

THE TRADERS IN ROME'S EASTERN COMMERCE

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Abstract

Rome's Eastern trade flourished for over two centuries, from reign of Augustus to that of Caracalla, bringing highly valuable goods from India and East Africa to consumers in Rome, and this thesis examines the traders who operated in Egypt and transported goods between the Red Sea and the Mediterranean. Chapter 1 examines the identities of the traders, in terms of ethnicity, wealth, and social standing, and also examines the evidence for the involvement of the imperial family in the Eastern trade, while Chapter 2 analyzes the many different customs dues, transit tolls, and other taxes imposed upon Eastern traders operating in Egypt. Chapter 3 presents an analysis of customs abuses, including the forms of abuses which occurred, legislative attempts to curb abuses, and the frequency of abuses. Chapter 4 investigates the potential for profits in the Eastern trade, taking into consideration the various expenses, such as transport fees and customs dues, incurred in the course of transporting the goods across Egypt, as well as the evidence for the value of Eastern goods at Rome.

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Introduction

1

When Octavian annexed Egypt in 30 BC, he not only brought under Roman control an abundant and steady supply of grain, but also incredibly profitable trade routes linking the Mediterranean basin with India and East Africa. This trade expanded and flourished after Egypt fell into Roman hands, bringing much-desired luxury goods¹ to the Roman elites and providing a valuable source of tax revenue for the Roman state. But this trade was also the subject of significant controversy in the ancient world, much as it is among scholars today (albeit for different reasons), with several ancient authors lamenting the drain that this trade placed on Roman wealth as coins were sent eastwards in exchange for luxury goods.²

Despite opposition by certain members of society, the Eastern trade seems to have continued to grow for at least the first two centuries of Roman rule. Unsurprisingly, our sources offer few direct descriptions of the changing volume of this trade over time, but nevertheless a general picture of growth over time can be established by a close examination of the available literary and archaeological evidence. According to Strabo, both the number of ships travelling to India and the profits earned from the Eastern trade

¹ As noted by Morely, "luxury goods" is a potentially misleading term, as there is no clear distinction between luxuries and staples (as even grain can be considered a luxury in certain cases, for instance when used for fine breads), and because of the moralizing connotations of the term (2007: 573-4). Furthermore, the term "luxury" also implies that the goods were solely the domain of the elites, and while the wealthier classes would certainly have provided the largest market for these goods, it has been demonstrated that many of these goods, especially pepper, would have had a market which comprised a large section of the population (McLaughlin 2010: 143-5; Rathbone 2007: 710-1). Despite these concerns, however, the term "luxury goods" will be used throughout this thesis on the basis of not only convention, but also sense, as these goods were indeed luxuries insofar as they were rare, expensive, and brought to the market from exotic lands.

² Pliny, *NH* 12.41 and 6.26, explicitly mentions India, Arabia, and China as the destination for the exported coinage, while Tacitus, *Annales* 3.53, merely records that the recipients were "strange or hostile nations" (*externas aut hostilis gentis*). The volume of this trade and its costs to the Roman state will be discussed more fully below.

grew dramatically once Egypt fell under Roman control, a change which he ascribes to superior administration of the region.³ Octavian largely preserved the Ptolemaic framework for the Eastern trade, albeit with a few significant differences. High levels of import tariffs were maintained so as to ensure high levels of income, and an additional customs duty was levied on goods which were processed in Alexandria and then reexported to other markets.⁴ The supervision of this trade was placed in the hands of the *praefectus montis Berenicidae* who was entrusted with overseeing the collection of the customs dues from the Red Sea ports.⁵

Determining the volume of this trade is, of course, more difficult than summarizing changes in the structure of its administration. However, several lines of evidence allow us to establish a general outline of the increase and decrease in the volume of the Eastern trade over time. We know, for instance, that the volume of this trade was high during the middle of the first century AD, when Pliny decried the amount of wealth flowing from Rome to India and China. Assuming that we accept Pliny's figure for the value of the trade (which, as I argue below, ⁶ I think we should), then it stands to reason that such a large volume of trade could not have emerged overnight. Logic would suggest that the Eastern trade must have existed at high, or consistently increasing, levels for quite some time, and that is precisely what the available evidence suggests; for instance, finds

³ *Geography* 17.1.13.

⁴ Import and export duties are discussed more fully, in the context of their impact on traders, in chapter 2.

⁵ See below, pages 43-5, for a discussion of the administration of the taxes levied on the Eastern trade.

⁶ See below, pages 8-9.

of Roman coins in India suggest that the volume of the Indo-Roman trade increased from Tiberius on.⁷

Literary evidence points to the same conclusion as the numismatic evidence. Writers of the Augustan era show great interest in eastern lands, such as India, and even China, and some even express the desire that these lands might soon become part of the Roman Empire, but their interest is purely ideological and they lack any clear understanding of the geography of these regions. Our sources are silent about the peoples in the Red Sea area until the period of Trajan and Hadrian, when there is an abundance of literary works describing the peoples and lands beyond the border, particularly to the east. Authors mentioning India, China, or the Red Sea region during this period include Lucian, Juvenal, Dionysius Periegetes, and Claudius Ptolemy, and, unlike their predecessors in the Augustan period, they demonstrate detailed knowledge of the people and geography of the lands to the east. ¹⁰ This increased interest in the east, coupled with an enhanced knowledge of the geography of the region, seems to indicate increasing economic connections between Rome and the lands beyond the empire's eastern border. 11 Again, it stands to reason that it would have taken a considerable length of time for such a great deal of previously inaccessible information to have come to pervade literature so

⁷ Sidebotham 1986: 55.

⁸ Horace, *Odes* 1.35.30-32, 2.12.24, 3.24.2 *Epistles* 1.6.6, 1.7.36; Propertius, *Elegies* 2.10.15-18; Tibullus 2.2.3-4; Virgil, *Aeneid* 6.792-800. For an overview of views on the nations of the Red Sea and beyond in Augustan and Tiberian literature, see Sidebotham 1986: 138-141. For an in-depth analysis of Hellenistic and Roman literary descriptions of India, see Parker 2008: 69-120.

⁹See, for instance, Horace, *Odes* 1.12.54-65.

For a detailed examination of knowledge of and interest in the east in Trajanic and Hadrianic literature, see Sidebotham 1986: 141-55.

¹¹ Ptolemy explicitly mentions merchants as his source of information in *Geography* 1.1, further demonstrating the increasing trade contacts between the Roman Empire and points further to the east.

widely, and therefore the amount of trade between Rome and the east must surely have been increasing in the decades prior to the reign of Trajan.

One work in particular suggests the growth of the Eastern trade in the early years of Roman rule: the unparalleled *Periplus Maris Erythraei*. The *Periplus*, which dates to the middle of the first century AD, ¹² is a handbook for traders travelling between Roman Egypt and the lands surrounding the Erythraean Sea. 13 It contains descriptions of the trade routes between Egypt and India and the goods which can be bought and sold at each port along these routes, as well as brief descriptions of the rulers and inhabitants of the various lands described. This is specialized information which would not be of interest to a general audience, and it is presented in a straightforward and stylistically simple format, indicating that it was designed to be a practical handbook rather than a work of literature, and suggesting that the volume of the Eastern trade was growing at the time, thereby necessitating an increasing number of traders, for whom this manual would have been an invaluable aid. The assumption that there was a great build up of knowledge about these trade routes in the first century A.D. is supported by Pliny the Elder's *Natural History*, which states that reliable knowledge about the whole route of trade from Egypt had become available only recently. 14

¹² Considerable debate has traditionally surrounded the dating of the *Periplus*, with suggested dates ranging from AD 30 to AD 230. However, as Casson (1989: 6-7) has demonstrated, the *Periplus* can be securely dated on the basis of the directions it provides for reaching Petra, which is described as being under the rule of Malichus, a Nabataean king, whose reign from AD 40-70 is firmly established.

¹³ The term "Erythraean Sea" is used by the author of the *Periplus* to refer to the Red Sea, the Gulf of Aden, and the western Indian Ocean (Casson 1989: 94). For a full listing of uses of various Greek and Latin terms used to refer to the Red Sea region (and to which body/bodies of water they refer in each instance) see Sidebotham 1986: 182-8.

¹⁴ Nec pigebit totum cursum ab Aegypto exponere nunc primum certa notitia patescente (Pliny, NH 6.26).

By the time of Septimius Severus and Caracalla, we have even less evidence than in preceding periods, but the volume of the Eastern trade appears to have been declining. Writers in this era not only exhibit a much poorer understanding of the geography of the areas to the east of the empire, but their works also rely almost exclusively on information from much earlier sources, which suggests that they had fewer contemporary sources upon which to draw than their predecessors. This may indicate a decrease in the volume of Roman trade in the east, although it might also indicate that the trade continued, but was now handled by intermediaries rather than by Romans themselves. 15 Archaeological evidence, especially at the Red Sea ports, some of which seem to have been completely abandoned, others merely suffering a great decline of usage, supports the suggestion that Red Sea trade through Egypt's eastern deserts decreased after the reign of Marcus Aurelius. 16 This is admittedly sparse evidence from which to draw conclusions regarding the volume of the Red Sea trade, but it does stand to reason that Rome may have been unable to maintain control over the highly complex eastern trading network during the considerable chaos that characterized much of the third century – chaos which included civil wars, ¹⁷ a marked increase in banditry in Egypt, the steady debasement of the coinage, and inflation (which would have limited the ability of citizens to purchase luxury

¹⁵ See Sidebotham 1986: 162-4 for a full analysis of Severan-era literature concerning the Erythraean sea. ¹⁶ Nappo 2007: 237; Sidebotham 2002: 219.

¹⁷ A combination of factors is necessary to explain the decrease in trade levels at this time, because civil wars alone did not halt trade, even in the theatres of war themselves, as has been demonstrated by Millar (1984: 5).

goods).¹⁸ This trend began to be reversed in the late third and early fourth centuries, when the re-establishment of order, coupled with the re-introduction of a strong currency under Diocletian, made trade conditions favourable again.¹⁹

The Eastern trade flowed along two main lines: one down the eastern coast of Africa and the other, taking advantage of seasonal monsoons, to India. Writers describing the Eastern trade have had a tendency to focus on the Indian trade, a trend which extends back all the way to the writer of the *Periplus Maris Erythraei*, who devoted half of his work to the Indian trade, versus only one quarter to Arabia and East Africa, respectively. The larger profits which could be gained from trading with India, and the greater difficulty faced in sailing there, likely explain why the author of the *Periplus Maris Erythraei* chose to devote so much of his handbook to the trade of that region. In modern scholarship a similar focus on the Indian trade is a direct result of our sources' greater concern with trade in that region, coupled with better archaeological evidence for the Indian trade, as well as a general interest, shared by ancient and modern

¹⁸ Young 2001: 83-5. Rathbone suggests that any speculation about decreased volume of trade beginning in the late third century is "idle" until we have more data (2002: 182). For a detailed description of the debasement of Roman coinage from AD 193-274, see Harl 1996: 125-143.

¹⁹ For Diocletian's monetary reforms, see Erim et al. 1971: 171-7, Harl 1985: 263-70, and Haley 1989: 92. For the evidence of a fourth century renaissance of the Eastern trade, see Young 2001: 86-8. For an analysis of the archaeological evidence from Berenike which points to the same conclusion, see Sidebotham 2002: 219-20.

²⁰ There were also overland routes, controlled by the Arabians, which stretched as far as China. Some, such as Young (2001: 190-1), have stressed the role of these routes in providing alternative sources of silk, while others, such as Ball (2000:133-9), have downplayed their importance. Certainly the overland trade routes controlled by Arabia, along with direct trade with Arabia itself (largely for frankincense), meant that Arabia was an important trading partner. However, the trade with Arabia will be left out of the current examination of the Eastern trade for two reasons: 1) the well-established overland routes linking Arabia to the Mediterranean, which meant that it did not rely upon the Red Sea to bring goods to Rome, as did India and East Africa, and 2) because of the wealth of other studies dealing with Arabia (e.g. Bowersock 1983; Graf 1997; Matthews 1984). Thus "the Eastern trade" in this thesis will refer solely to the Red Sea trade with India and East Africa, and not Arabia.

authors alike, in this exotic and highly lucrative trading route. However, while the value of the goods from India would have been greater, the volume of goods may well have been less than the volume from East Africa, given that a trip down the coast was far less dangerous and financially burdensome than a voyage to India. Either way, goods from both India and East Africa would have flowed through Egypt on their way to Rome, so it will be useful to briefly outline both trade routes here.

Ships plying both the African and Indian routes began their journeys in one of Egypt's Red Sea ports, such as Berenike²¹ and Myos Hormos.²² Navigating the African route was fairly straightforward, as it simply involved following the coast southwards and making stops at the various ports – both major and minor – along the way.²³ The region immediately below Egypt was known as Barbaria, and it lacked a central ruler or any major ports, having instead a variety of local chieftains and several minor ports. Below Barbaria was the kingdom of the Hellenized king Zôskalês, with its capital at Adulis; while this was by far the largest port on the African route, it was little more than a large village, with the nearest city (Koloê) being three days' journey inland, and the capital of Axômitês being a full five days away. After leaving the relatively cosmopolitan Adulis and the rest of the kingdom of Zôskalês, traders crossed into "Far-Side" Barbaria which contained a series of largely homogenous ports, beginning with Avalitês at the narrowest

²¹ Berenike has, for many years now, been the site of thorough scientific excavations, which have greatly improved our understanding of trading settlements on Egypt's eastern coast. See, for instance, Sidebotham and Wendrich (ed.) 1994.

²² For a comparison of the advantages and disadvantages of these two ports, see Rathbone 2002: 180. ²³ The following description of the ports of the African route is based upon *Periplus* 1-16. For a good discussion of this route in modern scholarship, see Casson 1989: 20-1 and 285-9.

²⁴ τα περα<ν>. Periplus Maris Erythraei 7.4.

point between Africa proper and the Arabian peninsula, and ending with Opônê just south of the tip of Cape Caseyr. Following "Far-Side" Barbaria is the land of Azania which stretches all the way down the eastern coast of the continent. Azania, like the region immediately preceding it, is filled with a number of small ports, ²⁵ the southernmost of which, Rhapta, was located somewhere along the coastline, near modern Dar es Salaam, Tanzania.

Travelling to India was obviously much more difficult than travelling down the coast of Africa, as the large expanse of the Arabian Sea had to be crossed. But enterprising traders found an ingenious way to cross this great body of water, even despite the rudimentary state of nautical technology: by harnessing the power of the monsoons. Ships bound for India would sail out of the Red Sea, and then await the coming of the monsoons at the site of Kane in southern Arabia, and then they would ride the unusually powerful winds all the way to the subcontinent. This would be done via one of two routes: the northern route brought ships to the sites of Barbarikon and Barygaza, while the route to the south led to the ports of Muziris and Nelkynda at the southern tip of the peninsula.

²⁵ However, Azania, unlike "Far-Side" Barbaria, was ruled by Arabians, specifically the Sabaeans and Homerites (Casson 1989: 45-6).

²⁶ For the use of the monsoons and the Indian trade route, see *Periplus Maris Erythraei* 39, 49, 56, Casson 1989: 11-2, and Young 2001: 28-32. For an analysis of pre-Roman uses of the monsoons, including ancient debate about who first discovered their use, see Gryzbek 2002: 337-47, Tchernia 1997: 250-60, and Whittaker 2004: 152-3. Young successfully refutes the modern theory that the monsoons were first discovered by Arabians, who kept the knowledge to themselves so as to profit from a monopoly on the trade in cinnamon (2001: 20-1).

²⁷ This stopover would allow the traders an opportunity to purchase frankincense, which would be exchanged for Indian goods when the ship reached its final destination.

²⁸ Near modern Karachi (Pakistan) and Surat (India), respectively. The northern route was also travelled by Palmyrene traders (Young 2001: 140-3).

Both the African and the Indian routes offered unique and desirable goods for Roman markets, goods which could not be obtained locally, and thus fetched exorbitant prices in Rome. ³⁰ Africa was a source mainly for animal by-products such as ivory, tortoise shell, nautilus shell, and rhinoceros horn, as well as being a source of frankincense, myrrh, cassia, and slaves. India yielded a far greater variety of goods, including indigo, lapis lazuli, onyx, turquoise, ivory, cotton (both cloth and garments), tortoise shell, diamonds, pearls, sapphires, Chinese goods, and pepper. ³¹ In exchange for these exotic wares, Roman traders offered a diverse range of goods, including: Egyptian linens, olive oil, Italian wines, ³² metals such as brass and iron, glass stones, ³³ frankincense, silverware, and, of course, the gold and silver coinage whose export Pliny lamented. ³⁴

It is precisely that complaint by Pliny – that every year Romans spend no less than 100 million sesterces on eastern luxury goods - which suggests to us the enormous

²⁹ Muziris is particularly notable for the fact that there may have been a permanent Roman settlement at the site. Evidence for this theory comes from the existence of a Medieval map (the *Tabula Peutingeriana*), based upon an earlier Roman version, which labels one of the buildings at Muziris "*Templum Augusti*", a building which would presumably only be constructed by Roman citizens who were long-term residents of the area (Young 2001: 30).

³⁰ See *Periplus Maris Erythraei* for a port by port breakdown of the goods available to the Roman traders in both the African and Indian routes, as well as the goods the Romans offered in exchange.

³¹ It has even been suggested that the last of these, pepper, was one of the main reasons for trade with India. A large number of peppercorns have been found in the archaeological excavations at Berenike, which Cappers suggests is an indication that the amount of pepper brought to the site from India was so great that a considerable amount of waste could be generated without causing financial hardship for the traders (1998: 81). For a detailed description of all the archaeobotanical evidence of pepper at Berenike, see Cappers 2006: 114-7.

³² For a description of the various types of Mediterranean amphorae found on the Western coast of India, see Slane 1991: 204-15, Tomber 2008: 39-4, Will 1991: 151-56, and Will 2004: 433-40.

³³ Stern describes the archaeological evidence for Roman glass in India (1991: 115-21).

³⁴ For a summary of the main coin finds in India, see Cimino 1994: 135-140, Parker 2008: 177-8, Tomber 2008: 30-7, and Turner 1989.

volume of the Eastern trade.³⁵ However, the amount mentioned by Pliny was so enormous that it might seem deserving of considerable scepticism, especially given the obvious inclination to exaggerate numbers when complaining about dangerously high expenditures. Nonetheless, there is reason to believe that the trade existed at these levels. As noted by Miller, 100 million sesterces a year for the entire Eastern trade does not seem like an impossible number when considered alongside the fortunes of wealthy Romans, such as Narcissus, who had personal fortunes worth hundreds of millions of sesterces, and who presumably spent a great deal of that money buying luxuries from abroad.³⁶ If an individual such as Narcissus could have a personal fortune in excess of 400 million sesterces, then the entire value of an enormous trade network dealing in luxury goods could easily have reached 100 million.

In fact, an argument can be made that Pliny may actually have been underestimating the value of the Eastern trade. The Muziris Papyrus, or, more properly, P. Vindob. G. 40822, which dates to the mid-second century AD, records a contract drawn up regarding a trade ship returning from India, with one side outlining the value of the cargo, which is listed at just under seven million sesterces.³⁷ As Hopkins rightly notes, the enormous value of this single consignment illustrates how few ships would have to

³⁵ Pliny, *NH* 6.26.

³⁶ Miller 1969: 229.

³⁷ Col. 2, line 29. Casson (1990: 205 n.29) notes that the value of this consignment is nearly equal to the cost of constructing an aqueduct, demonstrating just how valuable these luxury goods were, a point which is further underscored by the fact that ships of even average size could have held several such cargos in their holds, meaning that the value of a single shipload of goods would have been enormous. While there is some disagreement surrounding the average size of Roman merchant ships – Casson (1971: 172; 1990: 205 n.25) suggests 340 tons would be standard for a Roman vessel undertaking the voyage to India, while Sidebotham (2011: 218) suggests that 75 tons would be a more reasonable figure – it is nonetheless clear that a Roman vessel returning from India could carry numerous consignments and that the overall value of its cargo would be astronomical.

complete the round trip in order to surpass the 100 million mark set out by Pliny. ³⁸ The tremendous amount of money expended upon the luxuries of the Eastern trade not only shows the economic importance of this trade to the Roman economy and the social significance of the imported goods, but also the great size and complexity of the network that would have been necessary to facilitate this trade.

Obviously such a vast transfer of goods to Rome from as far afield as modern Tanzania and India was a complicated enterprise. Indeed, a whole network of transporters and financers was needed in order to facilitate it, and it is this network, more specifically the part which operated in Egypt, transferring goods between the Red Sea and the Mediterranean, which will form the focus of this thesis.

