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Trade and traders in the Roman world: scale, structure, and organisation

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> Everyone is aware that as a result of the world being united under the majesty of the Roman empire life has improved thanks to trade (*commercium*) and the sharing of the blessings of peace.

So wrote Pliny (*HN* 14. 2) in his characteristically sententious manner in the preamble to his discussion of viticulture. He was not alone. A notorious passage by the author of the *Revelation of John* (18. 11ff.) gives extraordinary prominence among those he sees as devastated by the fall of Babylon/Rome to

> the sea-captains and voyagers, the sailors and those who traded by sea . . . Alas, alas for the great city, where all who had ships at sea grew rich on her wealth.

For an observer in the eastern Mediterranean the constant passage of goods to Rome at the end of the first century AD was one of the most notable effects of Rome's domination and, therefore, in dreaming of Rome's fall the consequences for the local economies of the Mediterranean and for those who traded between them were bound to loom large. The language and sentiments of this part of *Revelation*, of course, belong to the well-known discussions of the deleterious effects of luxury; but it needs to be emphasised that the visible reality which underlay the debate on *luxuria* is itself testimony in great measure to the huge increase in trade as a consequence of the Roman empire. The Mediterranean had become Rome's port, as Cicero dramatically represents it (*On the Consular Provinces* 31):

> iamdiu mare videmus illud immensum . . . ab Oceano usque ad ultimum Pontum tamquam unum aliquem portum tutum et clausum teneri.
>
> (We have long seen that vast stretch of sea from the Ocean to the farthest shore of Pontus held as it were a single safe and closed harbour.)

(See the allusive and stimulating comments of Purcell (1996), who recognises the close interactions between ports, local regions, and the wider world.)

That Roman imperial expansion, even from its earliest days, should be linked to a major increase in commerce should not be doubted. It deserves far greater emphasis than it is usually given in modern accounts. The evidence is clear and varied. Interference with trade could be a factor in Rome's decision to intervene in an area (as for example in the first Illyrian War of 230 BC: Polybius 2. 8). Despite the fact that there is a strong modern tradition which seeks to play down this sort of evidence, commerce deserves to be reinstated among the major factors involved in imperialism. A complex phenomenon like Roman imperialism is likely to be explained not by some one cause, but by the interaction of a number of factors. Even if the mainspring of Roman imperialism was not explicitly economic, the economic consequences were often immediate and great. Consider the exploitation of Spain, which closely followed its incorporation as a province of the empire (see e.g. Richardson 1976). In these cases it is often presumed that the key factors are the decisions of the governing authorities in Rome. But the real initiative lay with hundreds of individuals who had an eye to the main chance. Traders accompanied armies. Indeed, they were frequently in advance of armies and could be a vital source of information for Roman commanders (so Caesar summoned *mercatores* to pool their knowledge of Britain, 'because no one, except traders, goes there without good reason' (*Gallic Wars*, 4. 20)). Some peoples banned the consumption of Italian wine, because it was suspected that it was a part of the Roman fifth-column, designed to sap the energies of Rome's opponents (the Nervii in Caesar, *Gallic Wars*, 2. 15, cf. 4. 2). But it was surely because this was exceptional behaviour that it came in for comment.

The linkage between empire and commerce is illustrated in detail by Cicero in his discussion of Sicily (*Verr*. 2. 2. 6):

> We have many citizens who are the richer, because they have close at hand a loyal and profitable province, to which they can travel with ease, and where they can carry on their business (*negotium*) freely. To some of these Sicily supplies income and sends them home with profits and their accounts in the black (*quaestu compendioque*). Others she keeps there, so that they may become arable farmers, stock farmers or businessmen (*negotiari*), and in short that they may settle and make their homes there. It is of considerable advantage to the *res publica* that so large a number of citizens should be kept close to their own country, engaged in occcupations so honourable and profitable.

