TAX TRANSFERS IN THE ROMAN EMPIRE

By
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The relationships between taxes, trade and the circulation of coin have been a fashionable topic from the publication of Keith Hopkins' articles on the so-called taxes-and-trade model onwards.¹ Although the publications in question contained many methodological subtleties, their central thesis was relatively simple. The basic observation underlying Hopkins' analysis of the Roman imperial economy was that a large amount of tax money was taken from a limited number of tax-exporting provinces, such as Syria, Asia and Spain, in order to be spent in tax-consuming areas, such as Rome and the frontier provinces. Since there is no sign that the tax-exporting provinces were eventually drained of cash, it follows that they must have earned their tax money back by exporting goods either to Rome or to the peripheral parts of the empire. In short, taxation stimulated trade. According to Hopkins, taxation had the same commercializing effect within the tax-exporting provinces, as peasants had to earn the tax money they owed to the local tax collector. Finally, the need to pay taxes not only stimulated local and interregional trade but also pushed up the level of agricultural production, since the imposition of Roman taxation forced peasants to produce larger surpluses than before.

During the past two decades this model of the Roman economy has been criticized and attacked on all kinds of grounds. To start with, some have argued that most taxes were paid in kind, not in cash.² Others have pointed out that even if the Roman government did receive a large part of its tax income in cash it does not follow that money taxes were being paid at the ground level of peasant production.³ Challenging another aspect of the model, some scholars have also argued that Roman taxes bore heavily on the peasantry and caused many of them to abandon their farms. This would mean that taxation, instead of pushing up the level of agricultural production, might actually have depressed

¹ K. Hopkins, 'Taxes and trade in the Roman empire', *Journal of Roman Studies* 70 (1980), 101-125, restated with corrections in Id., 'Rome, taxes, rents and trade', *Kodai* 6/7 (1995/96), 41-75; Idem, 'Rents, taxes, trade and the city of Rome', in E. Lo Cascio, ed., *Mercati permanenti e mercati periodici nel mondo romano* (Bari 2000), 253-267.

² R. Duncan Jones, *Structure and scale in the Roman economy* (Cambridge 1990), 189-194; P. Brunt, *Roman imperial themes* (Oxford 1990), 531.

³ L. de Ligt, 'Demand, supply, distribution: the Roman peasantry between town and countryside, I', *Münsterische Beiträge zur antiken Handelsgeschichte* 9.2 (1990), 42. Cf. now Hopkins 1995/6, art.cit. (n. 1), 255-256.

it.⁴ Another group of critics has focused on the relationship between taxation, interregional trade and the circulation of coins. In his early articles on the taxes-and-trade model Hopkins claimed that an analysis of silver coins found in various provinces showed the empire's coinage to have been completely mixed, at least during the first two centuries A.D. Against this it has been pointed out that, at least for Britain and Gaul, the theory of a completely mixed coinage works only if the coin assemblages from these areas are combined, not if they are looked at separately.⁵ Thanks to the laborious investigations of Richard Duncan Jones we now also know that certain types of coin are found more often or even exclusively in certain parts of the empire, a finding that tells against the idea that coins were continually being pumped around in a well-integrated taxes-and-trade system.⁶ Duncan Jones has also argued that the whole idea of looking at silver coins is misguided, since most interregional transfers of money must have been effected using the ever-expanding imperial gold coinage.⁷ Finally, the general idea that the imposition of Roman taxes increased the amount of interregional trade has been called into question. Thus it has been pointed out that most of Hopkins' tax-exporting provinces, for example Syria and Asia, were earning large amounts of money long before the imposition of Roman rule. This suggests that although Roman taxation may have redirected existing trade flows, it did not lead to any increase in the overall volume of Mediterranean commerce.⁸ Using a variant of this approach, others have argued that even after the imposition of Roman rule in the East there remained a lively inter-urban trade that had nothing to do with the workings of any taxes-and-trade mechanism. The general message is that Rome looms larger in the Hopkins model than it did in reality.⁹

Although some of these criticisms will be touched upon below, the principal aim of this article is to contribute to the ongoing debate by looking at some of the techniques that were used to transfer tax money from one part of the empire to another. The premise underlying this inquiry is, of course, that there was such a thing as a Roman taxes-and-trade system, although it does not

⁴ B.D. Shaw, 'Soldiers and society: the army in Numidia', *Opus* 2 (1983), 149-150.

⁵ R. MacMullen, *Corruption and the decline of Rome* (New Haven/London 1988), 231 n. 139.

⁶ R. Duncan Jones, 'Mobility and immobility of coin in the Roman empire', *Annali dell' Istituto Italiano di Numismatica* 36 (1989), 121-137; Idem, *Money and government in the Roman empire* (Cambridge 1994), 172-179.

⁷ Duncan Jones 1990, art.cit. (n. 2), 45. Cf. now Hopkins 1995/6, art.cit. (n. 1), 264-266.

⁸ Duncan Jones 1990, art.cit. (n.2), 43; cf. P. van Minnen, 'Landbouw en het "taxes-and-trade model" in Romeins Egypte', *Lampas* 31 (1998), 294.

⁹ H.W. Pleket, 'Models and inscriptions: export of textiles in the Roman empire', *Epigraphica Anatolica* 30 (1998), 117-128.

follow that this system embraced each and every part of the Roman world. The coin evidence assembled by Duncan Jones, for example, makes it difficult to maintain that the frontier provinces were part of a system in which reciprocal flows of taxation and trade created completely homogeneous coin populations throughout the empire.

By way of introduction to the theme of this paper, I would like to begin by calling attention to the fact that the Hopkins model is strikingly similar to the model that another Cambridge historian, Christopher Bayly, has proposed for the economy of the Mughal empire during the 17th and early 18th centuries. The model in question is to be found in Bayly's *Rulers, townsmen and bazaars*, which contains the following passage:

The extent to which revenue demand 'primes the pump' for trade has long been recognised. Peasant farmers and zamindars needed to sell more of their crops on the market in order to get cash to pay the revenue or rent. But to an equal extent, trade 'primed the pump' for the revenue demand. The flow of coin from one area to another dried up unless trade gave to the periphery the coin with which to pay the centre ... In effect, Bengal and Gujerat had to sell more of their goods to the centre in order to 'buy back' the bullion which was flowing there as tribute. Otherwise a continual outflow of bullion would soon have made it impossible for the outlying provinces to pay the revenue at all.¹⁰

It will be obvious that Bayly is here positing the existence of a taxes-and-trade circuit closely resembling that of the Hopkins model. It is not my intention here to discuss the similarities between the two models in detail. Instead I shall be looking solely at the way or ways in which transfers of taxes were effected in the two empires to which these models refer.