Rome's Eastern trade is typically examined from the perspective of the state, and the effects – both economic and social – generated by the export of coinage and the influx of luxury goods. I will instead concentrate on the traders themselves, upon whom the Eastern trade depended. Traders landing in Egypt's Red Sea ports and transporting valuable cargoes through the deserts of Egypt faced a multitude of challenges, ranging from the physical danger presented by bandits to the exorbitant costs presented by land transport expenses and high customs tariffs. Despite these challenges, however, traders continued to ply the same routes for centuries. Clearly the incentives to participate in this trade outweighed the costs and perils, and there is a need to examine the potential profits that Eastern traders could hope to earn, and how these would have compared with the

³⁸ Hopkins 2002: 223. Strabo (*Geography* 2.5.12) suggests that 120 ships a year made the journey from Egypt to India, a number which, if accurate, would mean that the value of the Eastern trade would certainly have surpassed the 100 million sesterces annually.

expenses incurred and the dangers confronted, so that we can form a better understanding of the motivations of the Eastern traders.

This is a topic which has not been extensively addressed by modern scholarship, although a few important works deserve mention here. Sidebotham (1986) and Young (2001) both discuss traders within their general analyses of the Red Sea trade, while Adams (2007) provides a thorough examination of land transport in Roman Egypt which sheds light on technical aspects of traders' activities in the Egyptian deserts. Relevant scholarship has also been produced on traders in the wider Roman world: Patterson (1998) presents a broad analysis of Roman trade and traders, D'Arms (1981) examines at length the involvement of Romans of various social classes in commerce, a topic which is also examined by Pleket (1983) with regard to the Greek half of the Empire, and Whittaker (1983) investigates late Roman traders and the links between them and their Medieval counterparts.

Chapter 1 will examine the identities of the traders, both in terms of ethnicity and social standing, as well as examining the evidence for direct imperial involvement in the Red Sea trade. The taxes and customs duties imposed upon the traders will be investigated in chapter 2, while chapter 3 will analyse customs abuses by unscrupulous customs agents, including the forms of abuses which occurred, legislative attempts to curb the abuses, and how often such abuses would have occurred in Roman Egypt. Finally, chapter 4 will attempt to examine the profits which traders could hope to earn from the Eastern commerce, in light of transportation expenses, customs dues, customs abuses, and other costs.

Analysing the profits, costs, and overall economic prospects for these traders will allow us to better understand the way in which Rome's trade networks functioned, and provide insight into how this important sector of the economy affected the financial state of the Empire as a whole.

Chapter 1: Identity of the Traders

The first question that must be addressed in an analysis of the traders in Rome's Eastern commerce is one of basic identity: who were the traders? Of course, this question is much easier to pose than it is to answer. Beyond the obvious difficulties inherent in determining the identities of individual traders, there is also the underlying ambiguity in the question itself; it cannot be answered, or even investigated, without clarifying which aspects of the traders' identities are of interest. This chapter will examine three aspects of the identities of the traders: ethnicity, social rank, and links to the imperial family.

1.1: Gender and Ethnicity

Although it may be tempting to assume that the majority of the traders operating in Egypt were of Egyptian origin, it is necessary to examine all of the evidence for the backgrounds of these traders. Evidence from ostraca and graffiti indicates that participants in the Eastern trade were a diverse group – including Egyptians, Romans, Greeks, Arabs, and Indians³⁹ – although not all groups were involved to the same degree. Indians, for instance, seem to have played a very minimal role in transporting goods to Egypt, even though they clearly possessed the technical knowledge required to do so.⁴⁰

³⁹ Ball 2000:123.

⁴⁰ Whittaker (2004: 153) strongly refutes both the suggestion that the Indian shipbuilders lacked the expertise to construct ocean-going vessels and the suggestion that they were prevented from crossing the Arabian Sea because they did not know how to take advantage of the monsoons; rejecting the former on the basis of Greek and Indian testimony for Indian shipbuilding expertise, as well as the fact that even much smaller, more fragile ships could have made the journey from India to Arabia and back by travelling along the coast. He therefore suggests that religious taboos, or, more likely, political resistance in Arabia and Egypt, prevented Indian traders from playing a more active role in transporting goods between India and the Roman Empire. However, as noted by Casson (1989: 34, 34 n.53), there is some evidence that some of the Eastern trade was in the hands of Indian traders, although it seems to have been a very small fraction of the overall volume of trade. For a discussion of the epigraphic evidence for Indian traders in Egypt, see Salomon 1991.

It appears, therefore, that the Eastern trade was handled predominantly by inhabitants of the Roman Empire. It was not, however, the domain of only one sector of the population: not only were members of various ethnic and linguistic backgrounds involved, but also Roman citizens and non-citizens alike, and even women. ⁴¹ This last category is perhaps the most surprising and will be addressed first.

There is not a great deal of evidence for the involvement of women in the Eastern trade. In fact, we only have evidence for two women: Aelia Isidora and Aelia Olympias. Nonetheless, it is striking that women, however few of them, were involved in this commerce. Furthermore, these women were not only agents in the Eastern trade, ⁴² but also *emporoi* and *naukleroi* (merchants and shippers, respectively), their numerous roles suggesting that they were highly involved in the trade. While it is, of course, impossible to ascertain how many other women may have played similar roles in this trade, Isidora and Olympias demonstrate that women could be active participants in the Eastern trade, a fact which is all too easy to overlook given that the overwhelming majority of traders are male.

While Isidora and Olympias are notable for their gender, their citizenship is altogether unsurprising. Both bear a Roman *nomen*, suggesting that they were likely

⁴¹ Members of a variety of different social strata were involved in this trade as well, but they will be addressed later in the chapter.

⁴² Isidora is mentioned as such in the Petrie Ostraca (O. Petrie 244, 257).

⁴³ SEG VIII.703. The women present themselves with these titles in a dedicatory inscription, suggesting that, from their perspective, they conveyed a sense of wealth or accomplishment, the latter perhaps strengthened by the (presumably) small number of women who could claim such titles. Furthermore, as noted by Young, referring to themselves as merchants and shipowners suggests that Isidora and Olympias derived the majority of their income from these activities, and therefore that their incomes from trading were sufficient to support their fairly prominent social positions (2001: 59).

Roman citizens⁴⁴ (although it is also possible that they were Junian Latins⁴⁵), which would have placed them among the substantial ranks of Roman citizens known to have participated in the Eastern trade.⁴⁶ Given that most of these Roman traders had Greek cognomina,⁴⁷ they are presumably of Greek or Eastern origin, suggesting that they were likely Egyptian residents. Since Roman citizenship was only available to Egyptians dwelling in Alexandria,⁴⁸ it follows that they would have been Alexandrians. This is consistent with Strabo, who implies that Alexandrian merchants were responsible for a large proportion of the trade in Egypt and the Arabian Gulf.⁴⁹ The predominance of Alexandrian traders should come as no surprise, given that the city was famous in antiquity for its wealth, which it earned on the basis of its advantageous geographic location and the enormous array of trade goods that entered the city from exotic locations outside the Empire.⁵⁰

While Alexandrian merchants were certainly active in the Red Sea trade, they by no means had a monopoly on this lucrative commerce, nor did Roman citizens. Much of the transportation of goods within Egypt was in the hands of small transport firms, the best known of which is that of the family of Nikanor, known from the Petrie Ostraca (the

⁴⁴ Their *nomen* suggests that they, or their ancestors, may have gained citizenship under Hadrian, although a later date is also plausible.

⁴⁵ For a general discussion of Junian Latins, see Weaver 1972: 97-9.

⁴⁶ Many are mentioned in the Nikanor archive and Coptos amphorae plugs (Sidebotham 1986: 88). Additional examples, can be found in Pliny's *Natural History* and the *Historia Augusta*. For details, see Rathbone 2002: 187 and Young 2001: 60.

⁴⁷ Sidebotham 1986: 88.

⁴⁸ Milne 1924: 133.

⁴⁹ *Geography* 2.5.12.

⁵⁰ See Dio Chrysostom 32.36 for an ancient description of the trading power of Alexandria. For a modern analysis of the wealth of Alexandria and its prominent role in trade, see Bernand 1966: 258-62, 277-8. For the wide dispersion of Alexandrian merchants, see Johnson 1959: 344 and 344 n.11.

so-called "archive of Nikanor" ⁵¹). All of the members of the Nikanor firm, with the exception of Aelia Isidora (mentioned above), were, in the words of Sidebotham, "Hellenized Egyptians, Egyptianized Greeks or Graeco-Egyptians", and they resided in Coptos. ⁵² The existence of a sizeable transportation firm whose members were not Roman citizens (nor even Alexandrians) indicates that participation in the Eastern segment was not limited to a narrow sector of the population. Indeed the author of the *Periplus Maris Erythraei* was himself Graeco-Egyptian, writing in koinê and making reference to "the trees we have in Egypt" and giving the Egyptian, rather than Roman, months, ⁵³ indicating that Graeco-Egyptian merchants carried goods along the entire length of the Eastern trading network, all the way to India, and were not limited to Egypt.

Besides Roman citizens and Graeco-Egyptians, there are two other groups which were involved in the Eastern trade of which mention must be made: Nabataeans and Palmyrenes. Evidence for the former in particular is scant, but evidence from graffiti and inscriptions along the trade routes through the Egyptian deserts suggests that Nabataean cameleers were employed to transport goods from one end of Egypt to the other. There is

⁵¹ *O. Petr.* 220-304, with *O. Brüss. Berl.* 7 and *O. Bodl.* II 1969-71. For a discussion of the role of the Nikanor family as transporters of goods rather than being traders themselves and the importance of the archive for our understanding of the mechanics of transporting goods across Egypt, see Adams 2007: 221-5. Fuks (1984: 312-21) and Sidebotham (1986: 83-92) provide a thorough discussion of the individuals who traded with the family of Nikanor, and Appendix 2 contains a list of the individuals named in the archive. ⁵² Sidebotham 1986: 83. The three categories given by Sidebotham would be highly difficult to differentiate in practice, and regardless would be of little use for present purposes, so within this thesis, all three will be encompassed by the term "Graeco-Egyptians". Rathbone, on the basis of dedicatory inscriptions, suggests that most small-scale merchants and transporters along the Egyptian desert routes were residents of Coptos, a site whose importance has already been discussed in the introduction (2002: 189).

⁵³ Trees: *Periplus Maris Erythraei* 29:9.27. Months: *Periplus Maris Erythraei* 6:3.6, 14:5.8, 24:8.12, 39:13.13, 49:16.32, 56:18:29. Casson 1989: 7-8.

no evidence that Nabataeans formed transportation firms like that of Nikanor, nor that they were involved in financing the exchange of goods in any way.⁵⁴

The evidence for Palmyrene traders operating in Egypt indicates that they were wealthier and engaged in a wider variety of commercial activities than the Nabataeans. In fact, they appear to have formed some sort of traders' guild based out of Coptos. While nothing is known about the functioning of this group, it seems relatively certain that they, like the other traders and trading firms in Coptos, were engaged in transporting goods between the Red Sea ports and the Mediterranean. Given that trading associations were common in Palmyra, we might assume that the Palmyrene group in Coptos functioned similarly.

Clearly the traders in Rome's Eastern trade were a diverse group: Roman citizens from Alexandria, Graeco-Egyptians, Nabataeans, Palmyrenes, and even women, were all involved to varying degrees. The diversity of the traders was not limited to their ethnic backgrounds, but also extended to social status, as members of all social strata participated in this highly lucrative trading network.

1.2: Social Standing

Condemnations of Roman elites engaging in trade are common throughout Roman literature.⁵⁷ Philostratus records that Apollonius of Tyana reduced a young Spartan noble

⁵⁴ Sidebotham 1986: 94-5.

⁵⁵ See Young (2001: 80-1) for discussion of a dedication to a Palmyrene merchant erected by fellow Palmyrene Red Sea merchants (*I. Portes* 103).

⁵⁶ Sidebotham 1986: 95-6.

⁵⁷ This should not, however, be taken to mean that a desire for profits was on its own undesirable. Even the staunchly conservative Cato the Elder viewed the accumulation of wealth and the increasing of one's

to tears by shaming him for turning his back on his family's tradition of agriculture in order to become a trader,⁵⁸ and Cicero likewise argues that small-scale trade should be considered disgraceful.⁵⁹ Livy provides evidence for the legal manifestation of these values, indicating that, as early as 218/9 BC, laws were enacted to prevent senators from engaging in seaborne commerce, which was seen as undignified.⁶⁰ Numerous additional examples of these sentiments could be produced, but these three provide sufficient evidence of the prevalence of these beliefs throughout Roman literature of various genres and periods.⁶¹ But how much does this represent a popular literary theme and cultural ideal rather than an economic reality? In other words, what evidence do we have for elite involvement in the Eastern trade?

Before the Red Sea commerce can be assessed in this regard, it is first necessary to examine the participation of Roman elites in trade more generally. Despite the admonishments of numerous authors that Roman nobles should not engage in trade, as well as the existence of laws banning senators from being involved in such activities, we have considerable evidence that they did so nonetheless. In fact, the very existence of laws prohibiting the senators from participating in commercial activities suggests that they did just that. Had senators not already been engaged in trading, then there would

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patrimony as an act worthy of admiration (Plutarch *Cat. Mai.* 21.8). It was not wealth itself, but rather certain means of acquiring it, which our aristocratic sources protested.

⁵⁸ Philostratus, V. Ap. 4.32.

⁵⁹ Cicero does, however, suggest that large-scale trade can be acceptable, providing that goods are imported from all over (*undique*) and sold without misrepresentation (*sine vanitate*), and that the trader ultimately uses his wealth to make the transition from trading to agriculture, the most fitting occupation for a free man (*de Officiis* 1.151).

⁶⁰ Livy 21.63.3-4.

⁶¹ For a fuller (although by no means complete) listing of Roman sources, including some from the Christian era, expressing this sentiment, see F. Meijer and O. Von Nijf (ed.) 1992: 15-20. For a more thorough discussion of some of these sources, see D'Arms 1981: 152-4.

have been no need to ban them from doing so. ⁶² This suggests that the reality fell short of the ideal, in much the same way as conservative outcry at the proliferation of foreign luxuries at Rome failed to curb the desire for eastern luxuries among the elites. ⁶³

Literary sources provide further evidence for elite involvement in trade. Tacitus disparagingly records that Gaius Gracchus, having been sent into exile alongside his father, supported himself by "petty trading". 64 While Tacitus' depiction of trading activities of Gracchus conforms to standard anti-commercial elite prejudices, elsewhere in the same work we have reference to another trader from the elite class, one who is mentioned not with disdain but with admiration; L. Volusius Saturninus, a senator who held several important posts under Augustus and Tiberius, was noted by Tacitus for having great wealth, which he had acquired by honourable means. 65 Based on that brief literary reference alone we would assume that "honourable means" would not have included trade. However, D'Arms, collecting various literary and epigraphical references, has noted that a significant proportion of the wealth accumulated by his father seems to have been derived from commerce. 66 This not only indicates that Roman elites participated in trading endeavours, but also that gaining wealth through commercial activities was only presented in a negative light when the conduct of the man was being called into question for other reasons.

⁶² D'Arms 1981: 33.

⁶³ See the introduction for an outline of complaints regarding the amount of money spent on foreign luxury goods, as well as the increasing volume of the Eastern trade.

⁶⁴ Sordidas merces: Tacitus Annales 4.13.2. This was a common term employed by Roman authors wishing to discredit commerce that was either small in scale or whose participants were of questionable character (D'Arms 1977: 160).

⁶⁵ Annales 13.30.2.

⁶⁶ D'Arms 1981: 69-70.

While Roman elites certainly profited from trade, it is important to remain cognizant of the fact that they typically would not have transported the goods themselves. The per class Romans typically acted as financiers in commercial transactions, rather than being physically involved in the trade itself. There are numerous ways in which wealthy Romans could accomplish this, but before these can be examined it is first necessary to examine the language the Romans used to describe traders.

As Whittaker has demonstrated, one way to differentiate these men was between those *qui negotia habent* and those *qui negotiantur*, of which the former were typically of higher social status than the latter. The distinction appears to be between those who sold their agricultural surpluses for profit (*qui negotia habent*) and those who were not landowners, but were engaged solely in entrepreneurial trading activities (*qui negotiantur*), ⁶⁸ and it was viewed as important enough to eventually be enshrined in law. ⁶⁹

It should come as no surprise that Roman elites, who were from their earliest existence a landed aristocracy, were not eager to condemn those seeking profits by bringing their own excess produce to the market, as all of our sources on Roman farming have a common interest in profitability. Instead it was profiting from trading the goods of others which was viewed in a negative light. But even this fails to encompass the distinctions made between the numerous duties carried out by the various men involved in trade; to understand these distinctions it is necessary to examine the terms used to

⁶⁷ Whittaker 1988: 49.

⁶⁸ Whittaker 1988: 58. See also D'Arms 1981: 24 for the usage of the term *negotium exercere*, which seems to have been roughly equivalent to *negotium habere*.

⁶⁹ Love 1991: 156: Whittaker 1983:173.

describe these duties and what these can tell us about the social standing of the men performing these tasks.

Mercatores were merchants who travelled the trade routes along with their goods and were physically present at the markets where they were sold, precisely the type of activities which were considered wholly unsuitable for men of the senatorial class. Thus *mercatores*, as well as *navicularii*, who were merely shippers, were men outside the ranks of Rome's elites – municipal and provincial notables, and freedmen – not senators or even equestrians. *Negotiatores*, on the other hand, were involved in a variety of commercial activities, and were not limited to transporting goods to the market. *Ill Importantly they also involved themselves in banking and financing, activities which are fitting for wealthier individuals, which is consistent with the higher social rank, namely the equestrian order, typically associated with *negotiatores*. *Ill Importantly they also involved themselves in banking and financing activities which are

Alcock, examining distribution patterns in the eastern half of the Roman Empire, has demonstrated that *naukleroi*, *emporoi*, and *negotiatores* operated in trading endeavours large and small, all across the region. As was the case in the west, *naukleroi* and *emporoi* in the east typically were not members of the highest social classes, but were rather men of moderate or even low social status. *Negotiatores* once again appear to be

⁷⁰ D'Arms 1981: 24. Pleket notes that, in the Greek part of the Roman Empire, *naukleroi* could even be slaves, supporting the suggestion that *navicularii* were typically men of very low status (1983: 137).

⁷¹ Some, such as Love (1991: 156), fail to distinguish between *mercatores* and *negotiatores*, although it seems clear that the ancients themselves did draw a distinction between the two, even if the duties of *negotiatores* did often encompass those of *mercatores*.

⁷² D'Arms 1981: 25. Drawing upon analogies from Hanseatic cities, Pleket demonstrates that shippers often attempted to become merchants, but merchants never attempted to become shippers (1983: 138), providing comparative evidence for the higher social status (and wealth) achieved by *negotiatores* compared to that of *mercatores*.

⁷³ Alcock 2007: 691. *Naukleroi* and *emporoi* are, of course, the Greek equivalents to *navicularii* and *mercatores*, terms which were used in the Latin west.

wealthier and higher in social status than other groups involved in trade, although none of the eastern *negotiatores* seem to have been able to match the enormous wealth of some of their western counterparts.⁷⁴

Regardless of which portion of the Empire they inhabited, members of the elite wishing to profit from trade, but not wanting to personally transport and sell the goods themselves, had several options. One possibility, which is addressed below, was to be involved merely as a financier and to lend money for a trading venture. Another alternative was to participate in trade indirectly, using freedmen as intermediaries. Continuing financial interactions, and even obligations, between a patron and his ex-slave are well-attested, 75 and such an arrangement would, of course, enable a senator to evade the negative associations arising from direct participation in trade.

However, the involvement of freedmen in trading activities is a difficult issue. It is clear that freedmen were often involved in trade and transport, and that some even managed to acquire significant wealth through these activities. ⁷⁶ What is less clear is whether or not they were acting independently in these activities. Some, such as D'Arms, have suggested that freedmen who engaged in transport and exchange typically did so as agents of their former masters, 77 while others, including Garnsev and Love, have stressed the economic freedom that many freedmen and even slaves possessed in business

Alcock 2007: 691; Pleket 1983: 139-41.
 See, for instance, Fabre 1981: 267-356.

⁷⁶ D'Arms 1981: 102; Love 1991: 157; Weaver 1972: 282-96.

ventures.⁷⁸ Unfortunately, this is a debate which seems unlikely to ever be satisfactorily resolved with the current state of our evidence; perhaps it is best to simply acknowledge that freedmen could act either independently or as agents for their ex-masters, and to be mindful of both possibilities whenever examining their role in trade.

