

Factor Markets in Hellenistic and Parthian Babylonia (331 BCE-224 CE)

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Abstract

Because the evidence is meagre, this article takes a qualitative rather than a quantitative approach to the markets of land, labour, and capital in Hellenistic and Parthian Babylonia. The evidence consists of administrative documents from Babylon and Uruk (Babylonian clay tablets in cuneiform script), from Dura Europos on parchment or papyrus (in Greek and Aramaic), and from Avroman in (Greek and Pahlavi). These texts suggest that the land market was restricted by the legal rights of king and temple. There is little information on wage labour. Slave labour existed, but neither its role in the economy nor the importance of the slave trade has been adequately assessed. The use of credit, interest, cheques, and other financial instruments is attested, but its significance is small, not least because of the prevalence of iconic interest rates of 20%, set by tradition rather than by market forces. As far as the evidence goes, the markets for land, labour, and capital were restricted by tradition and by the claims of king and temples on land, while the commodity markets were much more market-oriented.

Keywords

Factor markets – Hellenistic Babylonia – Parthian Babylonia – financial history – agricultural history – slave trade

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1 Introduction

We shall discuss the markets for arable land, labour, and capital in the period from the accession of Alexander the Great in Iraq, in 331 BCE, to the conquest of Iraq by the Sasanians, in 224 CE. Following the death of Alexander, in 323 BCE, and during the ensuing wars of the Successors, Iraq was ruled by the Seleucid empire from 311 to 141 BCE and then by the Parthian empire from 141 BCE to 224 CE. These empires did, however, occasionally lose control of cities in Iraq to other powers, as when the Romans temporarily took Babylon in 116 CE, under the emperor Trajan. The city of Dura Europos, on the middle Euphrates, founded by Seleucus I in about 300 BCE, was Parthian from c. 100 BCE to 165 CE, when it was conquered by the Romans; it was captured by the Sasanians in about 257 CE and then abandoned.

The main sources for our research are: administrative documents from Babylon and Uruk, dating up to the first century BCE and written in Babylonian cuneiform script; documents from Dura Europos in Greek and Aramaic; three documents from Avroman in Greek and Pahlavi, in the Zagros mountains, east of the Tigris, which shed light on arable land in the Parthian era; and studies of coinage and archaeological research.

Commodity prices are abundant in the so-called Astronomical Diaries (ADART), a series of cuneiform texts from Babylon, so abundant that they allow the application of statistical methods. We shall not discuss these here, as they have been discussed elsewhere and are the object of a current study, which will be summarized in a volume on market performance from ancient Babylonia to the modern world (Van der Spek, Van Leeuwen, and Van Zanden 2014; Van der Spek, forthcoming (a)). Suffice it to say here that the prices of food and wool were clearly subject to the forces of supply and demand, as is noted also by Jursa in this issue of *JESHO*. Sources on factor markets are scarce, however, so it will be impossible to analyse the data quantifiably. In addition, prices of land vary not only because of price oscillations but also because of the quality of the soil and the distance to water, roads, and the market, although these determinants are not always mentioned in the sources (De Neeve 1985). It thus seems preferable to discuss in detail the scarce information found in the transactions and to focus on saleability, and in doing so to try to find clues to the functioning of the factor markets in the period under review.

Because the sources for the study of the Babylonian economy during this particular period are so scarce, we are obliged to look back at the preceding period, discussed by Michael Jursa in this issue of *JESHO*. We have to assume that most of the conditions and developments of the preceding centuries did not fundamentally change with the arrival of Alexander the Great (331 BCE).

We thus look at the data in the light of our knowledge of the preceding period and search for possible changes. Changes had taken place in the Achaemenid period, especially as a result of the disruptions caused by the rebellions in Babylonia and the subsequent harsh measures taken by Xerxes in 484 BCE.¹ Changes also took place after 331 BCE, among the most important of which were the conquest of Babylonia by invaders from the west, who were not accustomed to a palace and temple economy; Alexander the Great's introduction of coinage and placing of 5000 tons of silver into circulation; and the construction by Seleucus I of a new capital city on the Tigris, which probably saw new economic conditions and habits but about which we have little information.²

In the following section, we shall discuss aspects of capital market transactions, which may help us shed light on the uses of money in this period.

2 Capital Market

Silver was increasingly important as money. In the course of the first millennium BCE silver was not only the main means of account but was also used as a means of payment. The standard unit was the shekel (8.33 grams of silver), but fractions of the shekel were used in daily transactions up to one-twenty-fourth and even one-fortieth (Jursa 2010: 631 and 641). The important introduction of coinage took place in the Achaemenid period, but its use was not widespread in Babylonia, as it was used mainly to pay mercenaries in the western part of the empire. A sudden breakthrough, however, took place in the time of Alexander. As far as we can judge, all payments were made in coin from the start of his reign, even though cuneiform texts continue to speak of prices in silver, because, in contracts, this is mostly followed by the proviso "in staters (or tetradrachms, silver coins worth four drachmas) of Alexander" or any other ruler. Money continued to be weighed, but a rule of thumb probably emerged that one shekel was the equivalent of two drachmas. This was true especially of the coins struck at Babylon—lion staters and elephant staters mentioned in the cuneiform texts—which were slightly lighter than the staters struck according to the Attic standard that was prevalent in the Seleucid empire. Cuneiform texts speak of a *manûtu ša Bābili*, "the account rate of Babylon." It is not known exactly what this was, but it must have been a conversion rate of shekels to drachmas. Alexander coined, in the course of his reign, the silver of

1 See Jursa in this issue of *JESHO*: 183-184.

2 On the role of silver, see Van der Spek 2008.

the Persian treasury, which triggered inflation for some decades, at least until about 300 BCE. The coins retained a fairly stable weight until the reign of Antiochus IV, when the first debasements appear. We know that the uncoined silver in use before Alexander the Great usually consisted of 87.5% pure silver (i.e. one-eighth alloy).³ The coinage introduced in Asia by Alexander has, in general, a silver content well above 90%. It was not until the first century BCE that serious and systematic debasements of silver coinage took place in Syria and Egypt (Mørkholm 1991: 5). Weight is another story. The silver tetradrachm at the time of Alexander the Great was about 17.28 gr. and was reduced to 17.20 by 300 BCE.⁴ In about 172 BCE (during the reign of Antiochus IV), the weight of tetradrachms from Antioch was reduced to 16.80 grams, and this remained the standard in the second century. By about 105 BCE, it was reduced to 16.30 gr. (Mørkholm 1991: 5-6; http://parthia.com/parthia_stats_gordus.htm; Le Rider and De Callataÿ 2006: 29-31). A similar decline is attested for Parthian coins. During the reign of Mithradates I (165-138/2[?]), the purity remained well over 90%, but under his successors it declined, to about 88% under Mithradates II (121-91) and about 75% in the mid-first century BCE. The weight of coins also declined. The silver tetradrachms minted at Seleucia on the Tigris by Mithradates are 6.7% lighter than the Seleucid ones minted by Demetrius II, who temporarily occupied Babylon in 138 BCE (Slotsky and Wallenfels 2009: 94, n. 65). The different appreciation of these coins is clearly demonstrated by one of the so-called commodity price lists, cuneiform documents listing prices (Slotsky and Wallenfels 2009: 83-97, text 6 rev. 12'-15'). It gives two distinct exchange values of barley (for two shekels of silver) for month III 175 SEB = 27 May-25 June 137 BCE: eighty-four litres in staters of Demetrius and seventy-two litres in staters of Arsaces (throne name of all Parthian kings).