The implication of the last sentence is that by Cicero's day many Roman citizens were seeking their fortunes much further afield. The trading links between those in the provinces and those back home meant that the success or failure of those acting in the provinces had knock-on effects on those in the home ports. So it was not just Sicilians who protested about Verres. Cicero claimed that the people of the Campanian port of Puteoli turned out in a body for Verres' trial (*Verr*. 2. 5. 154):

> The traders (*mercatores*), wealthy and honourable men, have come in great numbers for this trial. They tell us that their partners, their freedmen, or fellow-freedmen were plundered and thrown into prison; some were beheaded ... When I call for the evidence of Publius Granius, so that he can tell how his own freedmen were beheaded by you, and claim back his ship and cargo from you, you shall prove him a liar if you can.

Governors could not afford to ignore the interests of those involved in trade and business in their provinces. Cicero was to boast of his own behaviour in Sicily, when there as quaestor in 75 BC (*On behalf of Plancius*, 64):

> negotiatoribus comis, mercatoribus iustus, mancipibus liberalis, sociis abstinens (I was affable to the businessmen, just in my dealings with the traders, generous with those who had contracts in the corn trade, and displayed self-control as regards the partners in the companies of the *publicani*)

(the reference to *socii* is most likely to the companies of *publicani*, rather than 'allies', because Cicero is comparing himself to

Plancius, and one of the charges against Plancius was his shady involvement through his father with the companies of the *publicani*).

The remark also neatly illustrates the careful observation of social gradations by Cicero. So *negotiatores*, the money men who set up deals, were likely to be Cicero's social equals – hence the open friendly discourse. *Mercatores* were going to be slightly down the social scale, but could still expect Cicero to ensure fairness if, as frequently happened, their dealings were the subject of litigation. *Mancipes* would expect Cicero to promote their interests and, of course, Cicero would be a model governor in avoiding making any demands for a cut from the activities of the *publicani*. The subtle differences in Cicero's approach to relations with each group also reveal why we hear more, and in more detail, of the big *negotiatores* in the literary sources rather than *mercatores* and the like.

Many more examples from literary sources are available. But it will be objected that little of it illuminates the issue of scale. Did the empire make a great difference to the economic lives of a large number of its inhabitants? Other types of evidence, evaluated in their own terms, converge to strengthen the case for a positive answer. So, for example, the archaeological evidence of amphorae from wrecks in the Mediterranean reveals a period of some three centuries, from 125 BC to AD 175, coinciding with the height of Rome's domination of the Mediterranean world, during which the number of wrecked cargoes is at least two to three times higher than the period which precedes it or that which follows. Even if we suppose some sort of bias in the archaeological record, the overall picture cannot change to the extent of ironing out this notable peak. There is not going to be similar evidence of activity on such a scale again until the high Renaissance (Parker 1984, 99–113). (On the problems of this sort of quantitative data see Fitzpatrick 1987, 79–112. But see also Parker's pertinent comments on the interpretation of the archaeological record in Parker 1990.)

It is important to recognise the mechanisms at work here. This peak in activity exactly coincides with the full development of the Roman empire. But it did not emerge from nothing. If we take the example of the trade in Italian wine, then the increase in numbers of Graeco-Italiot amphorae testifies to trade in quantity from at least the early third century BC (Parker 1990, 329; Manacorda 1986). This involved centres such as Minturnae and the cities of Magna Graecia, particularly in Sicily. But the trade also leads to profound changes in the areas of reception of the wine. For example, in Gaul the luxury goods associated with the drinking of wine, often found in prestige burials, disappear completely as the importation of wine in amphorae and of mass-produced black-glaze pottery increases (Morel 1990). Wine had become a much less rare, and therefore less prestigious good, and was distributed and drunk more widely. What Morel does in his brilliant discussion is to demonstrate that the key changes only become identifiable by considering the totality of archaeological evidence over a long period of time. Then the big changes become much more clear, and this particular one is most naturally interpreted as the result of commerce. The coming of the Roman empire provides increased security, while rising populations and rising expectations create a whole range of new opportunities for those already involved in trade. (I am doubtful about Hopkins's famous model, which argues that the imposition of taxation on new provinces is the key stimulus to trade: Hopkins 1980. See the critique of Duncan-Jones 1990, 30ff.) The archaeological evidence is testimony to the decisions of numerous individuals, based upon self-interest, to take advantage of the new conditions.