Of course, no analysis of the role of freedmen in commerce would be complete without at least a brief mention of Trimalchio, who in many ways is our best example of this phenomenon. Considerable debate surrounds the "typicality" of Trimalchio and how representative he is of freedmen in general, but such a question is likely impossible to answer with any certainty, and, regardless, it somewhat misses the point. Freedmen varied enormously in ethnicity, wealth, power, occupation, independence, and virtually any other category of comparison; to suggest that any one man (fictional or not) could be representative of such a diverse group is inherently absurd. The usefulness of Petronius' description of the business ventures of Trimalchio, therefore, lies not in furnishing us with an archetypical representative of a class of freedmen traders, but rather in providing

⁷⁸ Garnsey 1983: 129; Love 1991: 159. The archive of the Sulpicii, a set of waxed tablets from Pompeii dating to the early first century AD, sheds some light on the various possible interactions between freedmen and their former masters in business endeavours (for a critical edition of the archive, see Camodeca 1999). Consider Cinnamus and Faustus, two members of the firm whose transactions are recorded in the archive; Cinnamus was Faustus' freedman, and while Faustus twice acts as *procurator* for his former slave (*TPSulp* 72, 74), most of the time the two act as partners, and on one occasion Faustus actually acts as an agent on behalf of Cinnamus (*TPSulp* 48), indicating that the business relationship between a freedman and his former master was quite complex and could vary according to the situation (Lintott 2002: 556).

Trimalchio is a fictional, comic character whose statements and actions must be viewed with considerable scepticism. Nonetheless, if the work is examined holistically, rather than focusing on specific facts or figures within the account, it can be a valuable resource. For a thorough analysis of the realism of the "life" of Trimalchio, see Veyne 1961.

⁸⁰ D'Arms 1981: 97-120; Finley 1975: 36; Love 1991: 160-5.

an example of the sorts of commercial activities in which freedmen engaged, allowing us to form a fuller picture of the economic landscape of Rome's trading network.

So, what, then, can Trimalchio reveal about the trading activities of freedmen? Chiefly, he demonstrates the great wealth that traders can accumulate. Now, of course, the actual figures that Trimalchio cites should not necessarily be trusted.⁸¹ Nor do we have to assume that Trimalchio's wealth was built in commerce and only afterwards converted into landed estates; in fact, D'Arms has demonstrated that such interpretations are completely unsupported by the text itself. 82 What is clear, however, is that Trimalchio was involved in trade on a large scale, and that this brought him considerable wealth. To be sure, he did not become wealthy through commerce, having inherited the fortune of a senator, 83 but he engaged in trade in order to increase his wealth. While it is unnecessary, and probably unwise as well, to assume that many freedmen achieved the unbelievable affluence of Trimalchio, his decision to use trade as a means to augment his wealth suggests that commerce was viewed as an opportunity for rapidly acquiring large profits. Given that the humour in the Satyricon comes from the exaggerated portrayal of various aspects of Roman society, it seems reasonable to assume that it was relatively common for freedmen to attempt to increase their wealth through trade, an assumption which is supported by several authors who mention that seaborne commerce was popular with

⁸¹ For instance, his assertion that he merely shrugged off the loss of 30 million sesterces when his ships were all destroyed and then promptly replaced them, and turned a profit of 10 million on a single voyage seems worthy of considerable scepticism, to say the least (*Satyricon* 76).

⁸² D'Arms 1981: 100-1.

⁸³ Satyricon 76.

Roman wealth-seekers. ⁸⁴ Thus it seems that the opportunities to profit from trade were attractive to members of all social classes.

Having briefly outlined, in general terms, the involvement of various social classes in trade in the Roman world, the social standing of participants in the Eastern trade can now be examined. Naturally social standing is often difficult to determine, particularly with the fragmentary nature of our evidence for the Eastern trade, but nevertheless it seems that, as in the rest of the Empire, individuals from all social strata were involved.

The participation of Roman citizens in the Eastern trade has already been noted, and since Egyptians could only gain Roman citizenship after first having gained Alexandrian citizenship, it seems that provincial notables played a role in the trade. Some of these were quite wealthy and high-ranking, such as Marcus Julius Alexander, ⁸⁵ an affluent Jewish Alexandrian who held Roman citizenship. Marcus was apparently the brother of Tiberius Julius Alexander, who held several prominent positions in the Roman army and administration of Judaea and Egypt, and Marcus himself was married to Berenice, a daughter of Herod Agrippa I, King of Judaea. ⁸⁶ Clearly, Marcus was an important man from a powerful family; while the status of the majority of the traders in the Red Sea trade cannot be determined to the same degree as that of Marcus Julius

 ⁸⁴ Juvenal 14.276-7; Pliny, *NH* 2.118; Seneca, *Epistulae* 119.5. For a brief analysis, see D'Arms 1981: 8-9.
 ⁸⁵ O. Petr. nos. 252, 266, 267, 271, 282.

⁸⁶ Josephus, *AJ* 19.277 for the marriage of Marcus and Berenice. For a brief outline of the career of Tiberius, see Sidebotham 1986: 84.

Alexander, he at the very least demonstrates that members of Egypt's elite, and of the equestrian order, were involved in trade.⁸⁷

What is perhaps more interesting, is the potential for connections between Marcus' business activities and his family's political posts. Tiberius' tenure as *Epistrategos* of the Thebaid coincided with the established dates for Marcus' trading endeavours in adjacent regions of Egypt. Now, we have no evidence whatsoever that there was any connection between the political and commercial activities of the two brothers: all we have are overlapping dates. Nevertheless, this does suggest the tantalizing possibility that Marcus would have utilized his brother's political power to aid his trading ventures in some way. Moreover, Josephus records that their father served as *alabarch* at Alexandria. While some debate surrounds the meaning of the term, it has been generally agreed that it should be equated with *arabarch*, a customs officer operating in the Eastern Desert. If this identification is accepted, then it further strengthens the possibility that a political post, this time one with direct influence on the Eastern trade, albeit without overlap with the known dates of Marcus' trading operation, could have been exploited to the benefit of a family member's business interests.

Regardless of whether or not Marcus Julius Alexander benefitted from the political posts held by his family, he nevertheless demonstrates that wealthy, prominent

⁸⁷ Young 2001: 60.

⁸⁸ AJ 18.159-60, 18.259, 19.276, 20.100. For further discussion of the family's commercial and political activities, see Burkhalter-Arce 1999: 41-4.

⁸⁹ Sidebotham 1986: 85. Young (2001: 66-8) provides a general discussion of the position of *arabarch*, while Burkhalter-Arce (1999: 44-54) provides a more detailed analysis of the post. The role of the *arabarch* in the collection of customs duties will be further discussed in chapter 2.

⁹⁰ It has suggested that this indicates that "[t]here was no modern concern about conflicts of interest between private enterprise and public duties" (Rathbone 2002: 188).

individuals were involved in the trade. Further evidence for the involvement of highranking Romans in the Eastern trade can be found in literature. For instance, the *Historia* Augusta mentions that Firmus, an imperial pretender who seized Egypt in AD 273, gained part of his wealth from shipping goods between Egypt and India. 91 The *Historia Augusta*, of course, is often unreliable, yet, as Young has convincingly argued, while the veracity of many of the stories in the work may be questioned, they undoubtedly must have all seemed plausible to the audience, and thus it seems logical to conclude that it was entirely feasible for a man of Firmus' stature to have gained a substantial proportion of his wealth from the Eastern trade. 92

A final (potential) instance of a literary reference to the involvement of a member of Rome's elite in the Eastern trade comes from Pliny's *Natural History*, which mentions a freedman of Annius Plocamus (a publicanus who was responsible for collecting the Red Sea taxes) was carried off by a gale while sailing around Arabia, 93 a route which presumably would only have been travelled for the sake of engaging in the Eastern trade. Young and others suggest that his voyage around Arabia and his involvement in the Red Sea trade was on behalf of his master, 94 although we have no evidence indicating whether that was indeed the case. While it is unclear whether the unnamed sailor was operating independently or on behalf of Annius, and thus whether or not he provides evidence of elite involvement in the Eastern trade, he does provide evidence of the involvement of another group: freedmen.

⁹¹ *HA* Quadr. Tyr. 3.3. Young 2001: 60.

⁹⁴ Young 2001: 60. Also, Meredith 1953: 38-40.

The involvement of freedmen, both imperial and otherwise, in the Red Sea trade is attested by the appearance of their names in the Nikanor archive. ⁹⁵ However, as has already been mentioned, it is very difficult to determine whether freedmen involved in trade were operating independently or as agents for their former masters. That some authors have suggested that the freedmen who engaged in transport and trade were mere agents has already been discussed and need not be repeated here; ⁹⁶ with respect to the Eastern trade, the assumption that the freedmen who were involved were always agents of wealthier men seems to be the result of the great value of the trade. This direct connection between the value of the trade and the wealth of the participants was made explicit by Adams, who concluded that, given the enormous value of the Eastern trade, it "surely was the preserve of the exceptionally wealthy". ⁹⁷ Participation (and profit-making) in the Red Sea trade was not, however, limited to the rich, as will be demonstrated below.

A variation of the suggestion that Eastern trade was controlled by the wealthiest members of society is presented by Casson, who argues that the while the East African trade would have been open to traders of even modest means, the Indian trade, because of the enormous amounts of capital required, would have been limited to "large-scale merchants" who "had the backing of wealthy Roman financiers, even members of the royal family". ⁹⁸ But even this more moderate claim is not supported by the available

⁹⁵ Non-imperial: *O. Petr.* nos. 252, 275, 276. Imperial: *O. Petr.* nos. 237, 238, 239, 247, 258, 290. Imperial freedmen will be examined more extensively below, as part of the investigation of the evidence for direct imperial involvement in the Eastern trade.

⁹⁶ See above, page 20. For an analysis of freedmen acting as business agents throughout the Empire, see Aubert 1994. For a general discussion of imperial freedmen, see Millar 1977: 69-83.

⁹⁷ Adams 2007: 230.

⁹⁸ Casson 1989: 35.

evidence, and has been successfully refuted by Young. 99 The Muziris Papyrus, a loan agreement financing a shipment of goods from India, demonstrates that the traders responsible for transporting goods from India to Alexandria did not have to finance the journey themselves, but could instead have relied on a loan from another party, which would have been paid back once the goods reached their destination. 100 Furthermore, we have evidence for a Ptolemaic loan agreement in which five men, four of whom were soldiers and therefore presumably would not have been exceptionally wealthy, financed an Eastern trading expedition, ¹⁰¹ and if we assume that similar arrangements were made in the Roman period (which seems reasonable given that the Romans largely maintained the Ptolemaic framework for the Eastern trade ¹⁰²), then the cost of financing trade with the East could have been spread out over several financiers. Additionally, the loan agreement outlined in the Muziris Papyrus only establishes a loan for one of the many consignments aboard the ship, ¹⁰³ meaning that the number of men profiting from a single voyage would have been very large. All of this demonstrates that even the trade with India, the most hazardous and expensive trading route in the Eastern commerce, was open to investors of various degrees of wealth, and not solely the richest members of society. 104

The transporters, like the investors, in this trade seem to represent a cross-section of the population. As has already been discussed, Roman citizens, some of considerable

⁹⁹ Young 2001: 55-8.

¹⁰⁰ *P. Vindob.* G 40822.

¹⁰¹ SB 7169.

¹⁰² See above, page 1.

¹⁰³ See above, page 9 n.36.

¹⁰⁴ For an analysis of the various methods of financing trading expeditions in the Roman world, see Morley 2007: 587-8.

wealth, such as Aelia Isidora and Aelia Olympias, as well as Graeco-Egyptians, were engaged in transporting goods across Egypt. Some of those responsible for this transport, such as individual muleteers, would have been of low social rank, while others, in particular those such as Nikanor who were the heads of large trading firms, would presumably have been able to acquire significant wealth and at least moderate social status, although, unfortunately, we do not have any evidence regarding their social ranks. ¹⁰⁵

Clearly, the Eastern trade, like trade throughout the rest of the Empire, involved members of all social ranks, from poor, low-status transporters up to wealthy, elite financiers. The only question which remains is one which has generated considerable debate: whether or not direct involvement in the Eastern trade extended all the way up to the emperor.

1.3: Imperial Involvement

Modern scholars remain divided over whether or not the Roman emperors, or members of the imperial family, directly participated in or profited from the Eastern trade. The disagreement stems from the fact that there is no direct evidence of direct imperial involvement, and that the indirect evidence, while highly suggestive, remains far from conclusive.

Perhaps the most compelling argument for the emperors being actively engaged in the Red Sea trade is the presence of imperial freedmen in the trade. Sidebotham, the

¹⁰⁵ As Adams notes, the ostraca which comprise the Nikanor archive were intended merely as temporary receipts, and thus lack detailed information about the transporters, or even the names or titles of the customs agents (2007: 226).

strongest proponent of imperial commercial interests in the Eastern trade, argues that the presence of the names of a few imperial freedmen in some of the ostraca from the Nicanor archive, ¹⁰⁶ as well as on a pair of amphora plugs from one of the Red Sea ports, demonstrates imperial involvement in the Eastern trade. ¹⁰⁷ However, there is simply no firm evidence that those freedmen acted as agents of the emperor in the Red Sea trade. As has been mentioned several times now, freedmen frequently engaged in commercial activities of their own accord, and not simply on behalf of their ex-masters. But what is even more important is that there is not necessarily any evidence that the freedmen were actually involved in the Eastern trade in any capacity.

The ostraca containing the names of imperial freedmen do not refer to the shipment of luxury goods, but instead mention small amounts of food and drink, leading Casson to suggest that the freedmen involved were not agents engaging in the Eastern trade, but rather "the commissary clerk[s] of some local government office accepting supplies for the feeding of the staff". Young, agreeing with Casson's interpretation, proceeds to speculate that imperial freedmen may have been involved in collecting taxes or administering passes along the roads of the Eastern Deserts, although he admits that these conjectures likewise cannot be proven on the basis of the available evidence. ¹⁰⁹

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¹⁰⁶ O. Petr. 237, 238, 239, 247: Άνίκητος Κομμούνου Τιβερίου Καίσαρος Σεβαστοῦ; 258: Θεου και ή Ήλιου Γαίου Καίσαρος Σεβαστοῦ Γερμανικοῦ (of course, it is also possible that this may represent epithets of Caligula rather than the names of his freedmen or slaves); 290: Τίβεριος Κλαύδιος Επαφρόδειτους.

¹⁰⁷ Sidebotham 1986: 89-91, 136-8.

¹⁰⁸ Casson 1980: 38 n.74.

¹⁰⁹ Young 2001: 61.

In addition to the presence of imperial freedmen in the records of transport receipts of the Eastern Desert, some authors point to extensive state investment in infrastructure as evidence of direct imperial interest in the Red Sea trade. Both Adams and Sidebotham argue that the vast sums of money spent on building and maintaining roads, ports, stations, and military activity in the Eastern Deserts are more plausibly justified as attempts to facilitate trade and protect imperial investment in the Eastern trade, with Adams suggesting that it "cannot be explained [solely] by the state's interest in taxation". However, that argument simply does not hold up to scrutiny. Given the high levels of taxation on goods from the Eastern trade, and the enormous value of the trade as recorded by Pliny, taxation of the luxury goods being transported through Egypt would have been quite lucrative for the Roman state. Furthermore, imperial investment in infrastructure projects in the Eastern Deserts can also be explained in other ways, such as the fact that they serviced quarries and mines which were imperially owned. 113

A final argument for imperial involvement in the Eastern trade relies not upon actual evidence, but instead upon logic, suggesting that the Emperors were likely to have participated in the Eastern trade because it was so lucrative, and they would not have

¹¹⁰ Adams 2007: 234. Sidebotham 1986: 51 for the argument that the presence of a fort at the port of Myos Hormos indicates that commercial interests in the Egyptian deserts received military protection.

¹¹¹ Adams 2007: 234.

¹¹² For taxation, see chapter 2.

¹¹³ Casson 1989: 38.

wanted to limit their profits to the 25% tax which was levied on eastern luxury goods. ¹¹⁴ While this argument offers no proof of imperial involvement, it is fairly compelling nonetheless. But the logic works in both directions, and it is in some ways more informative to suggest that the involvement of so many diverse groups – various ethnicities, all social strata, and perhaps even the emperor himself – is a clear demonstration of the great profits which could be earned through the Eastern trade, profits which will be discussed in the final chapter.

¹¹⁴ Adams 2007: 234. Rathbone, however, presents precisely the opposite argument, suggesting that, since the state coffers already received 25% dues from the Eastern trade, there was no reason for the emperor to undertake the risks inherent in direct involvement in trade across the Red Sea (2002: 188).

Chapter 2: Transport Taxes and Customs Dues

While the traders in the Eastern commerce varied greatly in social standing, wealth, and ethnic background, they were all equally subject to the numerous taxes which were levied on Eastern goods landing in Egypt and travelling towards Rome. The tax burden faced by goods travelling from the Red Sea to the Mediterranean was quite large, although there was not a single tax, but rather a series of customs dues, taxes, and other fees, which were administered in different areas of the province, were paid by different groups of traders, and presented very different costs.

2.1: The tetarte

By far the most expensive customs duty, and therefore the one which receives the most attention, was the *tetarte*. This tax, which was levied on all goods entering Egypt via the Red Sea ports, was set at 25% of the value of the goods. This means that the *tetarte* was the highest import tariff in the Roman Empire; in fact, most import and export duties in the ancient world were significantly lower: most Greek states and Roman provinces used rates of 2 - 2.5%. The few established instances of higher tariff rates were typically either still significantly lower than the *tetarte* (e.g. Roman Sicily at 5%), temporary war-time measures (e.g. Athens' 10% duty on goods travelling through the

¹¹⁵ It was also levied on Eastern goods arriving in the Red Sea ports of Arabia, as will be discussed below (see page 33ff).

¹¹⁶ P. Vindob. G 40822 recto, col. 2, 7-9; Casson 1989: 36; de Laet 1975: 306-11; Rathbone 2002: 183-4; Sidebotham 1986: 105; Wallace 1969: 256-8; Young 2001: 52.

¹¹⁷ Jones 1974: 171 and 171 n.100.

Bosphorus), or both (e.g. Athens' imposition of a 5% duty on seaborne trade within its empire). 118

There is some evidence, however, that trade with regions outside the Empire was always subject to high tariffs. Goods entering Illyricum, as mentioned above, faced a 12.5% duty. Furthermore, Strabo states that the import duties on goods from Britain brought in a lot of revenue, so much so that, if the island was conquered and tribute was extracted instead of customs duties, the amount of income received by the *fiscus* would actually decrease, which Jones suggests indicates tariffs similar in size to the *tetarte*. Thus, while we do not have firm figures on the tariff rates levied on external frontiers for most of the Empire, the available evidence suggests that perhaps the *tetarte* was simply representative of the high rate of import duties levied on all goods entering the Empire, rather than a unique feature of the Eastern trade.

On the other hand, the *tetarte* may have been adopted from the Ptolemies, who levied import duties ranging from 20 - 50 % at Alexandria, ¹²¹ with a standard rate of 25% being imposed in the Roman period. It has also been suggested that the variable *ad valorem* duties charged at Alexandria may not have applied to goods from the Red Sea,

¹¹⁸ Roman Sicily: Frank 1959: 151; Jones 1974: 171 n.100. For the same rate being charged in Africa, see De Laet 1975: 271. Bosphorus: Xenophon, *Hell*enica 1.1.22, 4.8.27 and 31; Diodorus Siculus 13.64.2. Athens' empire: Thucydides 7.28.4. The one Roman province (besides Egypt) which does not seem to follow this pattern is Illyricum, which seems to have had, at least at one point, a 12.5% import duty. For an outline of the considerable debate surrounding the Illyrian *octava* (including whether it was a sales tax or customs duty) see Jones 1974: 172 n. 104. For an argument against the existence of a customs rate of 12.5% for Illyricum, see Ørsted (1985: 260).

¹¹⁹ Strabo, *Geography* 4.5.3; Jones 1974: 171 n.171.

¹²⁰ For a contrasting viewpoint, see Wallace (1969: 256-7), who presents an argument for the uniqueness of Egypt and offers reasons why the import duties there may have been higher than those in the rest of the Empire.

¹²¹ Jones 1974: 171; Sidebotham 1986: 5-6; Wallace 1969: 256.

which instead may have faced a flat 25% duty like that imposed in the Roman period. ¹²² Indeed, given that 25% taxes in other sectors of the economy (e.g. the tax in kind exacted on fisherman) were quite common under the Ptolemies, ¹²³ it would not be unreasonable to suggest that the Romans inherited the *tetarte* directly from their Hellenistic predecessors.