Although silver and bronze coins were important means of payment, capital also circulated in kind (land-for-service; rations; payment of rents and tithes).

It is difficult to gauge how money was used for lending and investments. I shall discuss this only briefly, as there are two excellent studies, by Matthew Stolper and Michael Jursa, which treat this phenomenon thoroughly (Stolper 1993; Jursa 2006). Rent is a good indicator of its importance. Rent was traditionally set at one shekel per month (amounting to twelve shekels per year) over

3 For a detailed discussion of the silver, see Jursa 2010: 474-490, discussing previous literature, in particular Vargyas 2001: 13-51.

4 In Babylon, however, tetradrachms were, briefly, struck at a lighter weight. Satrap Mazaios (in Alexander's time) and Seleucus I struck coins (lion staters) that conformed better to the local shekel standard (Houghton and Lorber 2002: 44; Golenko 1993 and 1995).

one mina (= 60 shekels) = 20%. The documents show that these high rates were real and were often even higher (Jursa 2006: 161 and ns. 92 and 93)—high for a normal market economy. Interest rates trend higher in the Hellenistic period, and 40% became the rule (Hackl, Pirmgruber 2014, table 6). Many of these interest rates were, however, in fact not interest rates but penalties (Jursa 2006: 161-2 and n. 93), which are found also in deposit contracts. These documents could be used as negotiable financial instruments, that is, as cheques. This is exemplified by the formula in an interest-bearing promissory note arising from a deposit of 158.5 shekels of silver: “As long as Mūrānu (creditor) holds this document, any record of payment, whether a parchment or (another) document, any authorized agent, or any quitclaim at all that bears on this document is invalid. Any authorized person who holds this document may collect that tithe, the said two and one-half minas and eight and one-half shekels of silver from Bel-zēru-lišir and his son Marduk-nāšir (the debtors who mutually assume warranty).”⁵ The notion of market is clearly indicated in a record of deposit of five vats of wine and twenty “good?” loaves of bread, which is the property of the temple but under the control of Mūrānu and now deposited with a certain Rihat-Nanā and his wife: “In the months III or IV, year 43, Antiochus and Seleucus being kings, his (Rihat-Nanā’s) sons, Ate’-Bēl and Natanat-Bēl, will pay the silver price of the said five vats of prime beer <and twenty loaves of bread(?)> according to the exchange rate that prevails in Babylon in months III and IV. If they do not pay at the term appointed for them, they will pay according to the lowest exchange rate (i.e. highest price)⁶ during the year 43. If they do not pay according to the lowest exchange rate, interest will accrue against them at a monthly rate of two shekels per mina (amounting to 40% per year)” (lines 8-11).

Royal legislation is relevant in these documents. In a record of deposit of twelve shekels of silver, the clause indicating that the money is payable to bearer adds a reference to a royal order: “Any authorized person who holds the document may collect that twelve shekels of silver, that is, that deposit, according to the royal decree.”⁷ This “payable to bearer” clause is not mentioned in a record of deposit dated to 26 March 218 BCE according to which the debtor

5 CT 49, 106 (= Stolper 1993: 38-41, no. 12; Jursa 2006: 179-80). Similar clauses in CT 49, 111: 13-15 (= Stolper 1993, 42-4, no. 13; Jursa 2006: 183), BM 55437 (= Stolper 1993: 46-9, no. 15: 10’-14’; Jursa 2006: 184-5); CT 49, 112: 10-12 (= Stolper 1993: 49-50, no. 16; Jursa 2006: 183-4); CT 49, 102: 12-15 (= Stolper 1993: 51-2, no. 17); CT 49, 173: 9-11 (= Stolper 1993: 25-7, no. 8; Jursa 2006: 200).

6 Babylonians recorded prices as exchange rates of one shekel of silver, so a small amount of beer for a shekel means a high price in our terms.

7 CT 49, 173: 9-11 (cf. n. 6 above for the editions).

received a deposit of forty shekels of silver in staters of Antiochus (III), which he had to repay exactly one month later: “If Itti-Marduk-balātu (the debtor) does not repay it at the term stipulated for him, he will pay according the royal edict that has been written concerning deposits” (Stolper 1993: 28-33, no. 9).⁸ Royal legislation appears also in a promissory note of 15 *kurru* (2700 litres) of barley, from a ration payable to a certain Madānu-uballit (temple official?). The debtor has to pay in May-June 288 BCE (the date of the contract is unfortunately lost): “If he does not pay at the appointed time, [he will pay] double. [If] he does not pay double, he will pay according to the edict” (CT 49, 102; Stolper 1993: 51-3). The legislation may have been passed already in the Achaemenid period, as the word used here for “edict,” *dātu* or *dāta*, is Iranian. The content can only be surmised: it was apparently a decree concerning the handling of the repayment of deposits. The law may have entailed various provisions, such as the possibility that records of deposit could be used as cheques payable to bearer and that the rent (or penalty clause) was the payment of two shekels of interest (40%) instead of the usual 20%. Because temple assets may have been involved in all cases, Stolper suggests that it is a standing order instructing temple personnel how to handle assets in which the crown had an interest (Stolper 1993: 61). In any case, Jursa has argued that temple assets were administered by private entrepreneurs, such as Mūrānu and Rahimesu, who deposited these elsewhere, keeping the documents as cheques that could be used for moneyless payments (Jursa 2006: 146, n. 27; 161-2; 168 and n. 115).

One record of deposit from Dura is preserved, dated 251 CE, which lies outside the period under discussion here (P Dura 29) (Welles et al. 1959: 149-153). The creditor (a woman) deposited one hundred denarii with another woman. The interesting point is that this document can be used by the creditor or *anyone else who validly presents this document on her behalf*, and the debtor is liable to legal penalties in case of default, just like the cuneiform documents mentioned above.

Dura has left us a few transactions concerning loans: antichretic loans, that is, loans in which the borrower furnished services or goods instead of interest: P Dura 20, 21, 23; a loan on security: 22; and an acknowledgement of indebtedness, 24. P Dura 22 is a loan with the property of the borrower as security. The loan must be repaid at an appointed time about one year later. No interest is mentioned, but if the borrower fails to pay, the lender “and anyone else who presents this contract” (l. 10) has the right of exaction from the borrower and his possessions. The borrower may be summoned to renew the contract,

8 Note that the debtor, Itti-Marduk-balātu, son of Iddin-Bēl, of the Mušēzibu family, was probably an astronomer and the ancestor of the astronomer discussed above.

whenever he is summoned by the lender, and if he fails to do so he is liable to pay “a fine [of x drachmas] of silver [and the same amount of money to the crown, and] to hold this contract as valid nevertheless” (ll. 14-5). In fact, this contract should be understood as a record of deposit backed by a security, with a penalty clause in case of default. The contents do not differ much from the cuneiform documents discussed above. In P. Dura 20 (29 June 121 CE) a highly placed person, Phraates, lends 400 drachmas of good silver of the coinage of Tyre, and, instead of interest, the borrower, a certain Barlaas, is obliged to do servile work, of any sort he is ordered to do, and must pay one drachma for every day he fails to work. This contract amounts, in fact, to debt bondage, and the sum of 400 drachmas probably is a debt Barlaas could not repay. Barlaas is bound to repay the 400 drachmas exactly one year later, and if he is unable to repay, the lender has the right of exaction on the borrower and his possessions, and the contract must be renewed; if he fails to renew he is obliged to pay a fine of 400 drachmas to the lender and the same amount to the crown. P. Dura 21 (first half of the second century CE) has similar provisions, and P. Dura 23 (CE 134) demands the delivery of wine instead of interest until the repayment of the silver. P. Dura 24 (CE 159/60) is an acknowledgement of an old debt, but the document is too mutilated to allow firm conclusions. In no case in these contracts is normal interest in silver demanded, which means that these documents are hardly evidence of a good working capital market.