An intriguing aspect of Bayly's description of the taxes-and-trade system of Mughal India is that it assigns an important role to the transfer of money by means of paper transactions, obviously because the author sees the physical transportation of coin as a high-risk operation.¹¹ From Bayly's book it appears that the annual outflow of taxes from north-east India was made possible by the export of fine grains and luxury textiles. The merchants of Bengal took these

¹⁰ C.A. Bayly, *Rulers, townsmen and bazaars. North Indian society in the age of British expansion, 1770-1870* (Cambridge 1983), 63-64.

¹¹ Bayly 1983, op. cit. (n.10), 64.

goods to the heartland of the Mughal empire, where they sold them in Delhi, Agra and Lahore. Rather than travelling back with their earnings in cash, however, these merchants handed over their money to professional bankers from whom they obtained *hundis*, that is to say payment orders that are often referred to as bills-of-exchange but are better described as cheques.¹² The merchants then took the *hundis* back with them to the coastal cities of Bengal, where local bankers would cash them. Now these same bankers routinely received tax money from tax farmers who were under an obligation to send money to the capital cities in central north India. What actually happened, however, was that the central government was paid with the money that the Bengal merchants had handed over to the bankers in these capital cities. In short, the taxes due from Bengal were paid largely with money that had never left Delhi, Agra or Lahore, while the merchants of Bengal ended up with cash that had never left the commercial cities of the east coast. As a result the risks surrounding the transportation of cash over long distances could largely be avoided.¹³

Another pre-industrial empire showing evidence of a reciprocal flow of taxes and trade is China during the T'ang dynasty (7th to 10th centuries). During this period a lively interregional trade developed between south east China and the city of Ch'ang-an, the western capital of the T'ang dynasty. The main artery of this trade was the T'ung-chi canal, an artificial waterway hundreds of kilometres long that connected the Yangtze and the Yellow River. The main purpose of this canal was to make possible the transportation of supplies to the armies of central and northern China.¹⁴ It was, however, also used for purely commercial purposes, for instance by southern tea merchants who shipped their merchandise north via the T'ung-chi canal and then

¹² For discussions of the *hundi* system and its history, see e.g. L.C. Jain, *Indigenous banking in India* (London 1929), 70-83; B. Bhargava, *Indigenous banking in ancient and medieval India* (Bombay 1934), 131-152; I. Habib, 'The system of bills of exchange (*hundis*) in the Mughal Empire', in S. Chandra, ed., *Essays in medieval Indian economic history* (New Delhi 1987), 207-221; S. Subrahmanyam, 'Introduction', in Idem, *Money and the market in India, 1100-1700* (Delhi 1994), 31-35.

¹³ This is not to suggest that the physical transportation of money became a phenomenon of marginal importance in the Mughal empire. On the continuing importance of cash transactions in Mughal state finance, see J.F. Richards, 'Mughal state finance and the premodern world economy', *Comparative Studies in Society and History* 23 (1981), 285-309 (also in *The Indian Economic and Social History Review* 25 [1988], 475-491). Richards' arguments are not entirely refuted by K. Leonard, 'Indigenous banking firms in Mughal India: a reply', *Comparative Studies in Society and History* 23 (1981), 309-313.

¹⁴ M. Elvin, *The pattern of the Chinese past* (Stanford 1973), 54-59; G. Rozman, *Urban networks in Ch'ing China and Tokugawa Japan* (Princeton 1973), 24.

westward along the Yellow River to Ch'ang-an.¹⁵ For the purposes of this paper, it is interesting to see what happened to the profits made by these merchants in the capital city. According to the Chinese-American historian Yang

[t]he tea merchants wished to transfer profits realized from the sale of tea in north China back to the tea-producing south, but found the shipment of cash both cumbersome and perilous. The same problem of transfer faced the provincial authorities who were obliged to send monetary tribute and gifts to the imperial court. These authorities maintained in the capital liaison offices known as *chin-tsou yüan*, "memorial-presenting courts", part of whose duties was to expedite presentation of these gifts. The transfer problem was solved by the institution "flying money," whereby merchants deposited cash with the "memorial-presenting courts," in return for vouchers guaranteeing reimbursement in designated provinces. Thereby a double transfer of cash was realized without an actual physical transfer.¹⁶

In other words, not only Mughal India but T'ang China too had a taxes-and-trade system that was characterized by extensive circulation of goods coupled with a limited circulation of cash.

Now all this is very similar to what Hopkins says in his most recent articles on the taxes-and-trade model. Originally Hopkins perceived a connection between Roman taxation and the circulation of coins, especially silver coins. As we have just seen, the existence of this specific connection has been questioned by Duncan Jones. This may explain why Hopkins now seems inclined to attach more importance to credit. In one of his recent articles it is asserted, for example, that 'transfers between provinces could be made by balancing credits between bank accounts'.¹⁷ If this is true, the fiscal system of the Roman empire must have operated in roughly the same way as its Indian and Chinese counterparts.

The comparison between India, China and Rome raises some questions that have so far received little attention from ancient historians. Is there any Roman evidence, for example, to suggest that private people or state officials

¹⁵ For merchants combining shipments of tribute grain with private cargoes, cf. T.G. Rawski and L.M. Li, eds., *Chinese history in economic perspective* (Univ. of California Press 1992), 185 and n. 14.

¹⁶ L. Yang, *Money and credit in China. A short history* (Cambridge, MA, 1952), 52-53.

¹⁷ Hopkins 1995/6, art.cit. (n. 1), 266.

were reluctant to transport cash over long distances? A closely related question is whether there were any legal and administrative techniques by means of which the physical transfer of money could be avoided. My attempt to shed some light on these questions falls into two parts. In the first part I shall be looking at transfers of money by private individuals. In the second part I shall focus on the interregional transfer of public revenues, especially taxes.

