u'iltu*. Typical promissory notes of the time state the obligation of one party to pay or render a service to another. As with modern promissory notes the reason for the underlying transaction was not given and thus, again as a note of caution, the *u'iltu* may not have been a debt note reflecting an earlier loan. While it may be difficult to definitively state that this was a new innovation we can conclude that it was the natural extension of the tablet with the words "the bearer of the tablet is the creditor".

The second element to this research looked beyond the technical aspects of finance and considered various business activities. This investigation included the role of temple and palace, merchants and money lenders and private

enterprise, with a chapter each to consider the role of women in private enterprise and brewing, a vital agricultural industry.

Chapter Five considered the role played by the temples in the economy from the earliest beginnings through the Babylonian Period to beginning of the Persians. The Mesopotamian temple existed for about three or four thousand years and this longevity in the banking sphere meant it could perhaps be described as one of the first financial organisations to be created.

The chapter considered a specific example namely the temple at Eanna. The temple was certainly influential as far back as Sumer but there are suggestions that the temple may have preceded the city. It is therefore reasonable to assume that community life was focussed on the temple from the very earliest period. A natural progression would be for the temple to become involved in the economic life of the people if no other reason than that it was a major land owner. In an agricultural economy this land would have needed to be utilised productively. This temple's land ownership continued through to New Babylonian times, a period of some 2500 years, witnessing the rise and fall of major empires and thereby suggesting a substantial influence over secular life.

The juxtaposition of the temple economy with its religious function may help to explain the beginnings of the material role. However, it could be suggested that, thereafter, its economic longevity was due to prudent economic management intermingled with continued religious deference.

However, the texts also suggest that the authority of the palace grew throughout the third millennium BCE. By the end of this period, it is probable that the palace had acquired control over many of the institutional estates of the various temples. Nevertheless the temple continued to enjoy a significant role in the economy in spite of evidence showing that the financial importance of the palace was immense. There can be little doubt that by the time of the Neo-Babylonian and early Persian Periods, the palace, for instance acting

with private entrepreneurs, enjoyed a key place in the financial life of Mesopotamia.

The palace was considered in *Chapter Six* and the economic importance of the palace throughout Mesopotamia history was immense. They had the resources both financial and in labour to undertake the massive infrastructure projects needed to manage an economy where rainfall was uncertain and effective water management required intervention.

In their business affairs and tax administration, the palace would have needed to interact with the wider community. From a very early stage the palace representative would have assumed responsibilities beyond acting as mere agent. As early as the Old Babylonian Period the palace found it beneficial to use merchants. For the merchant, it is possible that a crucial factor in attracting them to the palace would be characteristics in their own business activities fitting in with the requirements of the palace. This shared and common interest continued into the Neo-Babylonian Period to the benefit of both parties.

Women in private enterprise had an important role to play from the early periods through the Late Bronze Age and the zenith under the Persians. *Chapter Eight* asked why women played such an important role in finance. During many of the periods under consideration women played an active role in the financial life of Mesopotamia. However, what is less clear is whether women, in the later periods and outside of the formal arrangements, could undertake independent financial transactions as the examples of *sābītu*, *lukur* and *nadītu* indicate for the earlier periods. Furthermore, it is not certain whether in some way acting as “agents” either formally or informally, or a combination of both, for their male relatives including adopted “sons”.

Nevertheless, there are three important examples where it is certain that women acted alone and not on behalf of male relatives. Firstly we find the *sābītu* women, secondly the *lukur* women and thirdly the *nadītu* women.

The *Sābītu* women came to offer comprehensive financial services and even played a restricted as role “banker” to the community. *Lukur* women are perhaps harder to compartmentalise. Simti, *lukur*-priestess, played an important role in the administration of livestock whereas *lukur-kashal-(I)a* “the *lukur* of the road”, may have had their own establishments along certain routes almost certainly undertaking related business activities.

The role of the *nadītu* women of Sippar is reasonably clear; they lived and conducted their affairs within the precincts of the *gagû* and that they soon developed an economic and financial function possibly but not exclusively, to facilitate transactions for the male relatives. The role of the *nadītu* women of Nippur is less clear where the “cloister” is simply described as the “place of the *nadītus*” (*ki-lukur-ra*). In addition, men are not unheard of as owners of house plots in this area at Nippur.

Mesopotamia at this time was predominantly an agricultural society and as an example, a specific agricultural industry that of brewing beer was examined. The dissertation considered the importance of this industry at the time and the reason for the importance of the industry in agricultural finance. Indeed in absence of “money” beer became a substitute payment in kind and from this financial facilities became important, for example, when a loan was undertaken, which would be repaid at harvest time. At the level of retail financing, on a smaller scale probably for individual purchases, these facilities could perhaps first be shown to have emerged around the brewing industry for example in the small scale loans conducted taverns, with the added feature of the lending conducted by women (*sabītu*). The beer dispensed would have been repaid in barley and could be viewed as a financial transaction under a countertrade umbrella.

The basis of the financing of the brewing industry continued from Sumerian times to the early Persian Period. On a retail level, lending was controlled by *sabītu* but with the added dimension that, commencing during early Persian Period, the process involved the backing of large firms, for example, the Murashû and Egibi families. This led to the development of a more formal

structure in the industry almost certainly in return for a suitable reward. The growth of the industry in the later period and the involvement of firms in large scale manufacturing led to the increasing involvement of men with women continuing to provide beer for the home.

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