The high interest rates inhibit investment, but there are signs that money given as deposit was used for investments. Documents registering the loans or deposits of money could be used as negotiable securities or obligations payable to the bearer (Stolper 1993). Jursa also describes the activities of Mūrānu, who deposited funds with businessmen and used the documents as negotiable financial instruments, that is, as cheques. Mūrānu, like Rahimesu, took over the management of a temple’s ration system. This practice of freely investing temple funds for private ends, seldom attested before the Late Achaemenid period, represents a distinctly intermediate stage in the increasing encroachment of the private sector upon the temple economy (Jursa 2006: 177).

3 Transactions of Arable Land

The Seleucid Period

There are a few cuneiform contracts concerning the sale and lease of arable land. One feature is the extreme fragmentation of the plots involved. The first text (UET IV 43, 21 December 317 BCE) is a lease receipt from Ur for twelve shekels of silver in staters of Alexander for the year 318-7 BCE (Van der Spek

1986, no. 1). Unfortunately, we do not know the size of the plot, although we do know that it is one-fifth of a field for the cultivation of dates and grain. The land in question was probably a “bow fief” (i.e. land allotted for military service as an archer), and the fragmentation is particularly telling, as this plot came from two different estates, that of a certain Harēšani, which was burdened with royal service (*palāh šarri*, i.e. military service or service commuted into payment of silver; Stolper 1985: 61-2), and that of a certain Balātu, which was tenured possession (*ina pāni*) of the lessee, encumbered with a surcharge (*mandattu*, fee in addition to the rent, most often paid in flax, sheep, or cattle; Stolper 1985: 140-1). Harēšani and Balātu may have been the original recipients of the bow fiefs, which kept the name of the first assignee, even if later alienated. We see this phenomenon also in Dura Europos (see below). Another possibility is that these individuals were favourites of the king (or their descendants), on whose estates these bow fiefs were situated (Stolper 1985: 52-103). In any case, this piece of land can hardly be understood as private, freely negotiable property.

The following documents from Uruk concern the sale of arable land. The first document is TCL XIII 249, dated 12 September 316 BCE. It is a contract concerning the sale of a tract of arable land (intercultivated with dates and barley) of only about 3000 m². The seller already owned half of this plot, and he hereby acquired another quarter, that is, 750 m², for the high price of 2 minas, that is, 120 shekels, which is 2000 shekels per *kurru* (in Uruk 1 *kurru* is 50,000 sq. cubit = 12,500 m²; Powell 1990: 483), or 1600 shekels per hectare. This is an extremely high price, when compared with the prices of date groves in Babylon and Borsippa assembled for reigns from Nebuchadnezzar to Darius I, c. 575-490 BCE (Jursa 2010: 457-462; Jursa in this issue of *JESHO*: fig. 4). These prices are equivalent to 100 and 800 shekels per *kurru*. A price of 2000 shekels would take approximately seven harvests or years to recover the investment; this is acceptable from a Mediterranean perspective, but from a Neo-Babylonian perspective, where 2.5 harvests usually constituted the equivalent, it is very expensive (Van der Spek 2000: 304-5). Although Uruk itself was not the scene of warfare in the previous year, the high price was perhaps connected with the invasion of the Greek general Eumenes and the ensuing battles with Seleucus and Antigonos,⁹ if a single text can be used for such arguments. There may also have been personal, non-economic motives. The buyer was already owner *pro parte indiviso* of half of the tract and now became owner of three-quarters of it: possibly he strove for the acquisition of the entire estate, which

9 The invasion of Eumenes is dated to October 318 or 317.

would improve his status. There is nothing in the text that invalidates the assumption that the land was private property, although the neighbour on one side held his land as tenured property (*bīt ritti*) of (the temple of) the god Anu (line 4).

There is a sale contract from four years later, in which the land sold is much cheaper: TCL XIII 234 (Van der Spek 1995: 208-213, text 3), dated 1 December 312 BCE. It concerns a tract of arable land of about 22 ha in Uruk, planted, like the former, with dates and barley and having a favourable location on a canal. A parcel of this land, 9.7 ha, plus one-fifteenth(!) share in a house in the village of Bīt-Šapunu, was sold for 555 shekels of silver. This makes the price 71.89 shekels per *kurru* (57.25 shekels per ha), leaving the share in the house out of consideration; the land alone must have been cheaper. This comes close to the modal Neo-Babylonian price and is much lower than the high prices recorded in the reign of Darius I (522-486 BCE). This text, too, has all characteristics of the sale of a piece of private property, though, on the west and east sides, the land was the “property of Anu” and on the south side the “property of the Lady of Uruk” (the temple of Ishtar). This small tract of land was owned by six men of different families. Two brothers sell their share to someone else, not one of their co-owners, so the fragmentation was not reduced. These are the only documents that offer information about prices of arable land per hectare—too few, of course, to be statistically significant.

From about the same time (315-311 BCE) is a “quitclaim”¹⁰ concerning a tract of arable land in Uruk, which, again, is surrounded by temple land, although the land is not identified as such (McEwan 1982: no. 1; Van der Spek 1986: 199-202, text 4). One of the witnesses is the buyer in the previous document.

The latest sale documents are YOS XX 18 and 19 (NCBT 1952 and 1976), both dated to 274 BCE, concerning the sale “in perpetuity” of a one-twenty-fourth share in the same plot of arable land (*zēru*), tenured land (*bīt ritti*), property of Anu, bordering on the city wall of Uruk, for the low price of 5 shekels. Unfortunately, the measurements are not given. The same is true for YOS XX 86 (YBC 4645; Doty 1977: 76-8), a plot sold for the much higher price of 6 minas (360 shekels), with an extra (*atru*) payment of 6 shekels “in staters of Alexander of good quality, at the exchange rate of Babylon (*ma-nu-ú-tú šá TIN.TIR^{ki}*).”¹¹

10 A quitclaim is a document in which one party waives any legal right he might have to a piece of property, in favour of a second party.

11 *Atru*, “extra,” is an extra payment of one-sixtieth of the purchase price, possibly in return for the seller’s seal on the document (Van der Spek 1995: 177). For the “account rate of Babylon,” see below.