Interesting indications that at least some private individuals were reluctant to send cash or to travel with it to far-away places are to be found in Cicero's correspondence and in the *Digest*. My earliest example concerns the way in which Cicero obtained a large sum of money from one of his clients during his stay in Brindisi in 47 B.C. The client in question, a certain Gnaeus Sallustius, was waiting with Cicero for Caesar's return from the East, both men wanting to be pardoned for having chosen the wrong side in the civil war. When Cicero ran out of money, Sallustius provided him with 30,000 sesterces. The interest of this transaction lies in the fact that this sum was to be paid back not to Gnaeus Sallustius but to a certain Publius Sallustius in Rome. Publius Sallustius was actually to receive the money from Atticus, to whom Cicero sent written instructions. In short, by relying on a network of friends and clients it was possible to transfer 30,000 sesterces from Rome to Brindisi or *vice versa* without any need to send sacks of coin.¹⁸

A rather similar arrangement was made in 45 B.C., when Cicero wanted to send some money to his son Marcus in Athens. This time Atticus contacted a Greek friend who owed him money and instructed him to pay off his debt by handing over the money to Cicero's son.¹⁹ The classical jurists call this type of transaction a *delegatio solvendi*. Needless to say, the effect of such an arrangement was to release the original debtor and to create a new claim against the receiver of the debt money.²⁰ In theory, then, Atticus acquired a claim against Cicero's son. What actually happened, of course, was that Atticus was reimbursed by Cicero in Rome. Again the overall effect was to bring about a double transfer of money without any coins travelling between Italy and Greece.

Further examples are to be found in the *Digest*. In one text the Severan jurist Paul deals with a case involving two creditors to whom money is owed in

¹⁸ Cicero, *Ad Atticum* 11.11.2; *Ad Familiares* 14.11. Cf. J. Andreau, *Banking and business in the Roman world* (Cambridge 1999), 21.

¹⁹ Cicero, *Ad Atticum* 12.24.1; 12.27.3; 13.37.1; 14.16.4; 15.15.4; 16.1.5. Cf. Andreau 1999, op. cit. (n.18), 20-21.

²⁰ M. Kaser, *Das römische Privatrecht, I. Das altrömische, das vorklassische und klassische Recht* (München 1971, 2nd ed.), 650-651.

Rome and Carthage respectively. Paul's aim is to explain the legal state of affairs that will arise when an agreement is made that authorizes creditor A to demand payment of B's money in Carthage and creditor B to collect A's money in Rome.²¹ The obvious explanation is that A and B are thought of as living in Africa and Italy respectively. If this supposition is correct, the agreement referred to in the text must have been made because the two parties wanted to avoid the physical transportation of cash from Carthage to Rome and *vice versa*.

My second example from the *Digest* shows that coinless transfers of money could also be effected by means of bottomry loans. In a long fragment the late second-century jurist Scaevola sketches the following case. A certain Callimachus, a merchant, has borrowed money in Beirut in order to finance a trading trip to Brindisi. After selling his goods in Brindisi Callimachus is to look for a suitable return cargo with which he is to sail back to Syria before 13 September.²² Part of the interest of this text lies in the fact that it shows that commercial shipments of goods did not always lead to the transportation of coins: Callimachus buys his Syrian cargo with Syrian money that stays in Syria and his Italian return cargo with Italian money that stays in Italy.²³ For the purposes of this paper, however, the second part of Callimachus' contract is even more interesting. This part of the agreement prescribes what is to be done if Callimachus is unable to depart from Brindisi with a suitable return cargo before 13 September. In this case Callimachus will be obliged to pay off the bottomry loan to one of the creditor's slaves who has accompanied Callimachus on his trip to the West.²⁴ This slave will then take the money to Rome. As we have just seen, the first scenario envisaged in the contract is an exchange of goods between Syria and Italy without any coins travelling from one region to the other. In the second scenario the bottomry loan provided in Beirut is to be used to finance a one-way movement of goods to Brindisi and also to effect a coinless transfer of money from Syria to Italy.

The existence of various techniques for avoiding the physical transportation of cash, such as *delegationes solvendi*, exchanges of debt claims, and loans repayable in far-away places,²⁵ is thus well attested. The mere existence of these techniques suggests that at least some private individuals

²¹ Paul, *Dig.* 19.5.5.5.

²² Scaevola, *Dig.* 45.1.122.

²³ Cf. Duncan Jones 1990, op.cit. (n.2), 42.

²⁴ For slaves accompanying merchants on trading trips financed by means of bottomry loans, cf. Papinian, *Dig.* 22.2.4.1.

²⁵ Cf. also Scaevola, *Dig.* 45.1.122 pr.: a loan made in Rome but repayable in a distant province.

were reluctant to send cash over long distances. The next question is whether similar fears affected the way in which public revenues were transmitted from the provinces to Italy and other tax-consuming areas. In trying to shed some light on this question, I shall start with the relationship between the *aerarium* and the *societates publicanorum* during the last century of the Republic. An exhaustive discussion of the activities of the tax-farming companies would, of course, be beyond the scope of this article. I shall therefore concentrate on the province of Asia, partly because the evidence relating to Asia is better than that relating to most other eastern provinces, but also because before Pompey's annexation of Syria Asia seems to have been the only eastern province to yield a regular surplus.²⁶

The principal chronological cut-off point in the history of Roman taxation in Asia is 48 B.C., when the task of collecting all direct taxes within city territories was taken away from the publicans and entrusted to the cities themselves.²⁷ If the *societates publicanorum* played any part in the transmission of direct taxes, then, they can only have performed this function before the mid-forties B.C. Before turning to the problem of transmission, however, we should ask in what form Asia's direct taxes were collected. It is, of course, a well-known fact that the most important tax, the land tax, took the form of a *decuma*, a tenth part of the harvest. It is tempting to infer from this that the land tax was levied in kind. Before yielding to that temptation, however, we should pause to consider some pieces of evidence that would seem to point in the opposite direction.

To begin with, the Republican evidence makes it quite clear that the Roman treasury received money, not grain or other natural products, from the publicans who farmed Asia's taxes.²⁸ This has led some scholars, including Claude Nicolet, to venture the hypothesis that the *decuma* was levied in kind but converted into money by the tax-farming companies.²⁹ In support of this thesis Nicolet cites a passage from the new Ephesian customs law that seems to say that no customs duties shall apply to those *decumae* that the *publicani* want to export from the province of Asia. In reality, however, the passage simply says that customs duties do apply to agricultural produce on which a *decuma* is

²⁶ Cf. Cicero., *De imperio Gn. Pompei* 14.

²⁷ Brunt 1990, op.cit. (n.2), 380; 388-389.

²⁸ C. Nicolet, 'Le monumentum Ephesenum et les dîmes d'Asie', *Bulletin de Correspondance Hellénique* 115 (1991), 476. Cf. M.I. Rostovtzeff, art. 'Frumentum', in *RE* 7 (1912), 155.