The development of Roman commercial law is another body of material, still underexploited, which provides further confirmation of trade great in scale and sophisticated in organisation. The beginning of *Digest* 18 quotes the second-century AD jurist, Paul, who recognises the importance of the introduction of money for easing the exchange of goods and the limitations of a barter system (*Dig*. 18. 1. 1):

> Today it is a matter of doubt whether one can talk of 'sale' (*venditio*) when no money passes.

There had been a lively debate among first-century jurists as to whether such exchanges could be deemed *venditio* or *permutatio* (barter). What is happening here is the Roman law coming to grips with the realities of a monetary economy. Much of Books 18 and 19 of the *Digest* is concerned with the large-scale transactions between producers and middlemen or between one wholesaler and another, not with the retail trade (*Dig*. 18. 6. 2 *pr*. envisages two kinds of sale of wine: one by the estate owner, who needs to ensure that his *dolia*, used to store this year's wine, are emptied in time for the next vintage; the other by the *mercator qui emere vina et vendere solet* 'the merchant who regularly buys and sells wine'). The jurists' language reflects what may be dubbed 'mature mercantilism' (Frier 1983) or, perhaps better, 'mature commercialism' – that is, that the deals envisaged are objective and impersonal between individuals who have no necessary connection with each other, other than that created by the contract of sale itself. Indeed, this is the whole point of the development of the law in this field; it is how to ensure that the conditions of sale are carried out, when those involved do not have any other personal, moral, or social relationship, which might constrain them to respect the terms of the deal. The jurists also reflect the world of a free market, as it were, in which it is open to individuals to make contractual agreements on any terms which suit the parties concerned, unencumbered by tradition, state legislation, or the like. For example,

> the measures and prices with which the *negotiatores* deal in wine are a matter for the contracting parties; no one is obliged to sell, if dissatisfied either with the price or the measures, especially when nothing is done contrary to the customary practices of the region.
> (*Dig*. 18. 1. 71, quoting a rescript of the Antonine period)

The measure presumably reflects the conditions of long-distance trade, where it is necessary to take account of local custom and practice.

The sale of wine figures greatly in the legal sources, in part because of its prominence as a product which was traded in quantity and over distance, but principally because the nature of the product highlighted key issues for the lawyers. In particular, wine's natural and frequent tendency to go off raised two problems. At what point in the transaction did the seller cease to have any liability for the quality and nature of the wine sold? And under what circumstances might the wholesale buyer have some sort of comeback for wine which had become vinegar? As Bruce Frier (1983) showed in a ground-breaking study, which deserves the widest recognition among economic historians, the ways in which the Roman jurists tackled these problems reveal much about the nature and scale of commerce in the Roman empire. Wine which turns to vinegar could have serious consequences for the wholesale buyer, who, having bought large quantities in good faith, finds the value of his investment drastically reduced before it can be disposed of. The legal issues involved were already being dealt with by the early classical jurists – in itself an indication of the importance of the wine trade. They exploited the doctrine of *error in substantia* ('mistake as to substance'), where one of the parties had entered into the sale agreement under a misapprehension as to the 'material substance' of what was being sold. But in the imperial period this doctrine was sidelined in favour of a much more flexible system based upon the seller's bona fide obligations to the buyer. Not only did the seller have to be responsible for any claims he might make for the object of sale, he also had to protect the buyer against any false assumptions which the buyer might have about the product. There can be no doubt that the result was to increase the liabilities of the seller in favour of the buyer. Those liabilities, of course, were not unlimited. The process by which the buyer tasted the wine and then either accepted it or rejected it (*degustatio*) was in the interest of both parties. Once the buyer had expressed satisfaction after tasting the wine, then the seller was no longer liable, unless he had made some specific claims about the quality of the wine and its ability to last. Equally, the buyer had no case if he complained about the quality of the wine later but had not taken the opportunity given to him to taste it (see e.g. *Dig*. 18. 6. 16). Usually these large-scale deals were between businessmen, who might both buy and sell wine on different occasions. Even where the seller was a vineyard owner, it was in his interest to have a balanced and fair set of principles to govern these transactions, particularly to ensure that the wine-dealer returned to take his next vintage from him. What all this reveals is that the minutiae of the Roman law on sale are not simply esoteric, academic legal quibbles, but are the creation of jurists attempting to tackle real problems in the real world. In this case the world was one of mature, large-scale commerce.