Sales of arable land and slaves (see also below) do not appear in cuneiform after 274 BCE (Antiochus I), probably because they became subject to registration in a Greek-language record-keeping system.¹²

A few documents concern leases. The oldest is a juridical document, probably from Babylon, concerning the lease of land of a temple of the sun god Shamash (in Sippar or in Larsa). A certain Itlalmatu had rented a tract of land from the temple of Shamash “in common property,” which probably meant that half of the crop belonged to Itlalmatu and half to the temple. This happened in 308-7 BCE, during or briefly after the fierce war between Seleucus and Antigonos for the possession of Babylonia (Van der Spek forthcoming (b)). It seems—the text is not wholly clear—that the royal treasury had requisitioned half of the grain harvest of this year, so that Itlalmatu was not able to pay the rent. Thereupon a juridical verdict was rendered that the lease was dissolved, with the temple relinquishing claims to the rent and Itlalmatu to the land.¹³

Another large lease contract dates to the time of Antiochus III (221 BCE).¹⁴ It is a huge document, containing two lease contracts in which the temple is the lessor and an individual is the lessee. The first contract is a lease for thirty years (which is exceptionally long, by Babylonian standards), and the rent is a fixed sum of 28 *kurru* (5040 litres) of dates, the second is a hereditary lease, and the rent is one-fourth of the crop. In both cases, the lessee is obliged to plant date palms. The second contract stipulates that the land is leased “in accordance with the writing of the *diagramma*, [according to the de]cree, which the king issued.” The content of the *diagramma* (Greek word for royal edict) unknown, but it seems to have included the stipulation that the rent was one-fourth of the crop (2:37-9) and/or that the land was given in perpetuity (2:34-35). I have suggested elsewhere that the *diagramma* might concern royal policy to reclaim land for the cultivation of dates (Van der Spek 2004: 322), but this cannot be inferred from this text, as the first contract does not

12 Doty 2012: 2-3 (with references). Two (unusual) contracts concerning slaves are more recent (see below).

13 This tablet is actually one of the first cuneiform documents ever found (by Carl Bellino) and published in 1822. Recent publications in Van der Spek 1986: 202-211 (text 5; reprint of Bellino's copy on p. viii) and Van der Spek 1995: 238-41. Improvements on my edition were suggested by Joannès 2006: 113-4 and Jursa 2006: 148, most of which I accept. For a discussion and new interpretation, see <http://vu-nl.academia.edu/RJBertvanderSpek/Papers>.

14 First published by Sarkisian 1974: 59f. (copy), 24f. (transcription), 40f. (translation), 48f. (commentary); Van der Spek 1995: 227-234 (text 7).

mention the royal *diagramma*. The document may reflect a tendency that temple land came de facto but not de jure into private hands. Note the final clause: “This arable land is of Nidintu-Anu, son of Anu-balāssu-iqbi, the shepherd of [the property] of Anu (the lessee) . . . except the share of the temple which is written (above), in perpetuity” (line 49).

Other documents concern a phenomenon familiar to us from earlier periods in Mesopotamia and also in Egypt, that is, land belonging to great organizations such as temples and palaces. The most important text in this respect is a famous but only partially published document recording a land grant by King Antiochus II to his wife Laodice and their sons Seleucus and Antiochus (the so-called “Lehmann Text”).¹⁵ The document begins with a statement by the *shatammu* (chief administrator) of Esagila, the principal temple of Babylon, dated 21 March 236 BCE, in which he refers to the earlier land grant by Antiochus II (date unknown) and of which it is recorded that his wife and sons in turn gave it “to the Babylonians, Borsippaeans, and Cuthaeans.” The land is apparently encumbered with the obligation to pay a tithe to the king, but Antiochus orders that this be given to the temple for its upkeep. The land is divided into plots, and these plots will be in perpetual possession of the recipients. It is also stated that the parcels shall be alienable and, if alienated, shall be in the perpetual possession of the new owners. Finally, the Babylonians will be exempted from “the silver of the heads (tax), the silver of the king(’s tax), and the sta[te service (*ilku*)¹⁶ of the fields(?)] and the state service great and small, everything that is due to the (temple and) royal treasury as regards the fields and the people(?)” (2:14-5). All these exemptions were confirmed by Seleucus II, when he became king. The statement of the *shatammu* is dated to 236 BCE, that is, the tenth year of Seleucus’s reign, when he was involved in a war with his brother Antiochus Hierax and during a period in which there was much unrest in Babylon, as we learn from the Astronomical Diaries (Van der Spek 2006: 297-301). It seems that Seleucus sought to ensure the support of the Babylonians by confirming the benefactions. A few people (most with Greek

15 This document, now in the Metropolitan Museum of Art in New York, was first published (in part) by C.F. Lehmann in a footnote in an article on an unrelated subject (Lehmann 1892: 330–32, ns. 1-2). Irving Finkel and I identified a duplicate in the British Museum (BM 47926). Both tablets will be published by Ronald Wallenfels and me as no. 148 in vol. 5 of *Cuneiform Texts from the Metropolitan Museum of Art* (New York 2014). Discussion and partial translation in Van der Spek 1993.

16 *Ilku* is the obligation to do military service—some of the recipients of land are identified as “soldiers”—which, however, was, already in Persian times, mostly converted into payment of silver (Stolper 1985: 25).

names but Babylonian ancestry) mentioned by name receive special assignments of land. All these regulations are inscribed on a writing board, and the whole decree is entered on a stone stela, which is to be erected in a courtyard of Esagila, the main temple of Babylon.

It is a tantalizing text that shows how the market for land—at least for certain types of land—was regulated. Royal land is given to private Babylonians (eventually), and these parcels are negotiable, yet king and temple continue to play a role in the use of this land. Although the land is parcelled out among Babylonians (probably all of them belonging to the temple) and the land came into perpetual possession with free power of disposition, the obligation to pay a tithe remains incumbent on the land, even though in this case it goes to the temple, not to the king. This may be a step in the direction of privatization of royal and temple land, but it is hardly evidence for a free market for land. These regulations endured for a long time. The gift is first made by Antiochus II, perhaps in 251 BCE, then Seleucus confirms the rights in 236 and extends them to tax exemptions. The Lehmann Text itself is preserved on a clay tablet dated to 173-2 BCE, in the reign of Antiochus IV, and apparently was then still relevant. A document dated 19 July 187 BCE from Cutha,¹⁷ one of the cities mentioned in the Lehmann Text, deals with a request by an exorcist, transmitted by the assembly of exorcists to the *shatammu* of Emeslam, the main temple of Cutha, concerning a “tract of land for horticulture and grain cultivation, the gift of the king, which is on the bank of the Euphrates (and) which belongs to the *expropriated* (?) land.” This land had belonged to a certain recently deceased exorcist, without leaving a son or daughter, and it is now approved by the chief administrator and the assembly of Emeslam that it be assigned “in perpetuity” to the son of the exorcist making the request, who was born after the acquisition of the land in question. The procedure, the location, and the vocabulary are reminiscent of the Lehmann Text, and it may indeed concern part of this gift, although the fact that the recipient is said to have been born “after the acquisition” of the land suggests a later royal grant, which would mean that the granting of land to the temple by kings continued.