²⁹ Nicolet 1991, art. cit. (n.28), 476; Idem., 'Dîmes de Sicile, d'Asie et d'ailleurs', in *Le ravitaillement en blé de Rome et des centres urbains des débuts de la République jusqu'au Haut Empire* (Naples/Rome 1994), 224-226; M. Heil, 'Einige Bemerkungen zum Zollgesetz aus Ephesos', *Epigraphica Anatolica* 17 (1991), 15-17; Pleket 1998, art.cit. (n. 9), 122.

owed to a tax-farmer.³⁰ The produce in question may have come from land outside city territories, where the land tax continued to be farmed out to *publicani* after Caesar's tax reforms.³¹ The new customs law from Ephesus therefore confirms what we already knew, namely that grain, wine and olive oil were exported from the port cities of Asia. There are no indications, however, that such goods were exported from the province by *publicani* who had collected them as taxes in kind.

Caesar's description of the preparations made by Pompey and his supporters in 49 and 48 B.C. sheds some further light on the form in which Asia's *decumae* and similar taxes in other parts of the East were collected by the publicans. In the third book of his *Commentary on the Civil War* Caesar tells his readers that Pompey spent the second half of 49 B.C. collecting enormous sums of money (*magnam pecuniam*) not only from the kings and dynasts of Asia and Syria but also from the *societates* of the provinces that he held. Further details are to be found elsewhere in the same book. It appears, for instance, that Metellus Scipio, then governor of Syria, helped Pompey by collecting the arrears owed by the *publicani* for the two previous years and by forcing the same *publicani* to pay the tax money for the current year in advance. Metellus then went on to do the same thing in Asia. Here too the *publicani* were forced to hand over all the funds under their control and compelled to pay in advance the amount of taxes they were expecting to collect during the following year. After the battle of Pharsalus more money was exacted from Cyprus. According to Caesar, Pompey departed from the island only after denuding the *publicani* of their money (*pecunia societatibus*

³⁰ Nicolet 1991, op.cit. (n. 28), 469 and 479, suggests that lines 72-74 of the Ephesian customs law should be restored as follows: οὐ πράγματος δεκάτας καρπῶν ἀροτῆρσι ποριζομένων ἢ ἰ' μέρος οἴνου καὶ ἐλαίου τῷ δημοσιῶνι δίδοσθαι [δεῖ φυλακεῖ]ων ἔνεκεν, τοῦτον <τόν> δημοσιῶνιν καρπεύεσθαι τὸ τέλος ὡς ἐξεμίσθωσαν Λούκιος Ὀκτάוניος, Γάιος Αὐρήλιος Κόττας ὑπατοί, ... In my view this should be emended to οὐ πράγματος δεκάτας καρπῶν ἀροτῆρσι ποριζομένων ἢ ἰ' μέρος οἴνου καὶ ἐλαίου τῷ δημοσιῶνι δίδοσθαι [δεῖ c. 9]ίων ἔνεκεν, τόν<του> τόν δημοσιῶνιν καρπεύεσθαι τὸ τέλος ὡς ἐξεμίσθωσαν Λούκιος Ὀκτάוניος Γάιος Αὐρήλιος Κόττας ὑπατοί. The passage that follows seems to prescribe that no customs duties shall be charged when goods are moved from one part of Asia to another. Cf. Vittinghoff, art. 'Portorium', in *RE* 48 (1953), 377-378: no *portoria* due on goods that were shipped within the boundaries of a single tax district.

³¹ Cf. Brunt 1990, op.cit. (n. 2), 389-391. One cannot rule out the possibility that the *portoria* and the *decumae* owed in respect of land outside city territories were farmed by a single company. Cf. C. Nicolet, "'Frumentum municipale': en Sicile et ailleurs", in A. Giovannini, ed., *Nourrir la plèbe* (Basel 1991), 134 (one company farming the *portoria*, the *scriptura* and the *decuma* due from possessors of *agri populi Romani* in Sicily). This would explain why par. 31 of the Ephesian customs law uses the non-specific term 'the tax-farmer' (ὁ δημοσιῶνις) to refer both to the tax-farmer collecting the *decuma* and to the man who has acquired the right to collect the Asian *portoria*.

sublata).³² The striking thing about these stories is that the publicans of the eastern provinces are consistently pictured as sitting on large amounts of money but never as controlling stocks of grain. This strongly suggests that most taxes in Asia and Syria, including the *decuma*, were paid to the *publicani* in cash.

How then do we explain the fact that a tax that was defined as a fixed proportion of the harvest took a monetary form as far as the *publicani* were concerned? The answer must lie in the annual *pactiones* that the tax-farmers of the East concluded with the individual cities in their districts.³³ In my view one of the functions of these annual agreements was to fix the sums of money that would discharge the duty of the cities of Asia to pay the *decuma* and other taxes. This reading of the evidence implies that if the *decuma* was paid in kind by landlords and peasants it must have been converted into money either by local officials or by local tax collectors, unless of course the rural population itself was in the habit of paying the land tax in cash. In this context I cannot refrain from citing the epigraphical evidence from Nakrason, a small town in Asia, and from an anonymous village on the site of modern Dereköy in ancient Lycia. The evidence from Nakrason refers to an annual obligation to pay a fixed sum of money as tax on two olive gardens, a vineyard and some pieces of uncultivated land.³⁴ The sum in question is described as ‘twelve *denarii* per *uncia*’, a local or regional tax unit of unknown size.³⁵ The inscription from Dereköy, which dates from the second or third quarter of the second century A.D., refers to a tax on grain land that was called the *sitike apomoirā* or simply the *sitike*.³⁶ Originally this tax, which must have been the Lycian equivalent of the Asian *decuma*, must have been levied in kind. From the remainder of the inscription it appears, however, that by the second century A.D. the village of Dereköy possessed a treasury that served, *inter alia*, to meet the villagers’ annual tax obligations in cash. It follows either that the peasants of Dereköy

³² *De Bello Civili* 3.3.2; 31.1; 32.6; 103.1.

³³ For these *pactiones* see E. Badian, *Publicans and sinners* (London 1972), 79–80; Brunt 1990, op.cit. (n.2), 366; Nicolet 1991, art.cit. (n. 28), 467 and n. 10.

³⁴ *Pace* Duncan Jones 1990, art.cit. (n. 2), 192, the inscription does not refer to the tax money due ‘on a small portion of vineyard’.