Regardless of whether it corresponded with import duties charged on the other frontiers of the Empire or whether it was inherited from the Ptolemies, the *tetarte* clearly represents an expensive cost faced by those importing goods from the East, so expensive, in fact, that some scholars proposed that the rate was actually much less than 25%. These proposals, which were based on an emendation of the text of the *Periplus Maris Erythraei*, were proven untenable upon the discovery of the Muziris Papyrus in 1985, which also refers to payment of the *tetarte* for Eastern goods, clearly demonstrating that the original reading of the *Periplus* (that is to say the 25% duty) was correct. 124

While the *tetarte* would have been a great expense for traders, it may not have been levied on all imports from the East. Unfortunately we do not have any record of all the goods subject to this tax, or whether any were exempt, ¹²⁵ but, as noted above, not all goods traded in the Eastern commerce were purely "luxury" items. ¹²⁶ Young argues that goods which were used primarily for religious functions, such as incense, may have been exempt from the *tetarte*. He makes this argument based on the fact that these items seem

¹²² Wallace 1969: 256.

¹²³ Wallace 1969: 257.

¹²⁴ Indeed, many authors, such as Wallace, rejected the emendation even before the discovery of the Muziris Papyrus, on the grounds that it required an unnecessary emendation of the text (1969: 256-7).

Presumably a notice board, similar to the one Philostratus describes Apollonius encountering when he entered Mesopotamia (V. Ap. 1.20.1), would have been posted in the customshouse listing the goods which were subject to duty.

¹²⁶ See above, page 1 n.1.

to have been viewed more as religious necessities than luxury goods, ¹²⁷ as well as the fact that Rome made no attempt to ensure that Arabian caravans – which presumably would have been carrying largely incense – paid the *tetarte*. ¹²⁸ However, that is purely speculation and there is no evidence (comparative or otherwise) to support Young's suggestion. Ultimately, all that can be concluded is that we lack sufficient evidence to state conclusively whether or not the *tetarte* was levied on goods of religious significance, so let us turn instead to its administration.

The *tetarte*, although possibly levied upon all goods landing in the Red Sea ports, was paid in Alexandria. Our best evidence for the process of collecting the *tetarte* comes from the Muziris Papyrus, ¹²⁹ which demonstrates that goods would be bonded in Koptos, and then sent on down the Nile to Alexandria, where the tax would be paid in kind. As Rathbone notes, the trader would still be liable for transporting the state's 25% share of the goods, ¹³⁰ which would have been no small expense, given the great cost of transport in ancient Egypt. ¹³¹ The importance of Koptos in the Eastern trade is made clear by Strabo, who calls it the "ἐμπόριον" for Eastern goods, ¹³² as well as the fact that the

¹²⁷ Young 2001: 16-17. For a discussion of the various Roman authors who mention frankincense and myrrh as commonplace items of religious usage among the upper class, and not as unusual luxury items, see Sidebotham 1986: 15.

¹²⁸ Young 2001: 208-9.

¹²⁹ P. Vindob. G 40822 recto, col. 2, 7-9. For the text of the Muziris Papyrus, along with translation and discussion, see Casson 1990.

¹³⁰ Rathbone 2002: 183-4.

¹³¹ For analysis of transit costs in Roman Egypt, see chapter 4.

¹³² Strabo, Geography 17.1.45.

Romans seem to have consolidated the routes from Myos Hormos and Berenike so that they both terminated at Koptos. ¹³³

The Roman state clearly had a strong interest in ensuring that all goods came through Koptos, presumably because it had a great stake in ensuring that all goods followed the proper customs procedure and paid the *tetarte*. Thus the consolidation of the roads from the ports, and then the bonding of goods in Koptos (the first city they would have reached that was large enough to serve as market for their goods) before sending them on to Alexandria. This process does, however, seem to prompt one question: why was the *tetarte* not simply levied at Koptos (which would have been much simpler from an administrative standpoint)? The answer here must surely lie in transport costs—having the goods bonded in Koptos and then shipped to Alexandria, rather than levying the *tetarte* at Koptos, would have saved the government substantial transportation costs, since the tax was paid in kind and the goods still had to be delivered to the capital, regardless of where the duty was levied.

The desire to ensure that no traders managed to avoid the *tetarte* may also have been the reason for the presence of a Roman customs officer at the port of Leuke Kome in Nabataea.¹³⁴ A Roman customs official at the port of Leuke Kome could have ensured

¹³³ Young 2001: 47. However, it should be noted as well, that the advantageous geographical position of Koptos made it a logical nexus between the Red Sea ports and Alexandria (Sidebotham 1986: 111).

¹³⁴ There remains some debate about whether the customs officer at Leuke Kome was Roman or Nabataean. Bowersock (1983: 70-1) and Casson (1989: 145) argue that the officer is Nabataean, while Sidebotham (1986: 106-7) suggests he could be either Nabataean or Roman. I am inclined, however, to agree with Young's interpretation that the customs officer must have been Roman (1997: 266-7), for otherwise we must assume either that: 1) a Nabataean official collected the *tetarte* on behalf of the Roman state, 2) the *tetarte* was levied twice on Eastern goods travelling through Leuke Kome en route to the Roman Empire (once at Leuke Kome to the Nabataean state, once to Rome upon entering the Empire), an enormous cost which no reasonable trader would have chosen, or 3) Rome did not levy the *tetarte* on Eastern goods

that goods destined for the Roman Empire paid the 25% duty levied upon all Eastern goods, regardless of their entry point into the Empire. Without such an official, many, if not all, traders would presumably have routed their shipments through Leuke Kome instead of one of the Egyptian desert ports so as to circumvent the *tetarte*. Thus, Rome may have stationed a centurion with a small force at Leuke Kome, despite the fact that it was not located in Roman territory, so as to ensure that the *tetarte* was levied upon all Eastern goods entering the Empire. ¹³⁵

Rome's clear desire to ensure that no one circumvented the payment of the *tetarte*, expressed by the placement of a Roman customs officer at a port outside of the Empire¹³⁶ and by the bonding of shipments between Koptos and Alexandria, has implications for the question of *why* the *tetarte* was implemented. Various suggestions have been offered for the high level of this particular customs duty. As has already been mentioned, the *tetarte* may simply be reflective of the generally high import duties charged across the Empire, ¹³⁷ but regardless of whether or not the *tetarte* was unique among import tariffs, the question of its purpose remains.

Two primary reasons are suggested for the high duty imposed upon Eastern goods, either to raise revenue or to discourage the purchase of luxury goods (and the

entering the Empire through Arabia (which seems unlikely given its great value to the treasury). For other examples of Roman tax collectors (and troops) in client states, see Sidebotham 1986: 107. Young 1997: 207-8.

¹³⁶ It should be noted that, while Leuke Kome was located outside of the Empire at the time of the writing of the Periplus Maris Erythraei, in which the presence of a customs officer at Leuke Kome is noted (*Periplus* 19), after AD 106 it would have been within the bounds of the Empire.

¹³⁷ See above, page 31.

attendant flow of wealth from Rome to the East) which Pliny, among others, lamented. 138 Of the two, the former seems to be a much more plausible explanation. Certainly the tetarte would have yielded significant profits for the treasury – 25% of goods from trading routes which had yearly profits totalling in the range of 100 million sesterces is a significant source of income. Young points out that if we accept Pliny's figure of 100 million sesterces as accurate (which I argued earlier that we should 139), then an income stream in the range of 25 million would be considerable given Suetonius' assertion that the tribute imposed upon the three provinces of Gaul after Caesar's conquests was 40 million. 140

Additionally, the fact that the Roman state built roads, ports, and caravan stations along the trade routes throughout Egypt suggests a desire to support (and profit from) the Eastern trade rather than to discourage it for fear of the dangers of excessive levels of luxury or an adverse balance of payments. 141 Furthermore, the state's eagerness to prevent anyone from evading the tetarte also suggests that ensuring that the continuation of payments to the treasury was a greater concern than the suppression of luxuries at Rome.

¹³⁸ Modern scholars arguing the former include Bang 2008: 213 and Veyne 1979: 211-2, while De Laet, for instance, argues the latter (1975: 309-10). Jones suggests that the main purpose of the tetarte was to raise revenue, but notes that this would not have prevented it from acting as a sumptuary law at the same time (1974: 171-2). For Roman authors lamenting the great expenditures on Eastern luxuries common among the upper class, see Pliny, NH 6.26, 12.41 and Tacitus, Annales 3.53.

¹³⁹ See above, pages 8-9.

Pliny, NH 12.41; Suetonius, Div. Jul. 25. Young also discusses the difficulty inherent in attempting to discern the income generated by the *tetarte* for the *fiscus* even if Pliny's figure is accepted. If, for instance, the figure refers to the final retail value of the goods after processing, then the treasury may have gained less than 25 million. On the other hand, if Pliny's figure for the cost of the Eastern trade only takes into consideration the amount of goods that were purchased with cash, then the value to the fiscus may well have been even greater than 25 million. Either way, imperial profits from the Eastern trade would have been quite significant (Young 2001: 210). Young 2001: 204.

Why, then, do our sources so lament the enormous amounts of money that Romans were spending on foreign luxury items? The answer lies in traditional Roman morality, which had a long-standing hatred of *luxuria*. Thus there arose a rich literary tradition of decrying the excessive *luxuria* among the population, especially when compared with the revered *mos maiorum*. Naturally the abundance of luxury goods brought into the Empire by the Eastern trade was the perfect fodder for this tradition; criticism of the desire for luxury goods from the Eastern trade even appears in poetry. Therefore it is in this context that the comments of Pliny and Tacitus should be viewed; they complain about the excessive amounts of money being spent on foreign luxuries, not because of a concern about the loss of a great amount of coinage or an adverse balance of payments, but because they are continuing the cultural and literary tradition of bemoaning the prevalence of *luxuria* among the members of the upper classes at Rome.

Of course, the *tetarte*, whatever the reason why it was levied, was not the only tax which was levied on traders in the Eastern commerce. In fact, once the goods were brought to Alexandria so that they could pay the *tetarte*, many of these goods then faced yet another charge: an export duty on goods leaving Alexandria for the rest of the

¹⁴² For a through overview of descriptions of *luxuria* (and its role in the decline of the Republic) in Roman literature, see Lintott 1972: 26-38. For an analysis of *luxuria* in Sallust, in whose works debt and *luxuria* are particularly prevalent, see Shaw 1975: 187-96.

¹⁴³ For instance, Statius, lamenting the death of the wife of a nobleman from Domitian's court, lavishes praise on her by stating that the riches of Babylon, Lydia, Arabia, China, or India would not be sufficient to corrupt her, and that she would rather die in poverty if that was what was necessary in order to preserve her honour (*Silvae* 5.1.60-3). Ovid similarly warns women against wearing gaudy Indian jewellery (*Ars Amatoria* 3.129-30). For a general analysis of the literary tradition of criticising luxury and the relationship between this tradition and Roman authors' treatment of the Eastern trade and its goods, see Parker 2002: 55-61 and Parker 2008: 165-71.

¹⁴⁴ Young 2001: 205-7.

Empire. 145 This second customs duty on exports, however, was likely paid by a different group of traders.

2.2: The Alexandrian Export Duty and Port Taxes

Once the goods arrived in Alexandria and the *tetarte* was paid, the trader was then free to do with them whatever he wished. While the trader could continue to transport the goods all the way to Rome (or elsewhere in the Empire), there are several reasons to believe that they were frequently sold in Alexandria. First of all, the transportation process, as was discussed above, ¹⁴⁶ was very fragmented, with different traders transporting the goods on different sections of the trading routes, and it seems unlikely that the same traders who brought the goods across the Egyptian deserts would also transport them across the Mediterranean. Furthermore, many goods would not have been ready for immediate shipment to their next destination, but would have instead have needed to be processed at Alexandria before they could be exported from the city. Given that Alexandria seems to have been an important center for manufacturing and industry, it seems reasonable to assume that many Eastern goods would have processed there before being transported to their final destination. ¹⁴⁷ Finally, many traders may have needed to sell their goods at Alexandria in order to acquire the capital necessary to pay back the loans which financed their trading expeditions to India. Presumably a large proportion of those trading with India needed to secure loans to finance their ventures, like the one

¹⁴⁵ Strabo, *Geography* 17.1.13; De Laet 1975: 311; Johnson 1959: 590-1; Miller 1969: 225.

¹⁴⁶ See Chapter 1 for details on the varying involvement of different groups of traders.

Young 2001: 53. For Alexandria as a site of processing for incense and textiles, see Pliny, *NH* 8.74, 12.32. For a general discussion of the processing of goods in Alexandria so as to increase their value, see McLaughlin 2010: 161-3.

outlined in the Muziris papyrus, and Casson persuasively argues, by analogy with a maritime loan recorded by Demosthenes, that the repayment terms likely required that the goods be sold in Alexandria in order to pay off the loan within the specified timeframe. Since these concerns would have affected most of the traders transporting Eastern goods into Alexandria, it is reasonable to assume that when those goods left the city, they would have been in the hands of a different set of traders.

This new group of traders, who did not have to pay the *tetarte* (but, of course, paid for it indirectly through the higher price of the goods), would then have been faced with a different tax, one for exporting those same goods – albeit perhaps manufactured versions of them – from the city. This would have provided another source of revenue for the state derived from taxing the goods of the Eastern trade before they left Egypt, but it would have fallen on a different group of traders. But before traders could reach Alexandria to pay the *tetarte* and the export tax, first they had to transport their goods through the Egyptian desert.

Traders faced a sequence of taxes at various locations as they transported their goods across Egypt, the first of which may have been levied as soon as they reached the shores of Egypt. While we have no direct evidence that ships using Egypt's Red Sea ports were taxed for using the harbours, the fact that a tax was levied on ships docking in ports elsewhere in Egypt suggests the practice may well have extended to the entire province. ¹⁴⁹ Indeed, given that such duties were typically imposed in order to finance the

¹⁴⁸ Casson 1990: 204-6.

¹⁴⁹ Sidebotham 1986: 105; Wallace 1969: 275. However, even if this practice did extend to the Red Sea ports, it likely did not present a great cost for the Eastern traders, as the little evidence we have suggests that

upkeep of the infrastructure (i.e. the harbour), it seems reasonable to assume that a tax was levied on all ships landing in the Red Sea ports. Nevertheless, regardless of whether or not shippers landing at Berenike or Myos Hormos were subject to a duty for use of the harbour, transporters moving goods from the port to Koptos, Alexandria, and, ultimately, the rest of the Empire had to face a series of duties, tariffs, and other charges (in addition to the great expense of the *tetarte*) as they made their way through Egypt.

2.3: The Koptos Tariff

Perhaps the best-known of these other taxes would be the so-called "Koptos Tariff". ¹⁵¹ This duty, collected by the *publicani* operating under the auspices of the *arabarch*, ¹⁵² which is not entirely understood, seems to have been imposed upon all users of the road between Coptos and the Red Sea ports. While transporters engaging in the Eastern trade would certainly have been subject to the Koptos Tariff, they would not have been the only ones: anyone travelling along the road, even as part of a funeral procession, would be subject to the tariff. The rate of the tariff varied according to whom it was imposed upon: it could be as low as five drachmae (for a guard or a sailor), or as high as 108 drachmae (for a prostitute). Although not mentioned in the text of the Koptos Tariff inscription itself, one group which would have been exempt from the tariff would be those who were engaged in official government business, such as those who transported

the harbour dues were charged at very low rates – in one instance the cost for docking three shiploads of goods at Syene for a month was only 2 drachmae, one obol (Wallace 1969: 275).

must be made in Koptos (Petrie 1896: 22).

To a description of some of the improvements to the infrastructure of the Egyptian deserts (of the sort that the Koptos Tariff would have helped to fund) in the reign of Trajan, see Sidebotham 1986: 154-5.

OGIS 674 = IGGR I. 1183. The name of the inscription comes both from its provenience (it was uncovered at Koptos by Petrie's exacavation) and its text, which mentions that the payment for the tariff

¹⁵² For a description of this position, see below, pages 43-5.

stone from the imperially owned quarries, ¹⁵³ and who, at least from the time of Hadrian, were exempt from the payment of customs duties and transit tolls. ¹⁵⁴

Even for transporters engaged in the Eastern trade, the costs of the Koptos Tariff would have varied significantly. Unlike standard customs duties, the Koptos Tariff was not charged on the goods themselves, but instead on the men, pack animals, and wagons using the road; this means that traders who were operating on a larger scale and carrying more goods (and therefore requiring more wagons and pack animals) would have faced higher costs. However, it should be noted that the Koptos Tariff, whose cost was determined by the number of people and vehicles, rather than the value of the goods, was advantageous for the Eastern traders, who were predominantly transporting low-bulk, high-value goods, while it would have posed a much greater obstacle for profitability for those who used the road to carry goods of lower value but greater size.

The Koptos Tariff seems to have been the fee charged to obtain a pass¹⁵⁶ which enabled the holder to travel along the road between Koptos and the Red Sea ports.

Comparisons have been drawn between the pass governed by the Koptos Tariff and that

¹⁵³ There were several imperial quarries in the Eastern deserts of Egypt, the most prominent of which were located at Mons Claudius and Mons Porphyrites. For a discussion of the transport of stone from (and supplies to) the quarries, see Adams 2007: 197-210.

Adams 2007: 68; *Dig.* 39.4.9.7-8 [Paul].

The tariff rate for people, as mentioned above, varied according to gender and occupation. The rate for a camel was two obols (one for a ticket and another for a seal for the ticket), the rate for a donkey was two obols, and the rate for a wagon was four drachmae. The rates for the pack animals seem quite low when compared with the Zarai Tariff, a Numidian customs duty posted in AD 202 (*CIL* VIII.4508, translation in Lewis and Reinhold 1967:146-7), which records a tariff rate of 1.5 denarii for each horse and mule; this difference can perhaps be explained by the different natures of the two tariffs, as the Zarai Tariff was a standard customs duty, while the Koptos Tariff, as discussed below, seems to have been a fee for a transit pass permitting travel along the roads of the Eastern desert.

¹⁵⁶ This pass was known as an ἀποστόλος or πρόσταγμα. Some authors have suggested that this pass originated in the Ptolemaic period, but regardless of its origins it was certainly in use in the Roman period (Wallace 1969: 275).

required for emigration from Egypt – although, of course, the former only permitted travel within the province itself – and it has been suggested that, at least in part, the two may have shared a purpose: to supervise and control movements within this strategically important Roman province. ¹⁵⁷

Supervision of intra-province travel may well have been one of the motives for the imposition of the Koptos Tariff, but it seems unlikely to have been the primary one. Instead it seems that the tariff was levied primarily to pay for the upkeep of the road, much in the same way that road tolls are used today. Thus the tariff is levied upon the users of the road helped to offset the costs of the road's maintenance (both for the road itself and the various stations ($\dot{\upsilon}\delta\varrho\epsilon\dot{\upsilon}\mu\alpha\tau\alpha$) along its route), and its revenues went to the military, which was responsible for ensuring that the desert road remained easily traversable. The costs of the road remained easily

Levying the tariff to cover the damage caused by each traveller is a plausible explanation for why, for instance, wagons faced a higher charge than donkeys, but it fails to explain why a helmsman paid more than a sailor for passage along the road, or why

¹⁵⁷ Sidebotham 1986: 80-1; Wallace 1969: 273. The desire to improve the supervision of the desert routes may also have been one of the reasons why the routes from Myos Hormos and Berenike were centered upon Koptos, as it would have made it much easier to supervise all traffic to and from the Red Sea ports (Young 2001: 50). Another way in which the Koptos Tariff may have served a regulatory purpose is in the tracking of goods; in the later Imperial period, and potentially earlier as well, the exportation of certain goods from the Empire was illegal, and the passes regulated by the Koptos Tariff may have enabled the government to take precautions against their export from the province (Sidebotham 1986: 81).

¹⁵⁸ Adams 2007: 133; Sidebotham 1986: 81; Wallace 1969: 274; Young 2001: 50.

¹⁵⁹ Given that the military was the beneficiary of the revenues from the Koptos Tariff, it is unsurprising that the inscription does not record a fee for military use of the roads. For that reason, and because, as mentioned above (see page 39), men travelling on state business were exempt from the payment of all forms of road tolls, it seems reasonable to suggest that the absence of a description of tax levels for soldiers on the incomplete inscription is indicative of the fact that they were not subject to the tax, and is not simply the result of the vagaries of preservation.

men and women paid different amounts. One suggested explanation is that the revenues from the Koptos Tariff were also used pay the guards who were stationed along the desert roads and who may have even accompanied caravans along the route, and that women were more difficult (and thus more expensive) to protect than men. However, this fails to explain why some men paid more than others, and, most strikingly, why prostitutes had to pay over five times the rate for other women. Surely prostitutes were not five times harder to protect than other women. Instead, the fee established for each group may have been chosen by determining what seemed to be the maximum feasible amount for that group. 160 Thus, an artisan could afford to pay more than a guard, and a prostitute could afford to pay more than an average woman, and in this way the tariff achieved the greatest possible revenue. 161 While this explanation is intuitively appealing at first glance, it fails to explain why women always pay significantly more than men (typically 2-4 times as much). Therefore perhaps a combination of the two explanations is appropriate: women were more expensive to protect, and thus paid more, while overall tariff levels were based upon each category's capacity to pay higher tariffs, rather than the difficulty of protecting them.