A few Greek texts give information on landed property in Mesopotamia. These come from parchments and papyri from Dura Europos, situated on the Euphrates, on the Syrian side of the border with Iraq (Welles et al. 1959). Dura-Europos was a Seleucid colony, founded probably by Seleucus I to settle soldiers and veterans, which later gained the attributes of a city, including citizen rights for its registered citizens. The land was divided into parcels, *klēroi*, and

17 BRM I:88 (Van der Spek 1986: 236-241, text 10).

these parcels were apparently hereditary and returned to the crown only when legitimate heirs were not available (P Dura 12). Our best information comes from a complicated deed of sale (P Dura 15). The sale is actually not a real, simple sale but the transfer to a third party of a piece of land (part of a *klēros*, said to be planted in fruit trees, probably vine stocks), farm buildings, and what belongs to the plot of land, in order to pay off a loan or debt of 120 drachmas. This sale is said to be *lysima* (redeemable), which probably means that the seller had the right to buy it back, possibly when he had other means to pay back his debt. The text dates to the early second century. The land is said to be in the *ekas* of Arybbos (*en tēi Arybbou ekadi*), in the *klēros* of Konon." The precise meaning of the word *ekas* (or *hekas*) is unknown. It is generally considered to be a unit of several *klēroi*;¹⁸ if so, it may be comparable to the word *hadru*, known from the Murašû archive from Nippur (c. 400 BC), which designates a unit in which a number of bow fiefs (to be compared with *klēroi*) were subsumed. These *hadrus* were headed by a governor (*šaknu*). Arybbos and Konon do not play a role in the contract, so they may have been the earliest recipients of the land, Arybbos the governor, Konon the *klērouchos* (*klēros*-holder). Whatever the case, this sale of land can hardly be regarded as evidence of a factor market but rather represents a complicated use of land as pledge under certain restrictions. However, all steps are supported by legal provisions—juridical formulae, reference to a law, an earlier contract, a record office, a tax collector, a herald—which point to a sophisticated legal system, which will have lowered transaction costs.

The Parthian Period

No cuneiform documents concerning the sale or lease of arable land survive from the Parthian period. We know from the Astronomical Diaries and from many other cuneiform texts that the temples in Uruk and Babylon in particular retained assets in buildings, temple slaves, and land. Regular offerings took place in the temple of Babylon, and high officials performed offerings when they visited the city. The king intervened in the appointment of high officials. We know from the price data in the Astronomical Diaries that the prices of grain, dates, and wool were higher than in the Seleucid period and oscillated a great deal, probably because of internal warfare, inflation (coins were debased and became lighter), and, perhaps, climatic conditions. The fact that, after its conquest by the Parthian king Mithridates I in 141 BCE, Babylonia was

18 Welles admits, however, that it is only by convention that commentators have regarded the *ekas* as the larger unit and the *klēros* as the smaller (Welles et al. 1959: 90, n. 20).

separated by a political border from the West—first the Seleucid empire, then, after 64 BCE, the Roman empire—must have hampered trade relations with the West.

An interesting collection of texts concerning the appointment of astronomers attached to the temple sheds some light on the role of land as a source of income (Van der Spek 1985: 548-55). The astronomer Itti-Marduk-balātu receives a high annual salary in silver (2 minas = 120 shekels) in 127 BCE (BOR 4, 132) and another astronomer gets 1 mina = 60 shekels per year (CT 49, 144 and 186), which is to be shared when more sons take over their father's duties. CT 49, 144 is a verdict by the temple authorities to the effect that the salary of one mina of silver plus an unspecified tract of land, which had once belonged to a certain astronomer and which had, on 15 January 118 BCE (apparently after the latter's death), been assigned to someone else, was now successfully claimed by the son of the former, who had demonstrated in court that he was capable of making the astronomical observations. We see here the same procedures at work as we encountered in the Lehmann Text. The temple has the authority over land and distributes it among its members; hereditary right is apparently important in the distribution, but the last word is reserved for the temple authorities. The land is given for service, in this case the making of astronomical observations.

The Parthian period yields the last cuneiform administrative archive from Babylon, the so-called Rahimesu Archive, dated to the 90s BCE. Rahimesu was the administrator of an offering box of Esagila and administered incomes and expenditures (Van der Spek 1998). The money is used for several things, including salaries and, remarkably for a landowning institution as the temple, the purchase of grain, bread, sheep, and meat.¹⁹ The purchase of sacrificial animals on the market is not unique to the Parthian period. A document dated 281-280 BCE attests the expenditure of 67.5 shekels of silver for the purchase of several fattened sacrificial sheep, and the practice is already attested also in the sixth century BCE (Jursa 2002: 116-119; BM 79034; for earlier references concerning temples buying sheep, see *ibid.* n. 27). One would expect that these items could be obtained from the temple land. Salaries (such as those for reconstruction work) in the Rahimesu archive are all paid in silver. Only the enigmatic text 3 speaks of the distribution of dates. Does this mean that, by this time, most of the temple land had now come into private hands, though perhaps encum-

19 Van der Spek 1998; purchase of offering sheep: texts 6 (plus wine and clothing); 13: 29, 39 and 40; 14: 11; 18: 31, 33, 45, 46; 21: 5-6; 23: 13; purchase of barley for the millers: texts 13: 8; 18: 5; purchase of meat: texts 13: 59; 23: 30; offering bread 13: 22; 18: 28.

bered with tithes, forcing the temple to buy food and labour on the free market, or is this situation due only to special circumstances, such as war?

From the Parthian period we have documents in Greek, Aramaic, and Pahlavi.²⁰ Three documents from Iranian Avroman were first published by Ellis Minns (1915). Document I (in Greek, consisting of a sealed version A and an unsealed version B) is dated to autumn 88 BCE, a year of unrest in the Parthian empire, which marks the end of King Mithradates II and the rise of usurper Gotarzes I in Babylonia. We are not even sure whether Arsaces, the king mentioned in the document, was Mithradates, Gotarzes, or some other pretender (all kings took the throne-name Arsaces).²¹ Document II (in Greek) is dated to 22-21 BCE. Both documents probably concern the same tract of land, a vineyard, referred to as Dabdakanras in document I and Dabdakabag in document II. In document I the sellers are two brothers, Barakēs and Sobēnēs, who sell their part in a vineyard “(his) own share, the share that is due to him(!) from his co-possessors (*para tōn synklērōn*), with the water²² and the fruit-bearing and non-fruit-bearing vine stocks (*akrodryois*), with the ingress and egress, and everything that pertains to it”²³ for the price of thirty drachmas to a certain Gathakēs.²⁴ It is puzzling that apparently only Sobēnēs renounced his possession, because it is stated that “the one part will belong to Barakēs and the one part to Gathakēs,”²⁵ indicating that now Barakēs and Gathakēs will be co-possessors. Gathakēs and his descendants will possess (*hexei*) his share “in perpetuity.” It is also stated that “they will fulfil yearly, in common, what is written in the old contract, all in full.” We do not know what “the old contract” is, but Haussoullier’s suggestion may be correct, that it is the original document in

20 I benefited much from a paper written by Carolien van der Brugge for a BA course on the Parthian kingdom (VU University Amsterdam), in which she argued that the Avroman documents I and II represent sales of arable land that were originally and perhaps officially still in the ownership of king or temple.