³⁵ P. Herrmann and K.Z. Polatkan, *Das Testament des Epikrates und andere neue Inschriften aus dem Museum von Manisa* (Sitzungsberichte der Österreichischen Akademie der Wissenschaften, Phil.-hist. Klasse, no. 265,1, Wien 1969), 10 and 25–26. Cf. L. Neesen, *Untersuchungen zu den direkten Staatsabgaben der römischen Kaiserzeit* (Bonn 1980), 69 and n.1; M. Alpers, *Das nachrepublikanische Finanzsystem. Fiscus und Fisci in der frühen Kaiserzeit* (Berlin/New York 1995), 276–277; Pleket 1998, art.cit. (n. 9), 121–122.

³⁶ M. Wörrle and W. Wurster, ‘Dereköy: eine befestigte Siedlung im nordwestlichen Lykien und die Reform ihres dörflichen Zeuskultus’, *Chiron* 27 (1997), 447–458.

paid the grain tax in money or, alternatively, that any taxes that were levied in kind were converted into cash by village officials.

The aim of this digression has been to argue that the original nature of the *decuma* did not prevent the publicans who continued to farm this tax until 48 B.C. from receiving most of their revenues in cash. This means that we can rule out the possibility that the land tax in Asia, at least, was transmitted in kind. Should we then conclude that the transmission problem was resolved by shipping large amounts of cash from Asia to Italy? Although physical shipments of cash no doubt occurred, there are several grounds for thinking that a significant proportion of the money that the publicans of Asia owed to the central treasury never left the province.

At this point a few words must be said about the role that the *societates publicanorum* are known to have played in state finance during the last century of the Republic. This role is particularly well attested in the eastern part of the empire. The main reason for this must be that it was only in a handful of eastern provinces, such as Asia, Cilicia and Syria, that the right to collect direct taxes was farmed out to tax-farming companies.³⁷ Since the right to collect these taxes was leased out in Rome, it seems clear that the annual instalments that the *publicani* were required to pay were owed to the *quaestores urbani*. In practice, however, a considerable proportion of the sums due from the *publicani* were paid directly to Roman governors and generals, mainly because the provinces whose direct taxes were farmed out to *societates publicanorum* were, precisely for that reason, characterized by the absence of rich provincial treasuries from which payments could be made by provincial quaestors.³⁸ This explains why the grant by means of which Verres was to buy wheat for the Roman state took the form of a draft on the tax-farming company that handled Sicily's pasture tax and some of its customs dues.³⁹ Similarly, Cicero, who took up the governorship of Cilicia in 51 B.C., drew his allowance from the publicans at Laodicea, evidently because there was no provincial state treasury to speak of.⁴⁰ On his return he again used the services of the same city's *publicani*, this time to deposit the balance of his grant, which was apparently 1

³⁷ Cf. Brunt 1990, op.cit. (n. 2), 388.

³⁸ It is sometimes supposed that the *publicani* paid their annual instalments to provincial quaestors (D. Magie, *Roman rule in Asia Minor* [Princeton 1950], 165; G. Rickman, *The corn supply of ancient Rome* [Oxford 1980], 43), but there seems to be no evidence for this.

³⁹ Badian 1972, op. cit. (n.33), 77.

⁴⁰ A.H.M. Jones, 'The aerarium and the fiscus' (orig. 1950), in Idem, *Studies in Roman government and law* (Oxford 1960), 103.

million sesterces.⁴¹ In one of his letters Cicero explains why he prefers not to travel back with the surplus money to Italy: by depositing the balance of his grant (and the booty captured during his military campaign in eastern Cilicia) with the *publicani*, who will be required to give sureties, he will relieve himself and the Roman people of the ‘risk of transportation’ (*periculum vecturae*).⁴² It seems likely that the same consideration led Cicero to deposit the private profits he had gained from his governorship, 2.2 million sesterces, with the publicans of Ephesus. Not long after Cicero’s return to Italy, Pompey seems to have asked him to leave the money where it was, so that he might draw on it in case of a civil war;⁴³ and from a later letter we learn that Cicero called in half the money during the early months of 48 B.C., almost certainly in order to make it available to Pompey.⁴⁴ Since Cicero appears not to have seen any of his Asiatic money again,⁴⁵ the other half may also have ended up in Pompey’s hands. So in the end the 2.2 million sesterces were never transferred to Italy. Yet it cannot be doubted that Cicero’s original aim had been to effect such a transfer, for in one of his letters he is asking Atticus to make his 2.2 million available in Italy by means of a *permutatio pecuniae*.⁴⁶ The idea may have been to hand over the money to one of Atticus’ agents in Asia while asking him to make available an equivalent sum in Italy.⁴⁷ Interestingly, the publicans of Ephesus are not assigned any role in this private *permutatio pecuniae*.

An earlier episode in Pompey’s career also illuminates the role of the *publicani* in late Republican state finance. I am referring here to the well-known provision of the *Lex Gabinia* of 67 B.C. that authorized Pompey to draw 6,000 talents ‘from the provincial treasuries and from the *publicani*’ (ἐκ τῶν ταμείων καὶ παρὰ τῶν τελωνῶν).⁴⁸ The lesson to be learnt from all this is that the late Republican government was in the habit of using the *publicani*’s funds to cover the expenses of administration and warfare, especially in the East. Of course, this arrangement was also in the interests of

⁴¹ Cicero, *Ad Familiares* 2.17.4 (= Shackleton Bailey no. 117) and Idem, *Ad Atticum* 7.1.6 (= Shackleton Bailey no. 124); Jones 1960, art.cit. (n.40), 103, confuses this money with Cicero’s private profits, which were deposited with the *publicani* at Ephesus.

⁴² *Ad Familiares* 2.17.4.

⁴³ *Ad Familiares* 5.20.9.

⁴⁴ *Ad Atticum* 11.2.3.

⁴⁵ *Ad Atticum* 11.13.4.

⁴⁶ *Ad Atticum* 11.1.2.

⁴⁷ G. Maselli, *Argentaria. Banche e banchieri nella Roma repubblicana* (Bari 1986), 118–119.

⁴⁸ Plutarch, *Pompeius* 25; Appian, *Mithr.* 94. Cf. Jones 1960, art.cit. (n. 40), 102. F.E. Steffensen, ‘Fiscus in der späten römischen Republik’, *Classica et Mediaevalia* 28 (1967), 271–280, has vainly tried to argue that Plutarch’s ταμεία should be identified as municipal treasuries.

the *publicani*, since any money handed over by them to a Roman governor or general must have been deducted from the sum due from them to the *aerarium* in Rome.