2.4: Other Taxes, Tolls, and Dues

The Koptos Tariff was certainly not the only cost which was faced by traders as they travelled through Egypt. Various other dues, both internal customs duties and transit tolls, would have been levied at numerous points along the journey from one end of Egypt

¹⁶⁰ Wallace 1969: 274.

¹⁶¹ Young (2001: 50).

to the other. While we lack the sort of detailed information about these duties that we have for the Koptos Tariff, it does seem that the other taxes faced by traders would have been much more straight-forward and uniform, rather than varying widely depending on the traveller's occupation, like the Koptos Tariff.

However, while these taxes may have been more uniform, not all traders would have had to pay all of them, as they would not have all taken exactly the same route through Egypt. But regardless of the specific route taken, all traders would have faced small customs dues for moving goods between various administrative districts in Egypt, ¹⁶² transit tolls, ¹⁶³ and, at least in some regions, a tax to support the guards along the desert routes. ¹⁶⁴ Another, less frequently discussed, tax which many traders would have had to pay, is that charged on animal ownership. In various areas of Egypt there is evidence for taxes on the ownership of both donkeys and camels, ¹⁶⁵ and considering that many traders would have owned their own pack animals, many of them must have paid these taxes (and even those traders who rented their animals from others would have paid

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While it is unclear whether or not Egypt's Eastern deserts constituted their own customs district, goods travelling from the Red Sea ports to Alexandria certainly would have been subject to intra-Egypt customs dues (Sidebotham 1986: 102-3). For instance, over a hundred customs receipts record a customs duty known as the $\lambda\iota\mu\dot{\eta}\nu$ Μέμφεως, which was levied on goods which passed through Memphis while moving between Upper and Lower Egypt (Sijpesteijn 1987: 22). For a general analysis of the $\lambda\iota\mu\dot{\eta}\nu$ Μέμφεως, as well as other import and export duties throughout Egypt, see Sijpesteijn 1987: 40-50.

For instance the παρόδιον, a transit toll whose exact nature is still unclear, was collected at Nome borders on goods travelling between the Delta and the Fayum, seemingly at a rate of 2 drachmae per camel. The παρόδιον, which is recorded in *P. Rein.* 42, *P. Lond.* II.318, and *P. Grenf.* II. 58, is described by Wallace (1969: 272-3).

¹⁶⁴ P. Grenf. II.50(a); BGU.IV.1088; P. Fay. 76; P. Teb. II.461. For discussion see Johnson 1959: 403 and Wallace 1969: 272-3.

¹⁶⁵ Camels: *BGU* I 199; *BGU* I 219; *BGU* II 654; *BGU* II 461; 521; *BGU* III 770; *BGU* XV 2542; *P. Bas.*12; *P. Coll. Youtie* I 40; *P. Grenf* II 48; *P. Hamb.* I 40; *P. Lond.* II 319; *P. Lond.* II 323; *P. Louvre* I 132; *SB* XIV 11710; *SPP* XXII 108; *SPP* XXII 155. Donkeys: *PO.* XII. 1457, *BGU*.1.213. For discussion of the taxes on both donkeys and camels, including possible explanations for the rarity of references to a tax on donkeys, see Adams 2007: 130-2, Johnson 1959: 405, and Wallace 1969: 91-3, 206.

this tax indirectly, in the form of higher rental rates). Similarly, at least in the Thebaid, there was also a tax on wagon ownership, which again many transporters in the Eastern trade would have paid. 166

One final form of taxation requires mention here – export duties on goods being shipped eastwards. Typically these taxes are ignored, in part because discussions of the Eastern trade tend to focus on the goods imported to Rome, rather than the goods which are exported to pay for them, and in part because we have so little evidence. Ostraca recovered at the Berenike clearly demonstrate that goods entering the Red Sea ports from elsewhere in Egypt were subject to customs dues, 167 and while some of these goods, such as the wine which was the primary item listed on the ostraca, may have been provisions for the town of Berenike or the ships' crews, presumably export goods would also have been subject to customs dues. We do not, however, have any evidence of the tariff rates these exported goods would have faced. ¹⁶⁸ Several authors have, quite reasonably, argued that export duties on goods in the Eastern trade would likely have been low to encourage the use of goods – such as linen and glasses, which were highly popular Egyptian commodities – rather than coinage to pay for imports, but while that hypothesis does seem logically sound, there is no actual evidence to support it. ¹⁶⁹ While, unfortunately, little else can be said about the export duties which would have been levied on goods

 $^{^{166}}$ Adams (2007: 68-9) and Wallace (1969: 206) provide analysis of the τέλος άμαξῶν, which is referenced in *WO* II 392, 395, 1054, 1057, and 1261.

¹⁶⁷ For a description of these ostraca, see Bagnall et al. 1999: 202-3.

¹⁶⁸ Wallace 1969: 257.

¹⁶⁹ Miller 1969: 225; Wallace 1969: 257.

leaving Egypt for points further east, they should not be overlooked as part of the overall tax burden faced by the traders.

2.5: Administration

Having examined the various forms of taxes to which Eastern traders in Egypt would have been subject, it is now necessary to examine the administration of those taxes. Overall control of the collection of taxes in the Red Sea region was the jurisdiction of the *praefectus montis Berenicidae*, an official who reported directly to the prefect of Egypt, and about whom we know very little. ¹⁷⁰ Below the *praefectus montis Berenicidae* was another administrator, one with whom Eastern traders would have had direct interaction: the *arabarch*. While we are better informed about the *arabarch* than we are about his superior, our understanding of the position is incomplete, and several questions remain, such as where the *arabarch* resided, whether or not the position was identical to that of the *alabarch*, ¹⁷¹ and even how many *arabarchs* there were. ¹⁷²

In all of our sources the term "arabarch" only appears once in the plural, ¹⁷³ but there are several reasons to suggest that more than one man may have held the post at any given time. Firstly, the references to the *arabarch* in the singular do not preclude the

¹⁷⁰ Adams 2007: 132; Sidebotham 1986: 102; Young 2001: 66-7.

¹⁷¹ Josephus records that Alexander, a wealthy and prominent Egyptian Jew, held the post of *alabarch*, a position for which we have no other evidence (*AJ* 18.159, 259; 19.276; 20.100). Given the similarity in spelling, the lack of any other reference to the position of *alabarch* in any of our sources, and the fact that when Josephus uses the term he does not provide any indication of what the position entailed, many authors have concluded that the terms "*alabarch*" and "*arabarch*" refer to the same position (Turner 1954: 54; Young 2001: 67). Burkhalter-Arce, who works under the assumption that the two terms are identical, offers a general overview of this position and the men who held it (1999: 41-54).

¹⁷² Since, as will be discussed below, all but one of our sources refer to the *arabarch* in the singular, that

^{1/2} Since, as will be discussed below, all but one of our sources refer to the *arabarch* in the singular, tha practice will be continued here, although it is important to bear in mind the possibility that there were multiple *arabarchs*.

¹⁷³ *Vindob*. G 40822 verso, col. 2, 11; Young 2001: 66.

possibility that there was more than one *arabarch*, they may simply refer to one of many.¹⁷⁴ Secondly, the *arabarch* seems to have had duties at both the Red Sea ports and Koptos, and one possible explanation for this is that different men served as *arabarchs* in different areas (although another possible answer for this seeming discrepancy is that the various duties of the *arabarch* in different locations were carried out by lower-level officials acting under his auspices).¹⁷⁵

What is clear, however, is that the arabarch was responsible for the collection of customs dues as well as certain other tolls in Egypt. The Muziris Papyrus records that the arabarch was responsible for removing small portions of the imported goods at the Red Sea ports as customs duty payment in kind, meaning that the arabarch would have been the first customs official with which Eastern traders would have dealt when landing in Egypt. In addition to these small initial import dues, the arabarch was also ultimately responsible for the administration of the Koptos Tariff, although it was actually levied by publicani. It has been suggested that the initial taxes levied by the arabarch at the Red Sea ports, which seem to have been charged at higher rates for goods which were less valuable on a cost-per-weight basis, may have been designed to help fund the maintenance of the desert roads and $\dot{v}\delta Q \varepsilon \dot{v} \mu \alpha \tau \alpha$. This is very similar to the purpose of

¹⁷⁴ Young 2001: 66-7.

¹⁷⁵ Young 2001: 68.

¹⁷⁶ Vindob. G 40822 verso, col. 2, 11.

¹⁷⁷ *Vindob.* G 40822 recto, col. 2, 11-15, 22-6. The rate of this duty seems to have ranged from 0.25% (the rate charged on imported ivory) to around 2.88% (the rate charged on imported fabric), although, of course, different rates may have been imposed upon other goods for which we have no record (Burkhalter-Arce 1999: 44-7; Casson 1990: 199; Young 2001: 66).

¹⁷⁸ Sidebotham 1986: 80-1; Young 2001: 67.

¹⁷⁹ Young 2001: 67.

the Koptos Tariff, which suggests that perhaps the *arabarch* was in charge of the various duties whose revenues were used to fund the upkeep of the infrastructure of the Egyptian deserts.

Unfortunately, unlike the Koptos Tariff, the administration of the *tetarte*, the largest, and consequently, the most important of the taxes on the Eastern trade, is unclear. None of our sources state to whom the *tetarte* was paid. Virtually our only evidence on the subject comes from Pliny, who relates that the *vectigal* of the Red Sea was farmed out to Annius Plocamus. While Pliny does not specify which tax is being farmed out, it seems likely that he is referring to the *tetarte*, as it was the major tax derived from activity on the Red Sea. Furthermore, Sidebotham suggests that the difficulties inherent in collecting the *tetarte* would have meant that it was more likely to have been farmed out to *publicani*, rather than administered directly by the government officials. Thus it seems that the *tetarte* was paid to *publicani*, rather than to the *arabarch*. Thus it seems

2.6: Conclusions

Clearly the traders in Rome's Eastern commerce faced a number of taxes and customs dues, which varied greatly with respect to their administration, rates, and function, and which taken as a whole presented a considerable tax burden for the traders.

¹⁸⁰ Pliny, *NH* 6.24.

¹⁸¹ Young 2001: 69.

¹⁸² Sidebotham 1986: 144.

¹⁸³ Burkhalter-Arce suggests that the *tetarte* would have been farmed out to the same men who served as *arabarch*, given that the great wealth that these men possessed would have allowed them to successfully bid for the right to collect the *tetarte*, and that collecting the *tetarte* would have enabled them to continue to increase their wealth (1999: 46-7). This, however, is not a particularly compelling argument, as there is no real evidence to suggest that the *arabarch* (nor any of the men who had previously held the position) was in any way connected with the collection of the *tetarte*

These myriad taxes would have presented many difficulties in terms of both cost and bureaucracy to traders operating at any stage of the transport chain – from the Red Sea to the Mediterranean – as nearly every aspect of the transportation process was taxed in one way or another. The great value of the Eastern goods, however, allowed traders to manage the great costs of the cumulative tax burden, and it even allowed them to cope with the hidden costs from the darker side of taxation: extortion and other abuses by customs officials.

Chapter 3: Customs Abuses

Throughout the course of their journeys across Egypt, traders would have been stopped repeatedly by customs agents, whom they had to pay in order to be able to continue along their way. However, not all of the charges traders faced at the hands of customs agents were created equal: some, such as road tolls, went to local governments; others, such as the *tetarte*, were destined for the imperial *fiscus*; and still others were pocketed by the customs agents themselves. This final group of charges was illegal, but not – as we shall see – necessarily uncommon; it comprises the various ways in which customs agents could supplement their income by exacting more money from traders while still obtaining the dues required by the state.

This chapter will examine these extra charges in order to gain perspective on their impact on Eastern traders, in terms of the forms these charges could take, the various ways in which the Roman state attempted to curb customs abuses (and whether or not these attempts were successful), and how frequently traders would have encountered customs abuses.

While modern scholars often give little thought to extortion and other forms of customs abuses (perhaps because it is a problem which (thankfully) is not common in the Western world today), ancient authors, on the other hand, were certainly familiar with the phenomenon. Indeed in the Graeco-Roman world the association between customs agents and unscrupulous behaviour was very strong, and the Romans' overall perception of customs agents, as far as it can be reconstructed, is quite negative. Pollux, in his *Onomasticon*, argues that a tax collector might equally be called – in addition to a whole

host of other pejorative terms – an oppressor, a thief, a brute, inhuman, or any of "the other vile terms you can find to apply to someone's character", while Ulpian, in the Digest, remarks that everyone is aware of the audacity and insolence of factions of *publicani*. ¹⁸⁴

In fact, customs abuses may even have been a larger problem than banditry for traders operating in Egypt (and, indeed, in the rest of the Empire as well). While banditry 185 and piracy, its maritime counterpart, 186 tend to dominate modern accounts of the dangers facing traders in the ancient world, the attention they receive is not necessarily commensurate with their importance to the lives and businesses of the Roman traders. Certainly, brigandage was a real concern to traders – it could be disastrous for profits or even deadly for the trader. 187 It is likely the violence involved in banditry which makes it so much more memorable for us and therefore causes it to comprise more of our conception of the dangers of trading, just as a few reports of violent crimes on the news today, can rapidly begin to seem like a crime wave: the extraordinary violence of the crimes causes them to remain in the forefront of our minds, and eventually we begin to

¹⁸⁴ Pollux, *Onomasticon* 9.30-1; *Dig.* 39.4.12 [Ulpian].

¹⁸⁵ "Banditry" and "brigandage" will be used according to their modern usage, rather than all of the various meaning encompassed by the Latin "*latrocinium*", which was not limited merely to what we today consider banditry, but instead had a definition so broad that it included "almost every kind of violent opposition to established authority" (Shaw 1984: 6).

¹⁸⁶ Here I will focus my attention on brigandage, but the same principles apply to piracy. We have little evidence of piracy on the Red Sea, but presumably it would have been a concern, at least in certain periods. For the possibility of the presence of a Roman fleet on the Red Sea (designed to protect trading ships from pirates) see Sidebotham 1986: 68-71.

¹⁸⁷ Evidently deaths at the hands of bandits were common enough that it eventually came to be recorded with the formulaic expression "*interfectus a latronibus*" on the tombstones of the victims (Shaw (1984: 10 n.25) catalogues 23 examples of this construction).

(irrationally) assume that the frequency with which we think about the crime is related to the frequency of its occurrences.

It appears, however, that banditry was a crime which was wide in scope, but not high in frequency. Shaw, examining the prevalence of banditry across the entire Empire, notes that banditry could affect nearly any aspect of Roman life; the legal codes include provisions for banditry in such diverse circumstances as marriage agreements, sales contracts, and dowry transfers, ¹⁸⁸ indicating that brigandage was a far-reaching problem, one whose victims were not limited solely to traders. But while banditry certainly *could* impact almost every avenue of Roman life, it is difficult to determine how often it actually did. Lewis, for instance, suggests that, while the problem of brigandage was never completely removed from Roman Egypt, the number of bandits was never very substantial. ¹⁸⁹ Periods of instability may well have created greater opportunities for brigandage, ¹⁹⁰ but for the duration of the height of the Eastern trade – from the reign of Augustus to that of Caracalla – the state (for the most part) would have retained sufficient control over the province to ensure that banditry did not reach unreasonable proportions.

But regardless of how frequently acts of banditry actually occurred, encounters with customs agents were certainly much more frequent, meaning that there were far more opportunities for customs abuses than for bandit attacks. While customs abuses would (for the most part) have been less dangerous than bandit attacks, they may have been no less detrimental to traders' profits, given the great number of customs agents that

¹⁸⁸ Shaw 1984: 8-9.

¹⁸⁹ Lewis 1983: 204.

¹⁹⁰ As, for instance, the civil wars in the 3rd century brought a breakdown of order that enabled brigandage to flourish in Egypt for their duration (Milne 1992: 62).

traders would have encountered on a regular basis and the various forms of extortion that they could face at the hands of those agents.

3.1: Forms of Customs Abuses

In the Roman Empire, Egypt was unique for the high level of bureaucracy which permeated virtually all aspects of life in the province, ¹⁹¹ including all forms of transportation (commercial or otherwise). ¹⁹² This meant that there were more opportunities for customs abuses, since there were more interactions between customs officials (as well as other administrators ¹⁹³) and traders. As was discussed in the previous chapter, transporting goods between the Red Sea and the Mediterranean required the payment of a vast array of tariffs, fees, and tolls, each one providing the opportunity for a customs agent to squeeze a bit of extra money from passing traders. Customs agents who did not feel compelled to adhere to the proper execution of their duties and were willing to increase their personal profits by unscrupulous means had many different options at their disposal.

Perhaps the most straightforward form of customs abuse, not to mention the easiest to implement and hardest to detect, would have been simple overestimation. Most customs dues in the Roman Empire were levied as a percentage of the value of the goods

¹⁹¹ This bureaucracy began under the Ptolemies and was adopted virtually in its entirety by Augustus when he conquered the region (Milne 1992: 120-1).

¹⁹² See Adams 2001: 172 for bureaucracy regarding the transport of stone from imperially owned quarries in the Egyptian deserts. For a detailed analysis of both state control of animals and animal requisitioning practices in Egypt, see Adams 2007: 118-155; in particular, see Adams 2007: 139-42 for evidence for abuses of animal requisitioning in Egypt.

¹⁹³ Of course, not all of the administrators with whom the traders had to interact were customs agents, just as not all of the fees that they had to pay were customs dues – there were also harbour fees, road tolls, etc.; nonetheless, for simplicity's sake, "customs agents" will be used as a generic term to refer to any and all Roman officials who had authority over traders operating in Egypt and "customs abuses" will refer to all forms of unscrupulous behaviour by these men, regardless of the actual dues that they were administering.

that were being transferred. This means that the amount of duty that was actually paid was dependent upon the subjective evaluation of the customs official on the spot: while the state set the percentage rate of the duty, it was up to the official to determine the total value of the cargo and, by extension, the amount of customs duty that the trader owed. As Bang notes, this would have afforded the customs agent a significant degree of freedom to consistently estimate the value of goods at the higher end of the price scale. ¹⁹⁴ By routinely overestimating the value of the cargoes under his supervision, a *publicanus* could easily raise his profits while still adhering to the letter of the law by continuing to charge the correct duty on all goods.

Overestimation, as mentioned above, would be very difficult to detect, both at the time it occurred and even more so now, and so it is unsurprising that we do not possess any actual evidence of its occurrence. Nevertheless, Bang's suggestion of overestimation of cargo values as a form of customs abuse does hold considerable intuitive appeal: it would have been simple to execute, profitable (especially if routinely applied to all traders¹⁹⁵), and, due to the subjective nature of value estimation, difficult for traders to prove and thus difficult to rectify. There is, however, one problem with this suggestion: it only works when customs duties were paid in cash.

When customs duties are paid in cash, then a customs agent could very well overestimate the value of the cargo and charge the trader more on that basis. But customs

¹⁹⁴ Bang 2008: 205.

¹⁹⁵ Indeed, if overestimation was in fact practiced by customs agents, it would likely have been practiced consistently (at least for goods of the same kind), not only because that would have increased the profits it generated, but also because consistent overestimation would have seemed simply to be the result of a subjective opinion, rather than appearing as though the customs agent was singling out a specific trader for higher rates, and thus would presumably have appeared more legitimate and aroused less suspicion.

duties in Egypt, notably including the *tetarte*, were paid in kind. ¹⁹⁶ Therefore overestimation could not really work, since the cash value of the goods never had to be estimated; 25% of a consignment of pepper was 25% of the load of pepper, regardless of whether it was worth 2 sesterces or 2 million. Of course, some other form of overestimation could still occur – say, taking 30% of the cargo rather than 25% – but this would involve the straightforward removal of more than the requisite amount of goods, rather than the more subtle approach of manipulating one's estimation of the value of the goods in order to increase profits.

Another potential form of customs abuse (and one which would be feasible whether the duty was paid in cash or in kind) would be for the customs agent to gradually introduce a whole series of extra charges that had to be paid in addition to the actual customs duty, with only the duty itself going to the state coffers and the rest lining the agent's own pockets. ¹⁹⁷ By "other charges", I do not mean other established forms of charges such as road tolls or harbour dues, but rather the addition of various administration charges which are either poorly defined, or for the execution of duties that are essential for the customs procedure (such as examination and interpretation dues) and thus seem as if they were added solely for the purpose of increasing revenue.

In one instance, as a first-century AD customs receipt reveals, so many different charges were added to a customs duty at the Memphis harbour that the total value of the charges actually exceeded the cost of the customs duty itself: over a dozen small charges

¹⁹⁶ See above, pages 30-36, for a discussion of the *tetarte*. Indeed, most taxes in Egypt were paid in kind (not just customs dues), so overestimation could not have been widespread in the province (Brunt 1990: 531; Duncan-Jones 1990: 189).