21 Assar 2006: 67 assigns it to Gotarzes I (91-87 BCE).

22 In I A 27-8 it is stipulated that the buyer will have the right to tap water every eighth day and night half, which probably means that they have to share the use of the water with their co-possessors (cf. B 27-8). Minns translates *kai tēs epagōgēs nyktos* as “and of what is let in by night half.” This cannot be correct: *to hydōr* (water) is neuter, and *epagōgēs* is feminine. The simplest solution is to consider the word a variant of *epagomenē*, said of the days added to the Egyptian calendar after day 360, making it simply “and of the annexed night,” i.e. every eighth natural day. In I B 28 it is expressed simply as “the share due to him with his co-possessors.”

23 I A: 11-14; with minor differences in I B 12-14.

24 I A: 10; in B 10 “thirty” is emended to “forty.”

25 I A: 14-5; in I B: 14-15: “half to Barakēs, half to Gathakēs.”

which the assignment of the *klēros* to its first possessor was defined. The duties to be fulfilled may be the maintenance of the plot—it is mentioned later in the contract—payment of tithes, or even fulfilment of military duties. That the sale may entail ancient rights of the king is suggested by the guarantee against eviction, which stipulates that, should Gathakēs be evicted, the seller, Barakēs, will pay double the price plus 200 drachmas in fines plus 200 drachmas to the king, and that, should Gathakēs neglect the vineyard, he will pay the same fine. These stipulations are apparently meant to protect the rights of the co-possessors—neglect of the vineyard will damage their interests—but also the rights of the king. We see here how a *klēros*, in former times (perhaps centuries earlier), was assigned to some soldier or other person, was inherited by later generations, and could be divided and perhaps sold to third parties (as happens in this contract), but the stipulations of the old contract were still valid and the king retained some rights. It is debatable whether the sale entailed full ownership rights or only the right to cultivate royal land (although it is nowhere stated that the land was royal) (*Codex Justinianus* 4.66.1; Van der Spek 1995: 190). At the end of the contract, after the witnesses, it is added that Gathakēs will give to Barakēs small quantities of bread, wine, and meat, plus “one drachma *embathrou*,” apparently yearly, as may be derived from contract II.

In contract II, dating to sixty-six years later, the son of Gathakēs buys another tract of land, called Dabdakabag, in the same village of Kophanis; this may be a part of the same Dabdakanras vineyard mentioned in text I, or it may be land somewhere else. The land is again described as a vineyard with ingress and egress and water rights. The buyer is a certain Aspōmakēs, and the price is fifty-five drachmas. There is again a guarantee against eviction, namely, that the seller shall pay, in the case of default, 200 drachmas to the purchaser and 200 drachmas to the king’s treasury. An interesting clause concerning further obligations follows, resembling the one added at the end of contract I A: 9-10, which stipulates, “they shall pay always annually *skelos* one drachma, two *koty-lai* of wine, twenty-one loaves of bread, five oxen, two (bushels?) of barley.” In II B: 9-10 it is slightly different: “they shall pay yearly *embathrou* (one) drachma, twenty-one loaves of bread, five oxen, *skelos* one drachma *skelos*.” The untranslated words are puzzling: *Embathron* may be a corruption of *embadikon*, which is a tax “for moving in” (a real-estate purchase tax; Bagnall 2009: 208), or simply an alternative for *epibathron*, “rent, payment for anything, especially land.” *Skelos* means “leg” but may be here a rendering of the Semitic word *shekel* (Minns 1915: 58), the main monetary unit in the Near East (in weight about two drachmas). In both cases it appears to be a payment denoting the right to take

possession of the land.²⁶ There is an interesting parallel in a Greek inscription from Caria in Asia Minor. A collection of inscriptions having to do with the Sinyri sanctuary concerns the attempt by this temple to acquire land by purchasing it from individuals and renting it out immediately in hereditary tenure. The tenant had the right to buy it back after ten years, but, even after that time, he was obliged to pay one drachma per year in order to show that the temple remained the ultimate owner of the land.²⁷

Contract III, not edited by Minns, is written in Pahlavi (in Aramaic script) and is dated to the year 300, which I believe to be of the Seleucid rather than the Arsacid era, hence 13-12 BCE.²⁸ The parchment is badly preserved, and specialists give various translations (Nyberg 1923; Altheim and Stiehl 1954). The transaction seems, at first sight, a normal sale of half a vineyard—seller, buyer, and price are mentioned—but in line 4 a role is reserved for the landlord. He is not named, but he was present at the sale and supervised the measuring of the tract (Altheim and Stiehl 1954). There is no indication who this landlord was; he may have been a royal favourite, who (or whose ancestors) had once received some land, with the villagers living on it (e.g. the land grant by Antiochus II to his wife Laodice in Asia Minor).²⁹ This interpretation is uncertain, and we should draw no rash conclusions. The language of the document testifies to the waning Greek influence in Parthia. It also shows that, above the level of the sale, some higher authority has ownership rights.

The next document is a parchment from Dura (Welles et al. 1959: 126-133: P Dura 25), dated 17 February 180 CE. When this contract was written, Dura was under Roman control (from 165 CE), but the main characteristics of the sale conform to earlier Greek and Parthian formulae. The sale again concerns a vineyard, in this case with a slave. The buyer is the highest official of the city, Heliodoros, son of Lysias, who is the *stratēgos kai epistatēs tēs poleōs*,

26 It may be that, in the *embadikon* tax (from *embateuein*, to enter) the words chosen here have also to do with the entering of the land by putting a leg (*to skelos* = "leg") or a shoe (*ta embathra* = "shoes") on the land. This must remain speculation until further evidence is available.

27 Robert 1945, no. 46: 5-8 (but read [*tòn phóro*]n, "rent," instead of Robert's [*tòn tóko*]n, "interest"; cf. Van der Spek 1986: 137, 168 and 173. I thank Carolien van der Brugge for the reference.

28 Most scholars assume that the Parthian era is meant, but in most documents, Greek as well as Babylonian, the Seleucid era is meant when the Arsacid is not expressly mentioned. If it were the Parthian era, the date would equate to 51 CE.

29 RC 18-20; cf. most recently Flinterman 2012.

“the general and supervisor of the city.” In fact, Heliodoros buys out his brother Lysias, with whom he shared the vineyard. It must have been a considerable tract of land, as the price, 500 drachmas, is very high. The vineyard is located in the neighbourhood of the village of Nabagata, “in the *epiphyteutic* (lands) around the same Nabagata, near the same village, and called ‘of the holdings of Baeiris.’” The phrase *en epiphyteutikois* is puzzling. It looks like *emphyteutikos* (“concerning *emphyteuma*,” “a hereditary leasehold held on cultivation tenure,” from the verb *emphyteuein*, “to implant, to engraft”). The word *epiphyteuein*, “to plant over or upon a thing,” does exist, but it has no known derivatives. The adjective *epiphyteutikos* (here used as a noun) appears to be simply a synonym of *emphyteutikos* (Welles et al. 1959: 132), analogous to the use we saw above of *embathron* as a synonym of *to epibathron*, “(land) rent.” It may thus be that, in this case again, the sale concerns the sale of the hereditary right to a tract of land once assigned by the king. The holding of Baeiris may refer to this original assignment. That it does not concern absolute ownership may be inferred from the clause “according to the previously existing boundaries and possession rights of this vineyard” (ll. 28-9). If this is correct, we again have a sale of possession rather than of full ownership.