Despite the existence of these arrangements, however, it seems unlikely that the need to transfer money to Italy could have been dispensed with altogether. How were these transfers carried out? In the absence of hard evidence, any answer to this question has to be speculative. It seems possible that, for instance, the publicans used revenues from their extensive properties in Italy to pay at least some of the cash that was due to the public treasury in Rome. This would have enabled them to use some of their Asian tax money to buy Asian land or to make usurious loans.⁴⁹ In theory, Asian tax money could also have been transferred to Rome by exporting Asian goods and selling them in Italy, or by providing bottomry loans that were repayable in Italian ports (cf. above). Unfortunately, there seems to be no evidence to back up any of these suggestions. It seems therefore preferable to assume that, despite the efforts that were made to ship as little coin as possible from the provinces to Rome, the physical transportation of money could not be avoided altogether.⁵⁰

We are now in a position to address the question of how the tax revenues from Asia (and from other eastern provinces such as Syria) were handled after the *publicani* had ceased to collect direct taxes in city territories. One obvious effect of Caesar's tax reforms was that state officials became responsible for the transfer of cash income from direct taxes. It may, therefore, be no coincidence that several references to the physical transportation of money by soldiers and state officials are contained in the literary sources relating to the period immediately following Caesar's death in 44 B.C. An interesting example is Appian's brief description of Octavian's arrival in Brindisi in late March or early April 44 B.C. According to Appian's description, Octavian found the city bustling with activity, with some groups of soldiers carrying money and supplies (ἀποσκευὰς ἢ χρήματα) to the army in Macedonia and other groups arriving with 'money and tribute' (χρήματα καὶ φόρους) from other parts of the empire.⁵¹ The most natural interpretation of the phrase χρήματα καὶ φόρους is that it

⁴⁹ For publicans acquiring landed property in Asia and other eastern provinces, see M. Crawford, 'Rome and the Greek world: economic relationships', *Economic History Review* 30 (1977), 48-49; S. Mitchell, *Anatolia. Land, men and gods in Asia Minor I* (Oxford 1993), 154.

⁵⁰ Cf. Crawford's suggestion (Idem 1977, op.cit. [n.49], 52) that Asian *cistophori* were melted down in Rome and struck into *denarii*.

⁵¹ Appian, *Bella Civilia* 3.11.

refers to taxes in money and in kind. Another reference to the physical transportation of money is to be found in Velleius Paterculus' description of how Brutus and Cassius went about collecting money after their departure from Italy. According to Velleius, 'they received sums of money (*pecunias*) that were being carried to Rome from the transmarine provinces by the quaestors, who willingly handed them over'.⁵² Further details concerning these shipments of money are to be found in Plutarch's *Life of Brutus*, in the fourth book of Appian's account of the civil wars and in Cicero's correspondence. From Cicero it appears that Brutus received 2 million sesterces from Gaius Antistius Vetus, the returning *quaestor pro praetore* of Syria, who was travelling back with the money to Italy.⁵³ In Plutarch's *Life of Brutus* this transfer is confused with a rather similar shipment of money that took place under the supervision of Marcus Appuleius, the retiring *proquaestor* of Asia, who handed over his public funds to Brutus at Carystus in the autumn of 44 B.C.⁵⁴ According to Appian, the money handed over by Appuleius amounted to the huge sum of 16,000 talents, or 384 million sesterces.⁵⁵ For our purposes it is interesting to see that Plutarch describes the quaestor of Asia (whom he mistakenly identifies as Antistius) as sailing to Italy with his province's tribute money.⁵⁶

There is little direct evidence for state-organized transfers of money from Asia to Italy during the Principate, for the obvious reason that the authors whose works have come down to us found little reason to refer to the physical transportation of coin. Significantly, the only passage in which Tacitus seems to be referring to transfers of eastern tax money concerns the civil war of 69 A.D., when Vespasian was in a position to deprive Vitellius not only of Egyptian grain but also of 'the tax revenues of the most wealthy provinces'.⁵⁷ The impression that considerable amounts of tax money were shipped to Italy is confirmed by the Neronian tax law from Ephesus, which declares all shipments of money carried out by or on behalf of the Roman people to be

⁵² Velleius Paterculus 2.62.3: *ubicumque ipsi essent, praetexentes esse rem publicam, pecunias etiam, quae ex transmarinis provinciis Romam ab quaestoribus deportabantur, a volentibus acceperant.*

⁵³ Cicero, *Ad Brutum* 1.11.1 and 2.3.5. I agree with R.Y. Tyrrell and L.C. Purser, *The Correspondence of M. Tullius Cicero* VI (Dublin/London 1899), 128 n. 1, that Antistius must have handed over the money in February 43 B.C., not in the autumn of 44 B.C., as Plutarch, *Brutus* 25, has it.

⁵⁴ Plutarch, *Brutus* 24.3: *πλοῖα Ῥωμαϊκὰ μεστὰ χρημάτων ἐξ Ἀσίας προσφέρεσθαι*; and 25.1: *ἀφ' ὧν ἦγε καὶ αὐτὸς εἰς Ἰταλίαν χρημάτων.*

⁵⁵ Appian, *Bella Civilia* 4.75.

⁵⁶ See n. 54.

⁵⁷ Tacitus, *Historiae* 3.9.

exempt from customs duties.⁵⁸ For the rest, there are some general references to shipments of money, one example being a passage from the *Digest* in which the Severan jurist Paul explains that people who have undertaken to transport public money by sea can never correctly be described as having committed the crime of *peculatus* (embezzlement) because if they steal the money they can be held liable on other grounds, for example on the basis of their contracts.⁵⁹

Before leaving the topic of cash shipments under the Empire I would like to add a few words about Egypt, another area that is known to have produced vastly more taxes than it consumed. It has been calculated that the annual tax revenue of early imperial Egypt amounted to 17.5 million *artabae* (ca. 500,000 tons) of wheat plus ca. 120 million sesterces in money taxes.⁶⁰ In order to put these figures into perspective, it may be pointed out that the amount of wheat needed for the corn dole in Rome and to feed the entire Roman army amounted to roughly 250,000 tons.⁶¹ This means that an alternative destination had to be found for at least 250,000 tons of Egyptian tax grain.⁶² Now there is nothing to suggest that the imperial government in Rome had at its disposal large amounts of Egyptian or African tax grain in addition to the grain that was needed for the *frumentationes*. This has led some scholars to venture the attractive hypothesis that large amounts of tax grain must have been sold off by government officials in Alexandria.⁶³ There is a theoretical possibility that some of these hypothetical sales were made on the condition that the purchase price would be paid in Italy. In that case the sale of Egyptian tax grain would have resulted in a coinless transfer of money from Alexandria to Italy. This doubly hypothetical

⁵⁸ SEG 39, 1180, lines 58–61.