¹⁹⁷ Bang 2008: 205-6.

for fees such as "administration", "clerks", "examination", "affadavit", "receipt", "guard", "interpreter", and "libation" resulted in a total charge of 47 drachmae, compared to a charge of just 44 for the customs duty itself. Given the great value of these small charges when taken as a whole, coupled with the somewhat dubious justifications for the charges – which seem to overlap to a considerable degree (as with the charges for administration, clerks, and examination, for example) – it seems as though they may very well have been added by customs agents desirous of greater income, rather than actually having being introduced by the state.

It is, of course, difficult to determine whether particular charges were initiated by the state or by a customs agent, but the fact that, in AD 58, as part of his attempt to address frequent complaints about the excessive greed of tax collectors, Nero saw fit to issue an edict repealing all taxes "bearing names the *publicani* invented to cover their illegal exactions", ¹⁹⁹ indicates that it occurred fairly regularly. As Bang notes, these new charges would likely have been introduced gradually, so that it would be easier to convince traders to accept them, and so that customs agents could appeal to tradition to assert the legitimacy of a new charge (by indicating how long it had been in use). ²⁰⁰ However, what was perhaps more important than appeals to tradition in terms of convincing traders to accept the new charges was the simple fact that they had no

¹⁹⁸ *P. Oxy.* 1650, col. 1.

¹⁹⁹ Tacitus, Annales 13.51: quae alia exactionibus inlicitis nomina publicani invenerant.

²⁰⁰ Bang 2008: 205-6. See the preamble of the Palmyrene Tax Law (section 1a, translation in Matthews 1984) for customs dues exacted on the basis of convention and how this frequently led to disputes between traders and customs agents; in fact these disputes occurred with such regularity that the Palmyrene city council felt it necessary to publish the tariff and its regulations in 137 AD in an attempt to prevent such disputes in the future.

alternative; after all, they had to comply with the demands of customs agents if they wished to continue transporting their goods, thereby more or less putting them at the mercy of any new dues which customs agents decided to levy.²⁰¹

In addition to the rather subtle method of gradually implementing a host of additional charges, customs agents also had more direct means at their disposal. One such method would be the blatant confiscation of goods. Customs agents had the right to confiscate goods that were undeclared or misleadingly declared, ²⁰² and confiscated goods were then auctioned off. This system could, of course, be misused easily enough: a customs agent wrongfully declares that trader has broken the law, confiscates his property, and then auctions it off to the highest bidder, pocketing the proceeds.

Furthermore, the original trader could actually buy back his own merchandise at the auction, ²⁰³ and thus a customs agent could illegally seize a trader's cargo, and then force him to pay a ransom to get it back. While this would not, presumably, have been very common, since it would have been highly anomalous for a customs agent to routinely confiscate the cargos of passing traders and therefore would be liable to cause traders to seek alternate routes or cause higher-ranking officials to attempt to step in and curb the

²⁰¹ For a discussion of the difficulties that traders would have faced when attempting to find redress for the customs abuses they suffered, see below, pages 56-8.

²⁰² Asian Customs Law (MonEph.), lines 45-56; (Ps)-Quint., Declam. 359; P. Oxy. 36. Bang rightly notes that the establishment of stiff penalties for falsely declared goods was a boon for customs agents who wanted to take advantage of the considerable ambiguity that existed concerning what exactly constituted falsely declared goods (2008: 210 n.27). Of course, legitimate misunderstandings between traders and customs agents would also have occurred, as is humorously demonstrated when Apollonius, having been asked what he was exporting into Mesopotamia, declared "Prudence, Justice, Virtue, Temperance, Courage, Perseverance", and the customs agent mistakenly assumed that he was referring to slaves, rather than philosophical ideals (Philostratus, V. Ap. 1.20.1).

practice, confiscation could pose a serious cost for those traders who were forced to buy back their own cargos from a customs agent.

One of the reasons that customs agents could get away with these sorts of flagrant customs abuses is because they could use force and/or the threat of force to compel traders to comply with their demands. Customs officials, especially those who administered larger, more important tariffs would have had sizeable retinues of slaves which could have been used to enforce their will upon others, whether upon traders from whom they were attempting to extort extra money, or anyone else who considered reporting the agents' abusive practices. ²⁰⁴

In one instance of the latter, a guard in an Egyptian village received a severe beating from the local customs agents when he attempted to speak out against the illegal activities at the customs house. ²⁰⁵ And this is not the only recorded instance we have of extreme violence at the hands of tax collectors. Philo, writing under Tiberius, records that some Egyptian men, who were behind on their taxes, were so afraid of the punishment that they would face at the hands of the local tax collector that they skipped town rather than have to face their fate. Based on what happened next, it is clear that the men had good reason to be afraid: he tortured and killed their wives, children, parents, and other

See *Dig.* 39.4.1-39.4.3 for members of a tax farmer's *familia* using violence to enforce collection and otherwise acting on his behalf. *Dig.* 39.4.1.5 [*Ulpian*] defines a member of a tax farmer's *familia* in this context not just as one of the man's slaves, but as anyone working for him, whether slaves or freemen. Of course, just because a man had such powers, does not mean that he had to use them; individuals could always choose to remain within the scope of the law. Indeed, it should not be assumed that the opportunity for corruption and official abuses must inevitably lead to illegal behaviour. The police in Ptolemaic Egypt, for instance, despite having wide-ranging powers and ample opportunities for corruption, seem to have conducted their duties in a highly professional manner, rarely abusing their power (Bauschatz 2007).

205 *P. Amp.* 77.

relatives.²⁰⁶ While in this case the tax collector in question was not a customs agent, Philo's account demonstrates the sort of violence with which some tax collectors threatened the men from whom they collected. Paul records that illegal exactions which were accomplished through violence were liable to a greater financial penalty as well as severe criminal penalties, adding that the latter were established by the need for strong public discipline, suggesting that the government was keen to deal harshly with violent customs agents.²⁰⁷

3.2: Attempts to Curb Corruption

Given the many different forms of customs abuses and the extraordinary violence which could accompany those abuses, it is perhaps unsurprising that there were periodic attempts to curb corruption across the length of the empire. After all, while the emperors did, of course, have an interest in ensuring that their tax revenues continued to flow into the *fiscus*, excessive levels of customs abuses were not to their advantage; as Tiberius once famously stated, emperors wanted their sheep "shorn, not skinned". Frustrated, over-taxed traders and rich, corrupt customs agents would not have benefitted the *fiscus*, especially if abuses got so out of hand as to discourage traders from trading altogether.

Thus Nero, along with repealing the various small charges which customs agents had added on top of the proper customs duty, revived several laws governing customs agents in an attempt to curb abuses (and, of course, the fact that he was reviving these

²⁰⁶ Philo, *de specialibus legibus* 3.159-63. Harris places this passage in the general context of power in the Roman world, noting that lower level officials, such as customs agents, seem to have been more prone to violent actions than their higher-ranking counterparts (2010: 575).

²⁰⁷ *Dig.* 39.4.9.5 [*Paul*].

²⁰⁸ Cassius Dio 57.10.5; Suetonius, *Tib.* 32.2.

laws indicates that he was not the first to issue decrees against such abuses). ²⁰⁹ Furthermore, he decreed that the praetor, propraetor, or proconsul should give precedence to all cases against *publicani*, ²¹⁰ which surely was an attempt to expedite proceedings against these men in order to indicate the seriousness of the government's attempt to crack down on these offenses. Similarly, Ulpian records that "the extent of the audacity and insolence" of *publicani* prompted a praetor to issue a decree stating that if the *familia* of a customs agent was involved in theft or wrongful injury, then the customs agent himself was to be held accountable, ²¹¹ which presumably represents an attempt to suppress abuses of power by *publicani* by establishing that they are liable to punishment for illegal behaviour on the part of anyone in their employ. Moreover, the fact that the whole of book thirty-nine of the *Digest* is devoted to laws regarding tax farmers, many of which are emendations or clarifications of earlier laws and judgments which do not survive, clearly indicates that there was a large body of legislation devoted to attempting to limit the abusive practices of crooked tax farmers.

It seems, however, that imperial attempts to curb the corrupt practices of customs agents were largely ineffectual. When Tacitus notes that Nero had to re-establish several legal rulings regarding customs, he also explains that they had only been observed for a

²⁰⁹ Tacitus, *Annales* 13.51. Unfortunately we do not have any specific information about the laws he was reviving, except that they had only been in use for a brief time before being disregarded.
²¹⁰ Tacitus, *Annales* 13.51.

²¹¹ *Dig.* 39.4.12 [Ulpian]. Although this excerpt was placed in the *Digest* in the context of *publicani*, *vectigalia*, and confiscations, it was originally located in book 38 of Ulpian's *Edict*, which collected various edicts regarding theft, suggesting that some of the actions of customs officials were so blatantly illegal that they were regarded more as outright thefts than as customs abuses. See below, page 59, for the decision of some traders to charge customs agents with simple theft rather than the illegal exaction of goods.

short time before they were abandoned. 212 It seems reasonable to assume that the attempted re-establishment eventually met with the same fate: a short period of adherence, after which they were quickly disregarded and former practices were taken up again. Overall, Bang's assessment of the various attempts to curb customs abuses seems quite apt: "[o]ne cannot quite escape the impression that most were rather irregular, remote, ineffective and recommendatory in character". ²¹³ Given the obstacles that were faced by such attempts, their failures should not be cause for surprise.

Distance would be one such obstacle; Egypt was far from Rome, and it would be difficult for the emperor to assert direct control over an individual customs house, and impossible to assert control over all of them. Since customs agents would have been unsupervised while performing their duties, traders would have been responsible for getting justice for themselves by bringing the offending customs officer into court. This could not have been easy. Not only was there the obvious difficulty of a private citizen taking a publicanus to court, but there was also the financial dimension: it would have been quite expensive to prosecute his case before a court. ²¹⁴ Legal action would have presented even greater costs for traders, as they would have had to remain in the area for the length of the proceedings; this would have caused them significant financial

²¹² Tacitus, *Annales* 13.51.

²¹³ Bang 2008: 206. Well's assessment is equally bleak, suggesting that [e]xtortion by officials in Egypt was a centuries-old tradition" which the Roman emperors were unable to eradicate despite numerous attempts (1984: 157).
²¹⁴ Keenan 1975: 246.

hardships, since they made money by transporting goods from one point to another, not by staying in one place.²¹⁵

In addition, the need to translate both rescripts and court proceedings into the local language may have hindered (or indeed thwarted) traders' attempts to receive justice if they lacked fluency in Latin or Greek. ²¹⁶ Once the trader managed to get the customs agent into court, even assuming that no language barrier deterred him, he still faced a host of other problems. Chief among these would be proving that the customs agent actually abused his powers. This could prove quite difficult, as many customs abuses would have been far from clear-cut. As discussed earlier, customs abuses such as overestimation and unlawful confiscation were based on subjective evaluations such as the value of a cargo or what constituted falsely declared goods. These would be nearly impossible to prove, even if the trial was conducted impartially, which was far from a certainty. Customs collectors, particularly those willing to bend the law to increase their profits, would have been quite rich, and therefore could fairly easily have used bribery to achieve favourable judgments. 217 Of course, some traders would also have been rich enough to engage in bribery, but given their generally lower level of social status, coupled with the fact that they had less wealth and time to engage in such pursuits, they would presumably have been less successful at it than customs agents.

²¹⁵ The prefect of Egypt, in a mid-second century edict, notes that some customs agents would actually capitalize on traders' need to travel quickly by detaining those who were in a particular rush and forcing them to pay for a timely release (*P. Princ.* II, 20, col. 1).

²¹⁶ For the difficulties which could arise from the need for vernacular translations of legal regulations and court proceedings, see Keenan 1975: 247.

²¹⁷ See Hopkins (1980: 121) for a general discussion of this phenomenon throughout the provinces, including the fact that it probably served to ensure that the poor paid far more than their fair share of taxes.

Furthermore, the structure of the laws regarding customs abuses seems to have further favoured customs agents. If a trader attempted to bring a customs agent to court for misappropriation, the customs agent could simply, by law, return the illegally levied goods and avoid court altogether. Presumably this was intended to benefit traders, who could hope that a customs agent would be interested in avoiding legal proceedings and would thus relent and return the improperly acquired goods to the traders. However, the law may very well have had a very different effect than was desired: by including what was essentially an escape clause allowing customs agents to avoid any judicial action (and thus any punishment), the law would have allowed customs agents to abuse the customs system with impunity, with the knowledge that if a charge was brought against them, they had the option of simply returning the goods in question. This would have left the customs agent in exactly the same place as if he had followed proper customs procedure to the letter, that is to say, having levied the proper amount of duty from the cargo. Thus customs agents would have had little fear of punishment for any wrongdoing.

If a customs agent was, in fact, convicted in court of illegally exacting goods from a trader, he had to pay the trader twice the value of the goods.²²⁰ This may seem like a just punishment until one considers that the penalty for outright theft was to pay

²¹⁸ *Dig.* 39.4.1.4 [Ulpian].

²¹⁹ Bang (2008: 208-9) discusses how this provision would have allowed customs agents to act more unscrupulously than would otherwise have been feasible, as well as attempting to determine the latest point at which they, that is the customs agents, could return the goods and escape punishment.

Gaius indicates that the property being returned was included in the double damages, meaning that the penalty was actually only a single times the value of the property, since returning goods which were obtained illegally can hardly be considered a penalty (Dig. 39.4.5.1).

quadruple the value of the stolen goods. ²²¹ Despite the fact that certain forms of customs abuses (such as improper seizure of goods which allegedly were falsely declared) were virtually identical to simple theft, they only carried half the penalty. Evidently this incongruency rankled some traders enough that they chose to charge the offending customs agents with simple theft rather than a customs-related charge, 222 suggesting that the traders viewed some customs abuses as essentially equivalent with any other form of theft (though, of course, they may have been more interested in receiving a larger payout than abolishing the legal distinction between the two crimes).

3.3: Frequency of Customs Abuses

Customs abuses must have been common enough to warrant several attempts to suppress them with legislation, but how often should we assume such abuses actually occurred? Would they have been regular occurrences or relative rarities? Several ancient authors remark on the ubiquity of abuses by *publicani*, ²²³ or otherwise present uniformly negative views of these men, ²²⁴ suggesting that those who routinely dealt with *publicani* (such as traders) would have had to deal with fraudulent practices on a fairly regular basis, which is the viewpoint taken by many modern authors. ²²⁵ Sijpestein, on the other hand, suggests that customs agents may not have been nearly as uniformly bad as our

²²¹ Dig. 39.4.1.3 [Ulpian]. Paul (Dig. 39.4.9.5) records that the penalty for illegal exaction (if coupled with violence) was triple the value of the goods, a difference which Bang (2008: 208) suggests was an attempt to lessen the difference between the penalties for illegal exaction and simple theft, although it could just as easily represent a distinction between violent and non-violent forms of customs abuses instead.

²²² *Dig.* 39.4.1.4 [Ulpian]. ²²³ *Dig.* 39.4.12 [Ulpian].

²²⁴ Pollux, *Onomasticon* 9.30-1; Cicero, *ad Quintum Fratrem* 1.1.32-3; Livy 45.18. In the New Testament publicani receive a similarly negative treatment, being equated with sinners: Luke 5.27ff and 19.7, Mark 2.16, and Matthew 9.9ff.

²²⁵ See, for instance, Bang 2008: 205, Brunt 1975: 125, Harris 2010: 575, Hopkins 1978: 44, and Lewis 1954: 153.

sources depict them, excusing those customs abuses which did occur as the unavoidable result of human foibles, remarking that the fact "they misbehaved on occasion is only human". While Sijpestein is right to highlight the fact that many of our sources about *publicani* are overly hyperbolic and remind us that not all customs agents conformed to the negative stereotype, overall the evidence does seem to suggest that customs abuses would have been quite common occurrences.

Perhaps the main reason to assume that customs abuses were, in fact, common in Roman Egypt is the tax-collection system itself. Much of the tax collection in Egypt, including that for the *tetarte* and the Koptos Tariff, was farmed out to *publicani*, ²²⁷ a situation which would have made customs abuses systemic, rather than anomalous. ²²⁸ Since *publicani* had to bid for the taxing rights in advance, they needed to recoup not only the amount of their bid, but also their operating costs, interest on the money advanced to the government, as well as earning enough in profit to ensure that the whole endeavour was worthwhile. ²²⁹ Tax farming was not a form of liturgy, performed at private cost for the benefit of the state, but a commercial enterprise, and as such it should not be surprising that profit-driven customs agents were keen to wring as much money as

²²⁶ Sijpestein 1987: 91-2. Of course, this does beg the question of why human nature would lead to occasional, rather than consistent, customs abuses if such behaviour can be dismissed as "only human", but such debate is overly philosophical for present purposes and thus is best left to others.

This remained true even after the Roman government took over most toll collection in the Empire during the reign of Trajan (Sidebotham 1986: 177).

²²⁸ Bang 2008: 204-5.

²²⁹ Hopkins 1980: 122.

possible out of traders. After all, if a publicanus overbid for a tax-farming contract, he was more likely to extort the difference from his tax base than to suffer a loss himself. 230

There were, however, mitigating factors which would have limited the ability (or even desire) of customs agents to engage in high levels of fraudulent behaviour. For instance, traders would often have multiple options for which port to use or which route to take, and thus customs agents would have to be careful not to abuse their position to such a degree as to drive traders into the hands of a different customs agent (e.g. at Myos Hormos instead of Berenike) and lose out on the revenues which they would otherwise have earned. 231 More fundamentally, customs agents had to balance their own short- and long-term interests. While exacting as much money as possible from every trader would have been to their advantage in the short term, customs agents needed to be mindful of their long-term interests and ensure that they did not endanger the continuation of the region's commerce by overcharging traders to the extent that they risked running them out of business. 232 Thus customs agents were engaged in a balancing act, attempting to maximize the profits which they gained from traders while simultaneous ensuring that they did not do anything that would deter traders from returning and providing them with even greater profits.

3.4: Conclusions

Customs abuses ranged from the addition of supplementary charges to outright extortion, some of which involved violence on the part of the agent's familia, and none of

²³⁰ Hopkins 1978: 44. ²³¹ Bang 2008: 227.

²³² Bang 2008: 225.

which could be effectively suppressed by legislative attempts to curb corruption, meaning that customs abuses would have been a regular part of business for traders in the Eastern commerce, one which could be quite costly and at times even dangerous. Overall, minor customs abuses were presumably common, if not near-universal, in Roman Egypt, due to the nature of the tax-farming system, but serious abuses would have been much less common, as it would have been detrimental to the customs officials' own interests if serious abuses occurred too frequently.

Chapter 4: Costs and Profits of the Eastern Trade

Having examined the identity of the traders in the Eastern commerce, as well as the taxes, tolls, and customs abuses that they would have encountered while transporting their goods across Egypt, attention must now be given to the reason they engaged in trade - profits. As we have seen, traders faced a multitude of taxes and tolls, as well as being subject to the constant possibility of further expenses and difficulties arising from customs abuses. In addition to those costs and dangers (not to mention the dangers posed by bandits), even the very act of transporting the goods was quite unpleasant. Trade, much like any other form of travel in the ancient world, which was a slow, frustrating process, frequently eliciting "complaints over long delays, bumpy roads, and neverending nausea". 233 Furthermore, unlike other forms of travel, trade also involved the transportation of large, often unwieldy, cargos, rather than just personnel and their personal luggage, making it a much more difficult process.

Clearly working as an Eastern trader was not a glamorous or easy occupation. Yet we know that traders in the Eastern commerce represented a broad cross-section of the Roman population, including both men and women, citizens and non-citizens, freedmen and freeborn, elites and low-ranking individuals, and possibly even members of the imperial family. ²³⁴ The various difficulties inherent in the Eastern trade do not seem to have discouraged participation; in fact, as Sidebotham notes, the trade actually grew

²³³ Bang 2008: 131. For several problems and dangers that would have confronted travellers in Egypt, ranging from natural disasters to traffic accidents, see Adams 2001: 154-8.

234 See Chapter 1 for a detailed examination of the role of each of these groups in the Eastern trade.

despite "the problems, dangers, costs, and effort expended". 235 So why was there continued participation among so many groups, of such varied social status and wealth, in such a dangerous, costly, and difficult process? There can only be one answer: because it was profitable. This chapter will outline the various expenses of the Eastern trade, and, where possible, attempt to quantify the cost of each in order to provide a better understanding of the costs and profits of the Eastern trade.

4.1: The Muziris Papyrus: Evidence for the Value of an Individual Consignment from India

As we have just seen, the Eastern trade was obviously profitable for the traders involved; otherwise they would not have chosen to engage in such a difficult, dangerous, and costly enterprise. Pliny suggests that the Empire lost a hundred million sesterces a year because of the Eastern trade, ²³⁶ clearly indicating that the overall value of the trade was enormous, and demonstrating that there was a great deal of money to be made from participation in the trade. But how would the great value of the Eastern trade break down on an individual level? To put that another way, how much would an individual consignment of goods from India have been worth?