The last document is P Dura 26, dated to 227 CE. A tract of land of about two acres located on the river Habur is bought by Julius Demetrius, a Roman veteran, at a price of 175 denarii, from a certain Otarnaios. The transfer is expressly in full ownership “to have it as owner securely for all time, to acquire and employ, to sell and to administer, in such fashion as he pleases” (Welles et al. 1959: 134-141; P Dura 26). There appears in this case to be no royal (or imperial) or sacred land or claim involved.

The available documentation leads to the conclusion that our (meagre) evidence often concerns the transfer of ownership of lands that somehow (originally or still officially) were ultimately owned by king or temple, a fact that does not suggest a free market. We perhaps see here the gradual privatization of royal and sacred land. The evidence is, however, very sparse and probably not representative. The cuneiform contracts cannot be regarded as identical to contract forms in Greek and Aramaic, which were obviously the standard. Fortunately, we have some Greek documents, but they may also incidentally concern *klērouchic* land. We must not too easily conclude that king and temple gradually lost their hold on the land; there are several instances of acquisition of land by temples (Van der Spek 1986: 136-9). The reference to the farmer who sold his land to the Sinyri sanctuary in Caria and later bought it back is but one example. In this case, the authorities had even appointed a committee to invest in land in this way, so it was not a singular issue.

Archaeology may provide proxy data. Huge areas of Iraq were surveyed in the 1960s and 1970s: the Diyala region (Adams 1965); the Middle Euphrates region (Adams 1981); the Uruk countryside (Adams and Nissen 1972); the area of Kish (Gibson 1972). These surveys all revealed a marked growth in settled area from the Neo-Babylonian period, with a maximum in the Sasanian period (Rezakhani and Morony in this issue of *JESHO*), both in the number of sites and in their surface area, especially in the Diyala region. This led Adams to conclude that the state initiated schemes of urbanization and agricultural expansion (Adams 1981: 176, 179; see also a discussion of the data in Van der Spek 2008: 38-9). These state-initiated schemes of agricultural expansion may be reflected in the documents discussed above, where we see either state or temple as ultimate owners (or perhaps former owners) of the tracts of land in question, remembering also that, in the case of the Lehmann Text, the land was derived ultimately from royal donations.

Conclusions Concerning Transactions Involving Arable Land

Sales were recorded in sophisticated legal documents. This made land ownership legally safe. Property rights and guarantee against eviction were provided for in all documents (Van der Spek 1995). Clearly, there was an important role for institutional land—royal land and temple land. Land was given as reward for services, though this land could become quasi-private property (Van der Spek 1995). Despite the fact that temples owned land, there is evidence that grain and animals were bought on the free market.

We may conclude from the available evidence that at least some of the arable land was not part of a regular market for land, though it could be bought and sold and was protected by law. Sales of land on the free market may have been more abundant in the regions around Seleucia—a new city with hundreds of thousands of inhabitants of partly Greek extraction—concerning which we have no evidence.

4 Labour Market

Labour in ancient Mesopotamia of all periods can be divided roughly into four broad categories: free subsistence farmers (with family members as co-workers), free tenants, free hired labour, and dependent labour (from all types of dependency to outright slavery).

Ancient Babylonia was not a typical slave society like classical Greece and Rome, though it may be that in Hellenistic Seleucia, on the Tigris, “Greek” chattel

slavery played an important role. Slavery had, however, existed in Mesopotamia since time immemorial, and rich households usually had only a few slaves, although some, such as the extremely rich Egibis, owned as many as several hundred (Jursa in this issue of *JESHO*).

There is scant documentation relating to the slave trade in the early Hellenistic period. The main source of information consists of sales, dowry gifts, and divisions of property in which slaves are involved (Oelsner 1995: 120-4). These documents concern chattel slaves, but the clause guaranteeing against eviction indicates the existence of other forms of dependent labour. The seller must guarantee that the sold slave in question did not belong to the category of temple oblates (*širku*), dependent workers (*šušānu*), free citizens (*mār banū*), royal slaves (*arad šarri*), or holders of a horse fief (*bīt sisī*), a throne fief (*bīt kussī*), or a chariot fief (*bīt narkabti*); in other words, the seller had to guarantee that the sold slave was not free and that no institution (temple or palace) could lay claim to him or her. From the extant documents we cannot deduce what their economic function was.

The prices of the slaves are similar to prices of the Neo-Babylonian period, when the mean price of a male slave was about one mina, with considerable variation (cf. Jursa 2010: 232-4; 741-5; Jursa in this issue of *JESHO*, fig. 2). We encounter prices of one-third to one mina (twenty to sixty shekels) in the Hellenistic period and one exceptionally high price of four minas.³⁰ The prices of the early Persian period, however, were much higher, so one might say that prices of slaves were once again at a “normal” level at the beginning of the

30 One-third mina for a female slave (vs XV 20 = Rutten 1935: 147-9, and probably also TCL XIII 248 = Moore 1935, p. 275, though the text gives one-third of a shekel, which may be an error, unless we have to assume that it was, in fact, a gift), half a mina for one male slave (BRM II:25 and pp. 35-6), two minas for two male and one female slave (VAS XV 3 = Rutten 1935: 143-6), one mina for a female slave, sold by a woman (BRM II:10 = Rutten 1935: 150-3); two minas for a slave and his two children (son and daughter), sold by a man to his daughter-in-law (BRM II:2 = Oelsner 1995: 145-7); two minas for the share in a slave which he owned with his brother and now sold to the son of his brother (HSM 913.2.182 = Doty 1977: 176-9 = Wallenfels 1998 no. I); one and one-third minas for two slaves (NCBT 1967 = YOS XX 12; cf. Doty 1978: 72); five-sixths mina for the gift of a house and a slave to two of his brothers; one-half mina (NCBT 1973 = YOS XX 9; cf. Doty 1977: 389, n. 301) and one mina both for one male slave (MLC 2194 = YOS XX 2 and MLC 2184 = YOS XX 8; cf. Doty 1977: 389, n. 301). I thank Ronald Wallenfels for providing me the handmade copies of the tablets made by L.T. Doty before the publication of YOS XX.

second century, as was the case also for food prices.³¹ We have only a few documents of the period after 274 BCE. One is a so-called “quitclaim” concerning a slave woman.³² In this case (as probably also in other cases) it is a sale that lies behind this document. It is stated that two persons (called “brother,” but actually cousins) cede their share in a slave woman to the brother of the first seller. The cousin, however, is stated to have received the sum of twenty-five shekels for his one-third share, which equates to more or less the standard price of one mina for a slave. This document is dated 14 May 228 BCE. A document dated 30 January 187 BCE (Wallenfels 1998: no. VIII) records the gift of a house and a slave woman by an architect to his two brothers(?), who receives in exchange the (symbolic) sum of fifty shekels. From later periods, we have no prices of slaves.

The prices of the slaves are not very high and conform to those from the period of Nabonidus (around fifty shekels). This price is also comparable when reckoned in terms of wages of that period, viz. two to four shekels per month, thus equalling the cost of 375-750 daily wages; hence they were more expensive than in classical Athens (150-200 daily wages) (Jursa 2010: 745, n. 3780). The slave prices do not seem to change significantly with the prices of grain, which fluctuate strongly between 328 and 275 BCE. These slave prices all concern the city of Uruk. Prices in Babylon and Seleucia on the Tigris may have been higher.