⁵⁹ Paul, *Dig.* 48.13.11.4: *Is autem, qui pecuniam traiciendam suscepit vel quilibet alius, ad cuius periculum pecunia pertinet, peculatum non committit*. For contractual liability, cf. Paul, *Dig.* 47.2.54.2: *Quod si servus tuus rem tibi commodatam subripuerit, furti tecum actio non est, quia tuo periculo res sit, sed tantum commodati*. It is also possible that Paul has in mind people performing the *munus pecuniae perferendae*, for which see Ulpian *Dig.* 50.5.2.7; Arcadius Charisius *Dig.* 50.4.18.3. For physical shipments of money, cf. also Seneca, *Epistulae* 76.13: *navis bona dicitur non ... quae fiscis atque opibus regis pressa est*, and F. Millar, 'Les congiaires à Rome et la monnaie', in A. Giovanninni, ed., *Nourrir la Plèbe* (Basel 1991), 148, citing Arrian, *Periplus Mari Euxini* 6 and 10: money shipped to the auxiliaries manning Roman forts on the Black Sea. For the physical transportation of bullion during the late Empire (carried out by officials using the *cursus publicus*), see e.g. C. Th. 8.5.48 pr. (386 A.D.).

⁶⁰ Duncan Jones 1994, art.cit. (n. 6), 53.

⁶¹ Hopkins 1995/6, art.cit. (n. 1), 256.

⁶² Since most of the frontier troops depended on supplies from their immediate hinterlands (P. Garnsey and R. Saller, *The Roman empire. Economy, society and culture* [London 1987], 90), the actual surplus must have been much larger than 250,000 tons.

⁶³ Brunt 1990, op.cit. (n. 2), 532; Duncan Jones 1990, op.cit. (n. 2), 193. Cf. also D. Rathbone, 'The ancient economy and Graeco-Roman Egypt' in L. Criscuolo and G. Geraci, eds., *Egitto e storia antica dall'ellenismo all'età araba* (Bologna 1989), 173–174.

scenario, however, sits rather uncomfortably with the juridical evidence, which strongly suggests that goods belonging to the public or imperial treasury were normally sold for cash.⁶⁴ Nor is there any evidence that Egyptian tax money was transferred to Italy by means of bottomry loans.⁶⁵ It would seem to follow, then, that most of the money brought in by the sale of Egyptian grain and a large proportion of those taxes that were collected in cash must have been shipped to Italy under the supervision of state officials. One advantage of this theory is that it explains the existence of a *procurator fisci Alexandrini* in Rome under the Flavian emperors.⁶⁶ Even A.H.M. Jones, who placed great emphasis upon the importance of transactions on paper, interpreted the creation of this post as evidence that cash was regularly shipped from Egypt to Rome.⁶⁷

I am not suggesting, of course, that all the tax money from Asia and Egypt was taken to Italy by government officials. In the case of Asia, one qualification that has to be made concerns the *portoria* and other indirect taxes, which continued to be leased out to tax-farming companies for a very long time.⁶⁸ During the Principate it seems to have become more common for indirect taxes to be leased out in the provinces in which they were levied.⁶⁹ The customs law from Ephesus, however, makes it quite clear that the Asian *portoria* were still being leased out in Rome in the third quarter of the first century A.D.⁷⁰ There is also evidence for the continued existence of provincial *promagistri* working for tax-farming companies whose *magistri* must have been based in Rome.⁷¹ The relevance of all this is that if the *portoria* of Asia

⁶⁴ See e.g. Ulpian *Dig.* 49.14.5.1: *Si ab eo, cui ius distrahendi res fisci datum est, fuerit distractum quid fisci, statim fit emptoris, pretio tamen soluto*, and for a general discussion of fiscal sales G. Boulvert, 'L'autonomie du droit fiscal: le cas des ventes', in *ANRW* II,14 (Berlin 1982), 816-849, esp. 846.

⁶⁵ Although we hear occasionally of people borrowing money from the *fiscus* (e.g. Flavius Josephus, *Antiquitates Judaicae* 18.158 and 163; Scaevola *Dig.* 20.4.21 pr.), such loans seem to have been unusual. In the late Empire several emperors explicitly forbade fiscal agents to lend out money to private individuals; see *C. Th.* 10.24.1-2 (= *CI* 10.6.1-2). Cf. Boulvert, art.cit. (n.64), 820 and n. 19.

⁶⁶ Rome was also the seat of a *procurator fisci Asiatici*, who must have handled cash revenues from Asia. On these *procuratores* see e.g. Jones 1960, art.cit. (n. 40), 110; Alpers 1995, op.cit. (n. 35), 198-200, and 278-286. Cf. Duncan Jones 1994, op.cit. (n. 6), 177 n. 22, for the suggestion that special *fisci* were set up for Asia and Egypt because both provinces used their own currency.

⁶⁷ Jones 1960, art.cit. (n. 40), 110.

⁶⁸ For the persistence of tax-farming companies during the Principate see Brunt 1990, op.cit. (n.2), 354-432.

⁶⁹ Brunt 1990, op.cit. (n. 2), 357, 370, 377, 385, and 393; A. Lintott, *Imperium Romanum. Politics and administration* (London 1993), 77 and 122-123.

⁷⁰ SEG 39, 1180, lines 101-103, 110-112, 124-126 and 140-143.

⁷¹ On these provincial *promagistri*, see M.R. Cimma, *Ricerche sulle società di publicani* (Milano 1981), 81-84; Brunt 1990, op. cit. (n.2), 407; Nicolet 1991, art.cit. (n. 31), 138-140. A new inscription referring to a *promagister publici Cyrenensis* has been discovered at Cyrene; see F.A. Mohamed and J.

and other provinces continued to be leased out in Rome, the burden of transferring the money in question is likely to have rested on the tax-farming companies, in precisely the same way as during the Republic. It may be noted that the customs law from Ephesus orders the person who has leased the right to collect Asia's *portoria* to pay his annual instalments not to any provincial *quaestor* or *procurator* but to the *aerarium* in Rome.⁷² In short, even after 48 B.C. the *societates publicanorum* continued to play a part in the transmission of Asian tax revenues to Rome.