To answer this question it is necessary to look at the Muziris Papyrus (P. Vindob. G. 40822), which records part of a loan agreement for a ship returning from a trading expedition to India, and is our best (really, our only) source for the value of shipments from India. The document includes accounts of the values of three of the goods in the

²³⁵ Sidebotham 1991: 26. ²³⁶ Pliny, *NH* 12.41.

consignment – ivory, Gangetic nard, and fabric – as well as the full value of the consignment (which included three other items which are not listed), ²³⁷ allowing us a glimpse into the profits that could be gained from a single voyage. The ivory, which weighed a little over 78 talents, was valued at 76 talents, 5675 drachmae, the Gangetic nard, which was transported in 60 containers, but whose weight is not recorded, was valued at 45 talents, and the fabric, which weighed just over 12 talents, was valued at 8 talents, 5882 drachmae; ²³⁸ taken together these goods seem to be quite valuable, but in fact they only comprise a small fraction of the 1154 talents, 2852 drachmae that the entire 6-item consignment is worth. ²³⁹ Clearly, the value of a single consignment in the Eastern trade was quite high, especially given that the goods had such a great value (131 talents), at a relatively small weight. ²⁴⁰

Since the Muziris Papyrus details the value of a single consignment of goods from India, and, equally usefully, describes the weight of some of the goods, it allows us to form a better understanding of the costs of the Eastern trade. It does so in two ways; first, it allows us to determine exactly how much traders would have had to pay for certain charges (such as the *tetarte*), and, second, it allows us to be able to better estimate other costs, by, for instance, giving us information as to the weights of the goods being transported, thereby enabling better estimation of the number of pack animals needed to

²³⁷ The consignment of goods described in the Muziris Papyrus will hereafter be referred to as the "Muziris Consignment", a term which will be taken to include the entire consignment, not just the three items which are named in the document.

²³⁸ P. Vindob. G. 40822 verso, col. 2, 1-26.

²³⁹ P. Vindob. G. verso, col. 2, 29.

²⁴⁰ Granted, we do not have a weight for the Gangetic nard, but even if it is excluded, then the other two items are valued at roughly 86 talents for only 89 talents of weight (equivalent to about 3.5 tons) of goods. This is a fairly insignificant size given that Roman ships could easily hold cargos of 500 tons (Casson 1989: 35).

move the goods. Furthermore, the costs that traders would have faced transporting these goods across Egypt can be viewed in light of the value of the goods being transported, thus providing an idea of the impact that these costs would have had on profits.

The Muziris Papyrus, does not, however, include all of the information necessary to determine the costs and profits of transporting the consignment. One problem is the fact that the papyrus does not state the identity of three of the six items in the Muziris Consignment, meaning that we have no information as to their weights, just as we have no information as to the weight of the 60 containers of Gangetic nard, which makes it much more difficult to estimate transportation costs. Furthermore, we have no evidence as to how many men were party to the agreement as financiers. ²⁴¹ This leads to a more general problem confronted when examining the profits of the Eastern trade: the highly fragmented nature of the trading network.²⁴² Since various stages of the trading process were handled by different groups of traders, ²⁴³ profits would have been divided among these different groups. Unfortunately, there is no way to determine how they would have been divided; presumably those who faced more risks, such as those who sailed the monsoons to reach India, would have received a greater portion of the profits, but we have no way to estimate the proportions of profits that would have gone to different groups. Therefore this chapter will focus on overall costs and profit possibilities, rather than attempt to determine how these profits would have been divided among various parties.

See below, page 78 for a discussion of a potential range of rates for the loan.
 See above, page 36-7, for instance, for why it is likely that goods were sold in Alexandria.

²⁴³ Rathbone 2002: 188: Wolfe 1953: 93-5.

4.2: Land Transport Costs

One of the expenses incurred in the course of the Eastern trade was, of course, transportation costs. Once goods arrived in the Red Sea ports, the first leg of their journey across Egypt was by overland transport: leaving from Berenike or Myos Hormos, goods would be transported to Koptos, and from there they would travel along the Nile to Alexandria. The Nile was used to transport the goods on the second leg of the cross-Egypt journey because it was cheaper; indeed transporting goods over water was nearly always cheaper than transporting them a comparable distance by land. 244

The difference in cost between water and land transport seems to have been considerable, and several authors have argued, on the basis of transport expenses listed in Diocletian's Edict of Maximum Prices, that it cost less to ship grain across the Mediterranean than to transport it 75 miles by land. This certainly suggests that sea transport was much preferable to land transport. However, this comparison of land and water transport costs is misleading in several respects. Firstly, it overlooks the great risks of sea travel, which must have been taken into account either as insurance against loss or as potential loss of revenue. The Furthermore, Diocletian's Edict of Maximum Prices is precisely that — an edict establishing the *maximum* prices that could be charged for various goods or services. Thus it does not necessarily reflect average prices, and

²⁴⁴ Among the many authors noting this phenomenon are: Adams 2007: 14; Bang 2008: 133; Beattie 2009: 80; Duncan-Jones 1982: 1; Erdkamp 2005: 200; Finley 1975: 126; Jones 1964: 842; Laurence 1999:108; Salway 2001: 46; Sidebotham 2011: 212; and Temin 2001: 180. The difference in cost between land and water transport is also noted by Pliny, who, in a letter to Trajan, states that marble, farm produce, and timber can be easily and cheaply transported across an unnamed Bithynian lake, but then must be transported overland to the sea, which entails great difficulty and considerable expense, and suggests that a canal between the lake and the sea would eliminate the problem (*Epistulae* 10.41).

²⁴⁶ Jones 1964: 842.

provides no evidence for local variations, and as such, it may be misleading when used to attempt to establish the differences in cost for land and sea transport. Finally, it compares land transport with sea transport, rather than river transport, which is the relevant comparison for intra-Egypt travel. The ratio of land transport cost to river transport cost seems to be around 1:5, which is still considerable, but significantly lower than the ratio between land transport and sea transport costs as suggested by the Edict of Maximum Prices, which was 1:31. But regardless of the problems with the often-quoted calculations of the difference in price between land and sea transport, it certainly was the case that transportation by land was much more expensive than transportation by water; nonetheless, land transportation did, of course, still occur in various regions, such as the Eastern deserts of Egypt.

The use of land transport in the Roman Empire was typically the result of necessity. This was certainly true of the Eastern deserts – there was no other way to move goods from the Red Sea ports to Koptos, so land transport was used. Once the goods reached Koptos they were transported along the Nile to Alexandria, conforming to the Empire-wide practice of using water transport wherever possible, and only engaging in

²⁴⁷ Duncan-Jones 1982: 367; Erdkamp 2005: 200; Laurence 1998: 135. As Hopkins notes, the terrain being crossed would also have impacted costs: transport over a mountain pass would be more difficult and time-consuming, and thus more expensive, than transportation on level ground (1983: 104).

²⁴⁸ Laurence (1998: 134-5) provides the calculations for these ratios. Given that these ratios are roughly equivalent to the relative costs of land, river, and sea transport in eighteenth-century Britain and in modern-day developing nations, it seems likely that they are reasonable estimations of relative transit costs in the Roman era (Peacock and Williams 1986: 64). Another problem, albeit one limited to this thesis, is that Diocletian's edict falls outside of the timeframe being examined here; however, while the document cannot be expected to provide accurate numbers for this time period – or, indeed, for any time period, as we have seen – it is still useful for aiding our understanding of the general differences in costs between the two forms of transportation.

land transport when its use was unavoidable.²⁴⁹ In fact, the location of the Nile meant that Egypt had an easily navigable river which was only a short distance away from nearly every part of the province (the Eastern deserts being the furthest region),²⁵⁰ an advantage which perhaps played as much a part in its important role in the grain trade as the fertility of its fields.²⁵¹ In Egypt, perhaps more than anywhere else in the Empire, there would have been truth to Adams' assertion that few journeys in the ancient world would have been undertaken solely on land.²⁵² Land transport in the Eastern trade also benefitted from the type of goods involved: the increased cost of transporting goods by land posed more of a problem when moving large volume, low-value goods than low volume, high-value goods of the sort of which the cargos of the Eastern trade were comprised.²⁵³

Transportation in the Eastern desert was accomplished by means of donkeys, camels, and wagons; horses seem to have been rarely used for transport in Roman Egypt,²⁵⁴ their use in the region instead being confined to military endeavours.²⁵⁵ Camels were obviously well-suited to travel in the desert, and it has been suggested that they were used predominantly for long-distance transportation, while donkeys, which were not quite as resilient, but were cheaper and quicker, were typically used for shorter distances.²⁵⁶

²⁴⁹ See Jones 1964: 844 for logistic, rather than solely strategic, reasons for the placement of *limes* along the Danube and the Rhine.

²⁵⁰ Adams 2007: 13.

²⁵¹ Jones 1964: 843-4.

²⁵² Adams 2007: 13. Laurence (1998: 143) and Sidebotham (2011: 314) likewise emphasize the fact that land and water transport typically would have complemented each other, although, as Wolfe (1952: 93-5) rightly notes, land and water transport would have been managed separately.

²⁵³ Bang 2008: 134; Erdkamp 2005: 200-1. See above, pages 7-8, for a list of the goods of the Eastern trade. Adams 2007: 58; Johnstone 2008: 142; Milne 1992: 261. Horses seem to have been employed as beasts of burden less frequently than other pack animals throughout the entirety of the Empire (Bang 2008: 133). ²⁵⁵ Büllow-Jacobsen 1998: 67.

²⁵⁶ Adams 2007: 55.

Wagons were used more frequently in the Eastern deserts than elsewhere in Egypt because the roads there were of much higher quality and therefore could support the use of wagons.²⁵⁷ The great advantage of wagons for transporting goods was, of course, the fact that they could bear much greater loads than pack animals: camels, for instance, could carry loads up to 600 Roman pounds, while wagons could carry double that amount, up to 1200 Roman pounds.²⁵⁸ Despite the clear advantage in cargo capacity, however, the evidence suggests that, even in the Eastern deserts where the terrain was favourable to wheeled vehicles, pack animals were still the most common form of transportion.²⁵⁹

Unfortunately we do not have very good evidence for transport costs, but papyri do provide more evidence on the subject than we have for other regions of the Empire, and it is useful to attempt to gain some perspective on the land transport costs faced by Eastern traders. Evidence from several second-century AD papyri suggests that the price to hire a donkey was 4-14 obols a day, whereas a camel was significantly more expensive, at 1-4 drachmae a day. ²⁶⁰ However this may not have represented the full cost

²⁵⁷ Adams 2007: 81; Milne 1992: 261.

Adams 2007: 80-1. This is roughly equivalent to weights of 6 and 12 talents respectively.

Adams 2007: 69; Bagnall 1985: 4; Sidebotham 2011: 138. Perhaps the fact that wagons were used less frequently than pack animals is because they faced higher tariffs: the Koptos tariff records that wagons were charged 12 times the rate of camels (4 drachmae and 2 obols respectively), and similarly the Palmyrene tax law, section 1a, (which obviously refers to tariff rates in Syria rather than Egypt, but is still relevant as a point of comparison) records that the tariff on a wagon-load of goods was assessed at a rate 4 times that of a camel-load of the same goods. Thus it seems that the tariff rates on wagon-loads of goods were much higher than could be justified on the basis of their increased cargo capacity alone, meaning that financial considerations may have prompted traders to use wagons less frequently than pack animals. Given that the income from the Koptos Tariff seem to have been used to fund road maintenance (see above, page 40), it seems reasonable to suggest that the high tariff rates levied on wagons may have been related to the additional wear that they placed on roads, but it is, of course, impossible to be certain of the reason for either the increased tariff rates on wagons or the infrequent use of the vehicles in the Eastern deserts.

260 Donkey: *PSI*. 688R; *P.O.* 2131. Camel: *BGU*. 921.

of hiring an animal for transport – one papyrus records that camels were charged for each talent-weight carried, at a rate of 7 drachmae, 3 obols. ²⁶¹ Using that papyrus as a guide, Adams suggests that camels, which could carry up to 6 talents, would have cost as much as 45 drachmae a day. ²⁶² In addition to hiring pack animals, it was obviously also necessary to feed them, yet another cost which traders had to bear. It would have cost 15-25 drachmae a month to feed a donkey, and around 45 drachmae a month to feed a camel, ²⁶³ expenses which are far from insignificant. ²⁶⁴

To rent a wagon cost 10-14 obols a day, ²⁶⁵ a rate which does not include the pay for the driver – around 6 obols a day²⁶⁶ – nor the cost of renting the animal which pulled the wagon. The latter cost is difficult to determine as it is not clear which animals were hitched to the wagons; Milne suggests that the task fell to donkeys, while Büllow-Jacobsen argues that we simply do not have any evidence. ²⁶⁷ While it is true that there is no evidence as to which animals were used to pull the wagons, it does seem reasonable to assume that donkeys would have been used, given that the use of a wagon would have negated the camel's advantage of having a greater load-bearing capacity, and would have represented a greater cost.

 $^{^{261}}$ BGU III 697 = Sel. Pap. II 370 (AD 145).

²⁶² Adams 2007: 231.

²⁶³ Adams 2007: 85 (donkey) and 88 (camel).

The great cost of maintaining work animals is indicated by a second-century AD letter from Oxyrhynchos in which the writer expresses concern about having to hire another set of oxen to irrigate a field, not because of the price of hiring the additional pair, but because of the cost of feeding and other expenses (*P. Oxy.* XLII 3063).

²⁶⁵ O. Brüss. 70; W.O. 1180 (both 3rd century AD).

²⁶⁶ O. Brüss. 70.

²⁶⁷ Milne 1992: 261; Büllow-Jacobsen 1998: 67.

So, how much would it have cost to hire animals to transport goods from one of the Red Sea ports to Koptos? Obviously an exact answer cannot be given, since the cost would have varied considerably from one cargo to the next as it was dependent upon a multitude of variables, including the weight of the goods, the size of the consignment, the type of pack animals used, whether the ship docked at Berenike or Myos Hormos, and so on. However, it is possible (and indeed useful) to estimate some of the variables and produce a rough estimate based on some of the possibilities.

Firstly, it is necessary to estimate the weight of a single consignment. Here our only evidence comes from the Muziris Papyrus, but unfortunately we only know the weight of two of the six items. Therefore to estimate the weight of the entire consignment, it is necessary to multiply the weight of the ivory and fabric (totalling 89 talents, 12 minae) by three, which gives a total weight for the consignment of 267 talents, 36 minae. Given that a camel can carry 6 talents, and assuming that the entire consignment was carried by camels, then 45 camels would have been required to carry the goods. Depending on which Red Sea port was used, the journey to Koptos would have taken either 12 days (Berenike) or 5 days (Myos Hormos). Therefore a camel train moving the consignment from Berenike to Koptos would have cost 4 talents, 300

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²⁶⁸ It is, of course, impossible to know if the weights of the other goods in the consignment were similar to the weights whose values we know, but it is the best evidence available, and furthermore, no attempt is being made to argue that this will produce the exact weight of the consignment, but rather that it will provide a general impression of the weight of a consignment of Eastern goods.

²⁶⁹ See above, page 69.

McLaughlin suggests that Berenike, while significantly further than Myos Hormos from Koptos, may have been less busy, prompting some captains to chose it over the more optimally located port (2010: 30), and it does seem reasonable to suggest that delays in unloading cargos at Myos Hormos due to overcrowded conditions may have offset the cheaper land transport costs that arose from its more advantageous location.

drachmae,²⁷¹ while one originating from Myos Hormos would have cost 1 talent, 4125 drachmae.²⁷² As mentioned earlier, the transport costs would have been different every time, but this provides an idea of how much it may have cost to transport one consignment of Eastern goods from the Red Sea to Koptos.

Pack animals, vehicles, and transporters would also have been subject to the Koptos Tariff, ²⁷³ further increasing the cost of the overland journey between the Red Sea ports and Koptos. Although we know how much was charged for each camel, wagon, and donkey, it is impossible to know what combination of pack animals would have been used to transport a consignment. However, some illustrative examples can be produced. For instance, if the cargo was moved entirely by camels, assuming the same weight as estimated above, then they would have faced a charge of 15 drachmae, along with one drachma per man for everyone managing the animals, however many that may have been. On the other hand, if the goods were moved by wagons pulled by donkeys, then the 23 wagons which would have been required would have faced a tariff of 92 drachmae, along with 7 drachmae, 4 obols for the donkeys and 23 drachmae for their drivers. Again these charges are far from burdensome given the great value of the goods they were hauling, but they would have contributed to the overall costs of engaging in the Eastern trade.

4.3: Water Transport

As has already been mentioned, once goods reached Koptos they would have been transported to Alexandria by means of the Nile, as it offered a much faster and cheaper

²⁷¹ 45 camels x 45 drachmae/day per camel x 12 days = 24,300 drachmae = 4 talents, 300 drachmae.

²⁷² 45 camels x 45 drachmae/day per camel x 5 days = 10,125 drachmae = 1 talent, 4,125 drachmae.

 $^{^{273}}$ OGIS 674 = IGGR I. 1183. See above, pages 38-41, for a discussion of the Koptos Tariff.

alternative to land transport.²⁷⁴ The Nile was obviously incredibly important for transportation within Egypt, but far less evidence survives for water transport compared to land transport, which much surely by the result of an accident of preservation.²⁷⁵ Not only is there little evidence for the costs of transport on the Nile, but the little evidence which does survive is predominantly related to the shipment of grain,²⁷⁶ and there is absolutely no record of transportation costs for Eastern goods.

Pearl usefully collects the papyrological evidence for Nile transportation costs, ²⁷⁷ which range from 4-22%. ²⁷⁸ The rate of 20-22% seems far too high to have ever been charged on Eastern goods, given that, if combined with the *tetarte* it would have equalled nearly 50%, an enormous costs which traders surely were not forced to bear. Furthermore, it seems justifiable to exclude the 20-22% rate from consideration since it occurs on only one papyrus ²⁷⁹ (albeit in a small sample of only five shipping rates), and since it is much earlier than any of the other examples, dating to c.250 BC, while the next earliest dates to the late second century BC. Excluding the unusually early and exceptionally large shipping rate, the rest of the transport rates all fall into the range of 4-10%, a much more

²⁷⁴ The greater speed of river transport compared to land transport would have been particularly pronounced when the goods were being shipped downriver – as, for example, when goods were being moved from Koptos to Alexandria – but even upriver transport could be faster than transport by land, particularly in those instances when the prevailing wind blew in the opposite direction of the flow of the current – as was the case with goods moving along the Nile from Alexandria to Koptos (Salway 2001: 46-7; 75-6).

²⁷⁵ Adams 2007: 21.
²⁷⁶ Some papyri record the costs of transporting other goods (see *P. Bad.* 79 for stone, and *SPP.* XX 68 for lumber or stone), but give no indication of the weights or values of the goods, making them useless for

estimating transportation costs. ²⁷⁷ Pearl 1952: 77. The dates for many of these papyri, which range from c. 250 BC to 3rd/4th century AD, fall outside the timeframe of this thesis, but given that they are fairly consistent and given that we have so little evidence, it will be useful to examine them here.

²⁷⁸ This range is only for longer-distance hauling; short-distance shipping rates ranged from 1-3%, but are not significant here as the distance between Koptos and Alexandria was much greater than the distances associated with these lower shipping rates.

²⁷⁹ P. Corn. 3.

feasible level for transport charges, and one which is corroborated by comparison with two other instances of Nile transport – ones not found on Pearl's chart and which occurred during the height of the Eastern trade – which both indicate shipping rates within the 4-10% range: one shows a rate of 8.7% for transporting hay, the other 10% for wheat. Of course, Eastern goods may have faced different shipping costs than grain, especially considering that, if a shipper charged a much smaller percentage on the transport of Eastern goods, given their enormous value, it still would have yielded more profit than charging a higher percentage on the transport of cereals, which were not nearly as valuable, but unfortunately we lack any evidence for the shipping rates of Eastern goods.

The cost of transport on the Nile would also have depended on the type of boat employed. As Lewis notes, river crafts on the Nile varied greatly, ranging from simple, one-man punts to enormous boats capable of carrying up to 500 tons. Smaller crafts would obviously have been cheaper than larger vessels on an individual level, but a greater number of them would have been necessary to carry the same cargo. Presumably most Eastern traders would have preferred larger boats not only so as to keep their cargo on a single vessel (thus making it easier to manage) but also because large vessels, for the most part, would have been safer than smaller vessels. Of course that is merely speculation as no evidence survives as to what sort of ships were used in the Eastern trade, nor what the different types of ships would have cost.