All the above is intended to provoke. There seems to me to be an overwhelming body of different kinds of evidence (literary, legal, epigraphic, and archaeological) all supporting the conclusion that during, and to some extent as a consequence of, the Roman empire the nature, scale and complexity of trade was quite unlike that in the periods which preceded or followed. The explanation of this expansion, of course, is likely to be multifactorial; but (to continue the provocation) central prominence deserves to be given to the initiative and entrepreneurship of thousands of individuals involved in attempting to satisfy the growing expectations of the populations of the Mediterranean under Roman rule – in short a market economy. Yet the vast majority of modern scholarship prefers to find alternative explanations, which seek to minimise both the scale and nature of commerce in the ancient economy. So, for example, Peacock and Williams (1986, 55–63) offer a range of explanations of the long-distance movement of goods in amphorae:

- reciprocity – gift exchange;
- redistribution – the state supply of the *annona* and the needs of the Roman armies;
- marketing.

But they play down the role of the market. Whittaker (1985) offers the model of the circulation of goods within the households and between the properties of the senatorial elite, so that a great deal of what was produced on their estates was consumed by their own households, their dependants, and their slaves. Long-distance overseas transport of goods, so it is claimed, frequently represents the transfer of provisions from overseas estates to the senatorial houses in and near Rome. Tchernia (1987) offers a variation on the theme. He interprets the evidence not as the workings of markets, but of the circulation of goods around the networks of friendship and obligation built up by the elite. This sort of approach was worked out in a much more sophisticated way by Manacorda (1989), who recognises the relative complexity of the structure of the wine trade and the numbers involved but argues that the elite producer could cream off the profits of all the stages involved in trade: production, wholesale, distribution, and retail through the use of slaves and freedmen. Underlying all these arguments is the assumption, sometimes unspoken, that the one thing that cannot be happening is a free market. So Tchernia simply states that the existence of a market economy

> presupposes the distribution of information, the spread of a social and material infrastructure (merchants, means of transport), and an entrepreneurial spirit, for which there is no evidence in antiquity. The

> market economy is not to be excluded *a priori*, but no more does it constitute the natural model one should automatically turn to to explain the archaeological evidence.
>
> (Tchernia 1987, 329)

The ghost of M. I. Finley is everywhere. It needs to be remembered that his marginalisation of traders and of the scale of their enterprises is based on his studies of archaic and classical Greece, and that at least until late in life he was sceptical of archaeological evidence. All the evidence suggests that trading activity in the Roman empire is not just greater in scale than in the classical Greek world, but that it is different in kind.

The reality is that there is evidence for all the mechanisms suggested for the movement of goods; but the various pieces of evidence, even those which sometimes appear contradictory, apply to different layers or sectors of the economy. They are often parts of the same continuum, but reflect the preoccupations and perceptions of people at different points in the chain. The question then is which mechanism predominated. Direct sale from the farm gate is contemplated, but no one suggests that this is the major way in which goods reached the consumers. Equally the widespread distribution of many amphorae types across many sites of different kinds tells against the idea that this represents principally the circulation of goods within the estate-owner's family and retainers.