A second caveat that must be entered is that a significant proportion of the tax money that the cities of Asia paid into the provincial treasury may not have travelled to Rome because this money was spent in other parts of the empire. More than sixty years ago the Swedish ancient historian Erik Gren pointed out that the taxes that were raised in the eastern Balkan provinces must have fallen short of what the Roman government had to spend on the army units that were stationed in that region.⁷³ In principle the deficit could have been made up by sending money from Rome. The coin evidence leaves little doubt that part of the missing money was supplied in this way.⁷⁴ Nonetheless it is difficult not to be impressed by Gren's argument that it would have made more sense to send surplus tax money from Asia directly to the Balkans than to ship it to Rome for distribution to areas with large concentrations of troops.⁷⁵ Anticipating the Hopkins model, Gren went on to suggest that Asia Minor may have earned back some of the tax money that left the province by supplying the armies of the Balkan with textiles, wine and olive oil.⁷⁶ Alternatively, imperial procurators who were based in Asia may have used Asian tax money to buy Asian goods for the troops on the lower Danube.⁷⁷ Unfortunately, there seems

Reynolds, 'An inscribed stone from the sanctuary of Demeter and Kore in the Wadi Belgadir at Cyrene: cult, corn and Roman revenues', *Libyan Studies* 25 (1994), 211-216.

⁷² SEG 39, 1180, lines 99-101.

⁷³ E. Gren, *Kleinasien und der Ostbalkan in der wirtschaftlichen Entwicklung der römischen Kaiserzeit* (Uppsala 1941), 144-145.

⁷⁴ Duncan Jones 1994, op.cit. (n. 6), 176.

⁷⁵ Gren 1941, op. cit. (n.73), 144-145.

⁷⁶ Gren 1941, op. cit. (n.73), 63-72. More recently Mitchell 1993, op.cit. (n. 45), 250-251, has suggested that the Roman armies on the Danube were partly fed with tax grain sent from Asia Minor. Against this see Gren, op. cit., 138-139 (emphasizing local supplies).

⁷⁷ For the role of provincial procurators in supplying the Roman army, see J. Remesal Rodríguez, 'Die *procuratores Augusti* und die Versorgung des römischen Heeres', in H. Vetters and M. Kandler, eds., *Akten des 14. Internationalen Limeskongresses 1986 in Carnuntum* (Wien 1990), 55-56 (citing Strabo 3.4.20); T. Kissel, *Untersuchungen zur Logistik des römischen Heeres in den Provinzen des griechischen Ostens* (St. Katharinen 1995), 142-154. Cf. S. Faroqhi, *Towns and townsmen of Ottoman Anatolia. Trade, crafts and food production in an urban setting, 1520-1650* (Cambridge 1984), 129-

to be no archaeological evidence to support the theory that large amounts of wine or olive oil were exported from Asia Minor to the Balkans during the first two centuries A.D.⁷⁸ This means that Gren's theory, attractive though it is, remains an unproven hypothesis.

My final and perhaps most important qualification is that the focus of this article has been on the province of Asia and, to a lesser extent, on Egypt. In his article on the *aerarium* and the *fiscus* A.H.M. Jones described these areas as 'the two provinces which produced a substantial surplus over the costs of their own administration or the needs of neighbouring provinces'.⁷⁹ Although this may be an exaggeration, it would certainly be absurd to apply the findings of this article to all of the empire's Mediterranean provinces. The same reservation must *a fortiori* apply to the frontier provinces. About these provinces I have nothing to say except that I find myself in agreement with Duncan Jones' view that the numismatical evidence rules out the idea of a closely integrated monetary system in which money moved quickly from Rome to the peripheral provinces and back again.⁸⁰

It is time to sum up the principal findings of this article. To begin with, the existence of taxes-and-trade systems in pre-modern China and India may be said to lend a certain measure of support to the Hopkins model of the Roman economy, at least as far as the Mediterranean parts of the empire are concerned. At the same time the literature on China and India raises the question of whether the physical transportation of cash could have been avoided by means of paper transactions. The Roman evidence leaves no doubt that private individuals made various kinds of personal arrangements to avoid shipping coin to far-away places. On the other hand, the very fact that these arrangements were always *personal* tells against the existence of a coordinated system comprising both private transfers of money and transmissions of provincial tax revenues to the central treasury in Rome.

130: Ottoman officials using tax money collected by local tax-farmers to purchase sailcloth, tents and cotton goods on behalf of the navy and the army.

⁷⁸ Cf. Gren 1941, op. cit. (n.73), 63-64, noting the scantiness of the archaeological evidence for Asian goods reaching the Balkans during the Principate. There is good numismatical evidence for the existence of close contacts between the Balkan provinces and north-west Asia Minor in the third and fourth centuries A.D.: Gren, op. cit., 19-20; K. Butcher, 'The coins', in A. Poulter, ed., *Nicomolis ad Istrum: a Roman, late Roman and early Byzantine city* (London 1995), 311-314.

⁷⁹ Jones 1960, op.cit. (n. 40), 110.

⁸⁰ Duncan Jones 1989, art.cit. (n. 6); Idem 1990, op.cit. (n. 2); Idem 1994, op.cit. (n. 6). Duncan Jones' findings are nuanced but not refuted by C.J. Howgego, 'Coin circulation and the integration of the Roman economy', *Journal of Roman Archaeology* 7 (1994), 5-21; and Idem, *Ancient history from coins* (London 1995), 107-110.

During the late Republic the Roman government relieved itself of the task of shipping large amounts of money by farming out the taxes of some very rich provinces and requiring the tax-farmers to pay their dues in Rome. Another technique that helped to reduce the need for physical shipments of coin was the use of the provincial *fisci* and of the funds accumulated by the *publicani* to cover the costs of provincial administration and to finance military operations in nearby areas. In this field there was a direct continuity between the extensive powers received by Pompey under the Gabinian law of 67 B.C. and the very similar powers that the Julio-Claudian emperors and their successors were always able to exercise.⁸¹

There is, however, no evidence that either the publicans or, later on, the imperial *fiscus* set up or used any system of paper transfers or credit that was also available to private merchants. The absence of such a system meant that the Roman government had fewer ways of avoiding physical shipments of cash available to them than had the governments of T'ang China and Mughal India. The overall impression we are left with is that, despite Hopkins' recent suggestions to the contrary, the financial techniques by means of which the Roman government transmitted its taxes were less sophisticated than those that were used in some other pre-industrial empires.

Utrecht, November 2001

⁸¹ For the more or less unlimited financial powers of the emperors, see e.g. Jones 1960, op.cit. (n. 40), 104-106; Brunt 1990, op.cit. (n. 2), 135, 154-162; Alpers 1995, op.cit. (n. 35), 75, 81, 147-151.