²⁸⁰ Hay: *P. Lond.* 1165 (c. AD 113). Wheat: *P. Hamb.* 17 (AD 210).

Lewis 1983: 142-3. For a similar variety of vessels on the Rhine, see Ellmers 1978: 1-10.

On the topic of water transportation, although the subject of this thesis is traders operating within Egypt, brief mention should be made of the costs of the sea voyages undertaken by Eastern Traders, that is to say, between Egypt and India, and between Egypt and Rome. Unfortunately there is a frustrating lack of evidence on both counts. Despite the frequency of grain shipments between Alexandria and Rome, we have no evidence for what the transportation costs for one of those shipments would have been. ²⁸² It is clear, however, that shipping would have been an expensive enterprise, entailing a variety of expensive costs, including manually loading and unloading the cargo, hiring the ship and crew, port dues, demurrage charges, repairs, and insurance against loss. ²⁸³ For the voyage to India we likewise have no evidence regarding costs, but it would have been much more expensive than shipping across the Mediterranean, as it involved all of the same costs, but held even greater dangers, as the monsoons which were harnessed to enable ships to reach India would have been extremely hazardous compared to the waters of the Mediterranean, ²⁸⁴ although sailing the Mediterranean could be quite hazardous itself, particularly in the winter. ²⁸⁵ Certainly the journey to India and back, which took six months to complete, 286 would have represented a large proportion of the costs of a trading expedition in the Eastern commerce, although it is impossible to determine, or even estimate, how much it would have cost.

²⁸² Johnson 1959: 402.

²⁸³ Erdkamp 2005: 202-3; Sidebotham 2011: 213. See Hopkins (1983: 96-7) for a description of how the construction methods of Roman ships would have made them much more expensive than those built in the Byzantine period and later.

²⁸⁴ McLaughlin 2010: 40.

Pliny, *NH* 2.47; Braudel 1972: 248-9; Casson 1971: 270-3; Rougé 1966: 31-2. Parker, in the introduction to his compilation of the shipwrecks of the Roman Empire, notes that the Mediterranean, while appearing to offer calm water and good visibility, was quite hazardous for ancient seafarers (1992: 1). ²⁸⁶ Ball 2000: 123.

4.4: Non-Transport Costs

Transport expenses do not, of course, tell the whole story of the expenses that traders would have faced while crossing Egypt; they would have faced a whole host of other costs as well. The first of these charges was levied as soon as a ship reached its port on Egypt's Red Sea coast, where a small customs duty would be levied by the *arabarch*. The rate for the goods of the Muziris Consignment, which can be calculated from the data provided on the papyrus, was 0.25% for the ivory and 2.88% for the fabric. These charges, particularly the 0.25% duty on ivory, may seem insignificant, and indeed, viewed in isolation, they are. However these were not the only duties with which they were confronted, and it was their cumulative cost, rather than their individual rates, which would have impacted the profitability of trading ventures.

By far the largest duty faced by traders was of course the *tetarte*, ²⁸⁹ which was also calculated at the port in the Eastern Desert, although it was not actually paid until the cargo arrived in Alexandria. The cost of the *tetarte*, at 25% of the goods, was obviously enormous, and likely represented the single biggest cost of the Eastern trade. Again, as for the smaller duty levied at the Red Sea ports, the Muziris Papyrus allows us to determine the value of the customs duty payments for the consignment. ²⁹⁰ The total value of the Muziris Consignment was 1154 talents, 2852 drachmae, meaning that the value of

²⁸⁷ See above, pages 44-5 for a discussion of the *arabarch* and the levying of this duty.

²⁸⁸ *P. Vindob.* G 40822 verso, col. 2, 11-15, 22-6. No charge is recorded for the Gangetic nard. For the calculations of these rates, see Casson 1990: 199 n.13-23. For a discussion of possible reasons for varying rates, see above, page 45.

²⁸⁹ See above, page 30-36 for a discussion of the *tetarte*.

²⁹⁰ P. Vindob, G. 40822 verso, col. 2, 29.

the *tetarte* charge would have been 288 talents, 3713 drachmae, leaving goods valued at 865 talents, 3713 drachmae in the possession of the trader.

In addition to the *tetarte* and the customs duty levied by the *arabarch* at the Red Sea ports, traders carrying goods from one end of Egypt to the other would have faced a plethora of other customs dues, tolls, and other charges. As these charges have already been mentioned,²⁹¹ it is unnecessary to outline them again here. The problem with these various charges and tolls, however, is that there is no evidence of how much they would have cost the average trader. Given the lack of direct evidence, a comparison with a nearby region may prove instructive. Pliny, describing the costs of shipping incense across Arabia, remarks that the cost of the various tolls and other charges (such as fodder and lodging) amounted to 688 denarii (equivalent to 2752 drachame²⁹²) per camel load.²⁹³ This is a significant expense, particularly given the large numbers of camels necessary to carry a single consignment of Eastern goods, and it highlights the surprisingly high cost of customs duties.²⁹⁴ While Pliny's comment obviously refers to Arabia rather than Egypt, it seems reasonable to assume that Egyptian costs would have been comparable, given the similarities of terrain, climate, shipping methods, and types of goods. However, it should be noted that Pliny's account does not provide any information about the costs of operating donkeys or wagons (which would have faced different expenses) along the

²⁹¹ See above, pages 41-43.

²⁹² For the sake of consistency, any price noted in the sources in denarii will be converted to drachmae to make it more easily comparable with the other costs outlined in this chapter, but the original price in denarii will always be noted. In the first and second centuries AD, the ratio to denarii to drachmae was approximately 1:4 (Cuvigny 1996: 8).

²⁹³ Pliny, *NH* 12.32.

²⁹⁴ Bang 2008: 202.

routes, and, more importantly, it refers to a much longer journey than any undertaken across the Egyptian desert. The charge of 2752 drachmae per camel load was accumulated over the course of a 65-day journey across Arabia, whereas a trip between a Red Sea port and Koptos would have taken roughly five days (Myos Hormos) or 12 days (Berenike), and if facing costs at the same rate, would have cost 212 or 508 drachmae, respectively. Assuming again that 45 camels would have been needed to transport the Muziris Consignment, the total cost of these various tolls and charges would have been 1 talent, 3540 drachmae or 3 talents, 4860 drachmae depending on the point of origin – a significant amount for a relatively short journey.

In addition to legitimate customs duty payments, traders would regularly have had to endure various forms of customs abuses, which, as was discussed in the previous chapter, could be quite expensive, and at times even dangerous. Crooked customs agents had a variety of illicit means to extract additional money from passing traders – ranging from the addition of supplementary fees to extortion backed by the threat of force – and a trader might suffer several of these on a single trip, or he might suffer none. This is the difficulty confronted when dealing with customs abuses: we know that they occurred, and we can assume they occurred relatively often, but we cannot even attempt to estimate how frequently they would have occurred or how much a trader typically would have lost when they did occur.

²⁹⁵ Adams 2007: 45.

See above, page 71, for how many camels would have been necessary to transport this cargo.

Once goods finally reached Alexandria, they would typically have been sold there to pay off the loans that had financed the voyage to India. 297 Unfortunately, although not particularly surprisingly, no evidence survives as to the rates which would have been charged on these loans (even the Muziris Papyrus yields no mention of the loan rate or how much needed to be paid back). However, we do know that across the Roman Empire bottomry loans typically fell in the range of 12-30%, ²⁹⁸ and it seems reasonable to assume that loans for voyages to India would have faced rates toward the upper end of that range, given the enormous risks associated with such a voyage, which means that interest on the loan would have presented a very large expense for an Eastern trading expedition.

In addition to being the location for the repayment of the original bottomry loan, Alexandria was also the place where many Eastern goods would have undergone manufacturing of one type or another, ²⁹⁹ turning raw materials into finished or semifinished goods which would have fetched higher prices once they reached the market at Rome. Manufacturing would likely have been an expensive process given the skill involved, making this yet another cost that had to be borne by a member of the trading network at one point, but it is impossible to even speculate about what it would have cost, as we have no evidence about the cost of manufacturing, and, regardless, the cost would have varied greatly depending on the type of goods, the process being used, and the skill level of the artisan doing the work.

²⁹⁷ See above, pages 36-7, for reasons to believe that goods were sold in Alexandria. ²⁹⁸ Sidebotham 2011: 216.

²⁹⁹ Johnson 1959: 346; McLaughlin 2010: 161-2.

4.5: Value of Eastern Goods in Rome

Although this thesis focuses on traders operating in Egypt, some attention must be paid to the value of Eastern goods in Rome. For this our evidence comes from Pliny's discussion of plants in chapter 12 of his *Natural History*. The price per pound of the goods listed by Pliny varies from 4 drachmae (for Short Flag) to 1200 drachmae (for a form of cinnamon). Young suggests that while these goods seem quite expensive – and indeed they were – on a per-pound basis, most consumers would only have required very small amounts, and therefore the goods would have been accessible to a large proportion of the population. But regardless of how much of a given item individual consumers purchased, the cumulative profits from the sale of a trader's cargo of Eastern goods would have been considerable. Obviously Pliny, who only discusses plant products, does not provide an exhaustive list of goods and prices, 303 but nonetheless his account is useful for demonstrating the sort of prices which Eastern goods could command at Rome.

Elsewhere in the *Natural History*, Pliny states that goods from India are sold in Rome at one hundred times their original cost.³⁰⁴ Obviously this would have been an enormous price increase, which begs the question: should this be believed? Or is it just part of the literary theme of lamenting the prevalence of *luxuria* among the upper classes

³⁰⁰ See Young (2001: Appendix A) for a list of all the goods and prices mentioned by Pliny, and see Miller (1969: 26-8) for a detailed breakdown of pepper prices.

Originally cited by Pliny as 1 denarius and 300 denarii respectively. In the ancient world Cinnamon was an ingredient in both medicines and perfumes, and it was likely its use in the latter which drove prices to such high levels (Casson 1984: 230-1).

³⁰² Young 2001: 222-3. See above, page 1 n.1, for a related discussion of the term "luxury goods" and whether or not it is appropriate for the items of the Eastern trade.

³⁰³ See above, pages 7-8, for a full list of the goods of the Eastern trade.

³⁰⁴ Pliny, *NH* 6.26.

at Rome?³⁰⁵ Certainly, given the context – Pliny had just finished noting the large amount of money that flowed eastward each year – it would not be unreasonable to view this as an exaggerated statement of the cost of goods meant to indicate their great cost and cast aspersion on those who buy them.³⁰⁶ However, there are reasons to assume that a price increase of 100 times is reasonable. First of all, a considerable mark-up from initial costs should be expected, given the enormous costs and dangers of transporting goods from India to Rome; after all, one hundred times greater prices does not mean that all of the increase was profit – a significant increase would have been necessary just to cover transportation costs and customs duties, let alone provide any profits. Furthermore, Chinese sources seem to confirm Pliny's assertion of the enormous price increase for Eastern goods in Rome, recording that Roman traders returning home could sell their Chinese goods for one hundred times their purchase price.³⁰⁷

Unfortunately, while Pliny provides evidence for the price per pound of various items in Rome, there is no evidence for the original values (i.e. at the point of purchase) of those goods, which means that Pliny's statement that there was a one hundred times increase in the cost of the goods cannot be substantiated. However, it does seem reasonable to assume that there would have been a very large increase in price from one end of the trading network to the other (whether the actual increase was 50x, 80x, 100x,

³⁰⁵ See above, pages 16-17, for *luxuria* as a recurring literary theme.

³⁰⁶ As Parker aptly phrases it, "[m]oral rectitude again emerges as the all-important lens through which Pliny visualises the issues at hand" (2002: 73).

³⁰⁷ Miller 1969: 224; McLaughlin 2010: 162-3. Granted these documents obviously refer to trade with China rather than India, a trade which would have been much rarer and more expensive, and for which virtually no evidence survives, but it is still illustrative of the fact that a one hundred fold increase in price from point of purchase to point of sale was not unfeasible for goods imported from a great distance.

or whatever the case may have been), given the agreement between Pliny and the Chinese sources about a hundred-fold increase in the price of goods, the great costs and dangers of the Eastern trade, the high costs of Eastern goods at Rome as recorded by Pliny, and the great value of the goods in the Muziris Papyrus. A large increase in prices of the magnitude described by Pliny (or in a similar range) would have produced the enormous profits which sustained the Eastern trade and the eastward flow of coinage which Roman moralists decried.

4.6: Conclusions

The Eastern trade was an expensive endeavour; and while the Eastern goods were extremely valuable, the various costs inherent in transporting them across Egypt were also quite high. While some of these expenses are known or can be estimated, others must simply be noted without any attempt to quantify how much they would have cost the average traders. Nevertheless, we can be certain that the Eastern trade was profitable, as traders continued to ply the route for over two centuries, and, given the enormous dangers faced in even reaching India, we can be sure that the profits must indeed have been quite large to entice traders to brave those dangers.

Conclusion

Rome's Eastern trade stretched across great distances, brought exotic and enormously valuable goods to Roman consumers, and provided significant revenue to the Roman state. All of this was possible because of the traders operating in Egypt: they were the ones who hauled cargoes between the Red Sea and the Mediterranean and who paid the customs dues that helped fill the state's coffers. Although perhaps not as glamorous as sailing the monsoons to India (and certainly not as dangerous), transporting the goods across the Egyptian deserts and shipping them down the Nile was nonetheless a crucial part of the Eastern trade, and therefore the traders who operated in Egypt are essential to our understanding of the Eastern trade as a whole.

The identity of the traders is itself quite striking, or, more accurately, it is their lack of a unifying identity which is striking. The traders represent a real cross-section of the population, including members of nearly every possible social and economic group: while the majority of traders in the Eastern trade were men, women could also important participants, as demonstrated by the careers of Aelia Isidora and Aelia Olympias; citizens and non-citizens alike participated actively in the trade, as did members of various ethnic groups, including Romans, Graeco-Egyptians, Nabataeans, and Palmyrenes; even social standing was no barrier to participation in the Eastern trade, as members of all classes, from freedmen to senators, and possibly even the imperial family, were involved, in one capacity or another, in the commerce.

Of course the state was not concerned about the identity of the traders, only in the amount of cash it could generate from them. And that amount was considerable. Cargos

of Eastern goods passing through Egypt on their way to Rome faced a multitude of tolls, taxes, and customs duties which were paid into the treasury. The *tetarte* in particular was extremely profitable, providing the government with 25% of all of the goods of the Eastern trade, which amounted to an enormous sum, given the great value of the trade; the Muziris Consignment alone, which was but one of numerous consignments aboard a single ship of the 120 that Strabo reports sailed yearly to India, ³⁰⁸ required a payment of 288 talents, 3713 drachmae for the *tetarte*. Together with the other taxes of the Eastern trade – the customs dues paid at the Red Sea ports, the Koptos Tariff, and numerous other minor taxes and tolls – the *tetarte* would have represented a substantial cost for Roman traders and a significant source of revenue for the state.

Customs duties, however, were not the only costs that traders encountered when dealing with customs officials – they were also faced with customs abuses. These came in many different forms, some of which were physically dangerous for the traders, and all of which detracted from their profits; they could be as unsophisticated and direct as outright extortion backed by the threat of force, or as subtle and gradual as the ongoing addition of illegal supplemental charges to a customs duty. Numerous attempts to legislate against customs abuses do not seem to have yielded any lasting results, and customs abuses seem to have remained a permanent feature of the Eastern trade. While, unfortunately, it is impossible to discern how frequently customs abuses would have occurred or how much they typically would have cost a trader when they did occur, the numerous possible forms of customs abuses, the ubiquity of negative comments about customs agents in our

³⁰⁸ *Geography* 2.5.12.

literary sources, and the structure of the *publicani* tax-farming system all suggest that customs abuses would have been a common occurrence in the Eastern trade.

Despite the high incidence of customs abuses and the great cost of the taxes and tolls inherent in the trade, Roman traders continued to work the Eastern trading routes because they were profitable: profitable enough to induce members of nearly every segment of the population to participate in the trade, and profitable enough to convince sailors to brave the monsoons and make the dangerous voyage to India. A single consignment aboard a ship landing in one of the Red Sea ports could be worth as much as 1154 talents, 2852 drachmae, an enormous sum which would have allowed traders to pay taxes, transportation costs, and other expenses and still have enough left for a considerable profit. These profits were sufficient to support the continuation of this complex and dangerous trade for over two centuries until it eventually declined amidst the deteriorating economic conditions of the later Roman Empire.

The Eastern trade posed great risks and enormous costs, but it also offered the possibility of large profits, which encouraged the involvement of traders from all sectors of the population. Collectively these traders transported goods worth as much as 100 million sesterces annually and served as a connection between Rome and states beyond the Red Sea, thereby playing an important role in the Roman economy and forming a crucial link between Romans and peoples living outside the borders of the Empire.

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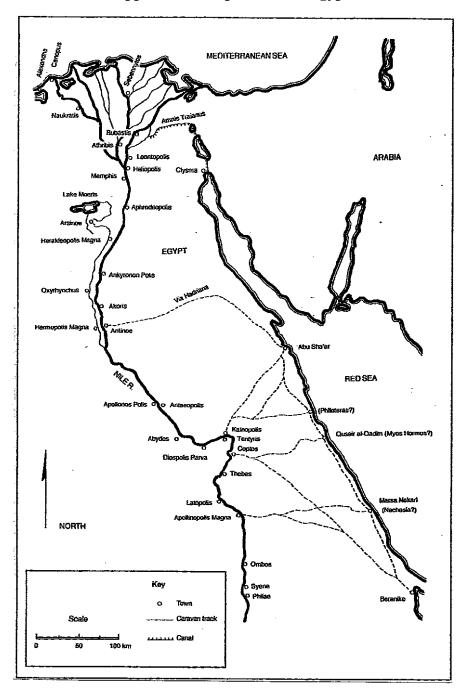
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Appendix 1: Map of Roman Egypt



From Young 2001: 12, map 1.2

Appendix 2: Individuals Named in the Nikanor Archive

| N O | |
|--|-----------------------------------|
| Name | Ostraca |
| Ἀνίκητος (Anicetus) | O. Petrie 237, 238, 239, 247 |
| Ἄρποκρατίων (Harpocration) | O. Petrie 247 |
| Αὐλος Γαβίνιος Εὐδαιμίων (Aulus Gabinius Eudaimon) | O. Petrie 225 |
| Γαίος Ιούλιος Βακχυλυς (Gaius Julius Bacchylus) | O. Petrie 222, 291 |
| Γαίος Ναρβανος (Gaius Norbanus) | O. Petrie 244, 257 |
| Δούρκιος Ιούλιος Φ[] (Dourcius Julius Ph[]) | O. Petrie 261 |
| Έρμερῶς (Hermeros) | O. Petrie 287 |
| Έρμοιδᾶς (Hermoidas) | O. Petrie 241 |
| Ίσιδώρα (Isidora) | O. Petrie 244, 257 |
| Κλαύδιος Δημήτριος (Claudius Demetrius) | O. Petrie 275 |
| Κορνήλιος (Cornelius) | O. Petrie 227, 246 |
| Μάκρο (Macro) | O. Petrie 268, 270 |
| Μᾶρκος Δαίλιος Ύμεναῖος (Marcus Dailius Hymenaeus) | O. Petrie 240 |
| Μᾶρκος Ιούλιος Ἀλέξανδρος (Marcus Julius Alexander) | O. Petrie 252, 266, 267, 271, 282 |
| Μω[.]ιτιος Πετασμήφιος (Mo[.]itius Petasmephius) | O. Petrie 277 |
| Παμῖνις Παρθενίου (Paminis son of Parthenius) | O. Petrie 228, 229, 231, 248, 249 |
| Πανίσκος (Paniscus) | O. Petrie 230, 255, 256 |
| Ποπιλιος Μαμιλιος Ανδρομαχος (Popilius | O. Petrie 271 |

| Mamilius Andromachus) | |
|--|-------------------------|
| Ποριεύθης (Porieuthes) | O. Petrie 269, 284 |
| Τιβέριος Κλαύδιος Άγαθοκῆς καὶ (Τιβέριος Κλαύδιος) Θεόδωρος (Tiberius Claudius Agathocles and (Tiberius Claudius) Theodorus) | O. Petrie 275, 276 |
| Τίβεριος Κλαύδιος Επαφρόδειτους (Tiberius Claudius Epaphroditus) | O. Petrie 290 |
| Τίβεριος Κλαύδιος Κάστωρ (Tiberius Claudius Castor) | O. Petrie 275 |
| Τιβέριος Κλαύδιος Σεραπίων (Tiberius Claudius Serapion) | O. Petrie 297 |
| Φθόγγος (Phthoggos) | O. Bruess. 7 |
| Χρητουχοῖσος (Chretouchoisos) | O. Petrie 247 |
| Ψενποῦθις Παρθενίου (Psenpouthis son of Parthenius) | O. Petrie 233, 250, 253 |