There are a few documents from Dura concerning slaves. One is discussed above (P. Dura 25), in which a house is sold together with a slave, a phenomenon we encountered also in Uruk. The other is a document written in Syriac (though one of the witnesses and the *stratēgos* undersign in Greek), dated 243 CE (P. Dura 28), thus after the fall of the Parthian empire (Welles et al. 1959: 142-9; P. Dura 28). The seller is a woman represented by her husband, because she is said to be illiterate. The sold slave is a female slave twenty-seven years old, a captive; the price is 700 denarii (c. 350 shekels, high by Babylonian standards but normal in the Roman world). The transfer is into full ownership.

Though we have records of quite a few slave sales, it is difficult to determine whether there was a brisk trade in slaves. Many transactions involve sales within families. A remarkable feature of the fourteen known texts is that the sellers were, in six cases, women. Nana-iddin and his wife may have been

31 For slave prices from 600 to 480 BCE, see Jursa 2010: 744, fig. 27, and Jursa in this issue of *JESHO*, fig. 2; for prices until the reign of Artaxerxes I, see Hackl and Pirngruber 2014.

32 Ashmolean 1923.741 (copy McEwan 1982, no. 22; transcription and translation Doty 1977: 243-7).

involved in the slave trade or simply owned a large estate. They bought twenty-five slaves (Doty 1978: 70). In one case (MLC 2192 = YOS XX 4 // MLC 2198 = YOS XX 5) Nana-iddin bought eight slaves in one transaction; unfortunately, the price is lost (Doty 1978: 88). We do not know much about the slaves' tasks. Were they used mainly for domestic service or for economically productive labour? Two of the purchased slaves appear as tenant farmers working an orchard belonging to Nana-iddin's wife³³ (Doty 1977: 172-5; Doty 1978: 71), but this is statistically insignificant. From the Astronomical Diaries we know that people could be conscripted for *corvée* labour, for instance, for digging a canal (ADART no.-93A r.24-5).

Dependent labour was customarily remunerated in rations, *kurummatu*, which were increasingly being paid in silver. Because free people (e.g., prebendaries) also received rations, one might better speak of an allowance or salary in kind. We have only two attestations of wages, varying from two-thirds to four shekels per month, and these are far separated in time. The first wage is the that of labourers working on the removal of the debris from Esagila shortly after the death of Alexander the Great. Five workers receive a wage of twenty shekels (interestingly equated with 10 staters) for one month. The document is dated 7 January 321 BCE (Jursa 2002: 120, text no. 8; BM 87261). This reflects a wage of four shekels per month, which is high; wages are traditionally one shekel per month. During the period between the death of Alexander and about 300 BCE—when, after a long period of warfare, Seleucus had achieved a strong hold on Babylonia—prices of food were extremely high. The next texts mentioning wages come from the Parthian period, from the Rahimesu archive (c. 93 BCE). Porters of the Day One Temple receive one shekel (later reduced to two-thirds of a shekel), cleaners of the same temple receive one and one-half shekels, and a parchment scribe four shekels, at a time when a shekel bought ninety litres of barley (Van der Spek 1998: 252). One shekel was thus exactly equivalent to a ration of ninety litres. It was a time of political unrest, and the astronomical diary for July 94 (ADART no. -93 A r. 11) reports, “there were many sick and dead in the land” in a month when the shekel could buy 108 litres of good barley and 135 litres of low-quality barley. It is possible that the cleaners and porters earned additional income (Jursa 2010: 814, n. 4015). From these sparse data it is difficult to determine whether there was a labour market in Hellenistic Babylonia. Probably there was, but labour was provided by many sorts of labourers: free, semi-free, tenants, and subsistence farmers.

33 Promissory note for the payment of *imittu* lease (i.e. lease based on an estimate shortly before harvest time) of seventy-five *kurru* of dates by four tenants, MLC 2200 = YOS XX 7.

5 Conclusion

The Babylonian economy in the Hellenistic and Parthian periods did have markets. The commodity markets were open and competitive and obeyed the laws of supply and demand. The factor markets were probably more restricted by social customs. Land could be bought and sold, but there were restrictions arising from ownership rights of the king or the temple. Family rights must also have been a hindrance in buying and selling, as there are many plots of land (and many houses) possessed by multiple family members. Wage labour is attested and seems to have been of growing importance. It is, however, difficult to estimate how large a role was played by slavery, dependent labour, or traditional work in families in subsistence farms and shops. In the Graeco-Roman world, independent labour was much more highly valued than was wage labour, which was seen as a sort of slave labour. This attitude is an obstacle to a free labour market. In the capital market, borrowing for investment was hampered by high interest rates, which were partly the result of tradition. Nevertheless, some development in the direction of a credit system, with IOU's functioning as negotiable cheques, is attested. It was, however, set in traditional transactions of depositing money.

These factor markets were marked by institutions and traditions that reduced the development of free and fully competitive markets. What we see reminds us of situations in the pre-Hellenistic period. The picture may have changed in the second half of the period of Parthian domination, when the role of the temples gradually diminished and eventually disappeared. We do not know much about the causes, but the Babylonian religion apparently could not survive in a Parthian state in which Iranian, Greek, Jewish, Manichaean, and Christian beliefs grew in importance. The economic basis of the temples must have weakened concomitantly. Temple property may have come into private hands through the administration of temple assets by individuals and through the ease with which temple estates could be bought and sold by individuals. We do not know if the Parthian state profited from the downfall of the temples, as the Christian emperors did in the late Roman Empire. Disappearance of the temples and perhaps deliberate destruction by the Sasanians—perhaps Babylon, certainly Hatra, Assur, and Dura—may have been the end of a longer development that entailed a break in Mesopotamian economic and religious traditions.

This is all somewhat speculative. We must remain cautious regarding our documentation, which is derived mainly from old temple elites, who continued to use the old-fashioned cuneiform writing system and were perhaps more constrained by ancient rights and restrictions than other segments of the

population. The documentation in Greek and other languages reveals a somewhat different world, but it, too, is scanty.

Abbreviations

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| ADART | Sachs, Abraham J., and Hermann Hunger 1988, 1989, 1996. <i>Astronomical Diaries and Related Texts from Babylonia</i> . Vols. 1-3. Vienna: Verlag der Österreichischen Akademie der Wissenschaften. |
| BRM | Albert T. Clay (ed.). 1920-1923. <i>Babylonian Records in the Library of J. Pierpont Morgan</i> . 4 vols. New Haven: Yale University Press. |
| CAD | Gelb, Ignace J., et al. (eds.). 1956–2010. <i>The Assyrian Dictionary of the Oriental Institute of the University of Chicago</i> . Chicago: Oriental Institute. |
| CT 49 | Douglas A. Kennedy. 1968. <i>Cuneiform Texts from Babylonian Tablets in the British Museum</i> . Part XLIX. <i>Late Babylonian Economic Texts</i> . London: Trustees of the British Museum. |
| P Dura | Parchment published in Welles et al. 1959. |
| RC | Welles 1934. |
| YOS XX | Doty 2012. |

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