One of the more powerful models is redistribution, by which the Roman state seeks to supply its armies and the *annona* for the city of Rome. But it is clear that the redistributive system presupposes the presence of a multiplicity of private *negotiatores* and *mercatores* to enable it to work; Claudius and later emperors had to offer incentives to private *negotiatores* and *domini navium* to be willing to participate in the supply of corn to Rome (Suetonius, *Claudius* 18 and *Dig*. 50. 6. 6. 3ff.). This was extended to *navicularii*, who 'served the *annona*'. But the state supplies provided for only a minority of the population of Rome. Even given that a significant proportion of the rest relied on supplies from their patrons, there is still a large amount left to be provided by the private merchants (see Sirks 1991a, 1991b). In any case, for an important product like wine, there were no state distributions in Rome until Aurelian; so the supply lay largely in the hands of those involved in the wine trade. Traders, merchants, and entrepreneurs are not marginal. They are at the heart of the economic system, which provided for the needs of people, and they underpinned the state's contribution as well.

A major part of the determination to play down the abundant sources for commerce rests not only upon the indubitable fact that agriculture provided for the lives of the vast majority of the population of the ancient world but also on a false dichotomy between agriculture and trade. They are not alternatives, but are inextricably linked in the chain of production and consumption in the Roman empire at all levels. The concept of the self-sufficient peasant is a myth. All peasants had to go to market for essentials, such as salt, and the evidence from modern peasant societies is that where markets exist then peasants are quite capable of forgoing self-sufficiency in order to devote part of their small property to the production of goods for that market. Even more instructive are the agricultural handbooks produced for the large landowners in the Roman empire. These handbooks, albeit that they frequently smack more of the library than the farmyard, deal with two distinct and very real concerns of the elite estate-owners. The failure to recognise this has been the source of endless muddle in modern debate. The first need of the *paterfamilias* is to provide for the good running of the household and the estate. In this the aim is self-sufficiency, to minimise the costs of an estate by ensuring that as far as possible the physical and nutritional needs of those working the estate are met from the estate's own resources. Hence the importance of mixed farms, where parts of the estate can be devoted to the production of corn simply to feed the estate-workers. The second concern is with production for profit. The two goals can be neatly illustrated by an example of the different legal outcomes, which depended on the purpose of exploiting a claypit on an estate:

> Such a requirement might exist, for example, if a man has a pottery where the containers used to carry away the produce of his farm are made (just as on some estates it is the practice to carry wine away in amphorae or to manufacture *dolia*) or where tiles are made to be used in building his villa. However, if the pottery is used to manufacture vessels for sale, this will amount to usufruct.
>
> (*Dig*. 8. 3. 6)

The estate-owners expected to profit from their estates. In this they were what modern economists would describe as 'profit-satisficing' and 'risk-averse'. That is, they set a level of return with which they would be satisfied – often arrived at arbitrarily, or by comparison with the return from neighbours; above that level other goals might apply – the pursuit of pleasure or leisure, or the avoidance of further hassles. Second, in seeking the expected return, the owners were fundamentally averse to taking risks with their investments. The famous discussion on the profitability of viticulture in Columella, *RR* 3. 3 is essentially an attempt to persuade people who are risk-averse to invest in vines. In this Columella shows himself more adventurous than many of his contemporaries; elsewhere in his work, though, he is as cautious as any of the writers on agriculture. Nevertheless, profits there must be (Columella, *RR* 1. 1. 3: *certam sequi rationem rei familiaris augendae* (to pursue a secure method of increasing one's property)); but the extraordinary thing is that the handbooks on agriculture entirely ignore the issue of marketing. In this they were setting a trend which was to survive to the eighteenth century, in which writers on agriculture are exclusively concerned with the good regulation of agricultural work, which was conceived as the adequate performance of a household without reference to the place of this household in the larger economy. The best explanation of this surprising lack of interest in markets is if the large estate-owner is not directly concerned with the marketing of the products of his farms, because that lay in other hands.

Once again the legal texts, particularly on wine, offer confirmation. We know from anecdotal evidence (e.g. Pliny, *Letters* 8. 2) that it was convenient in many ways for the task of picking the grapes, making the wine, and organising its sale and distribution to be left to middlemen, *negotiatores*, who brought in their own gangs of pickers, but used the estate's equipment, and left the wine to ferment in the estate's *dolia* before removing it within a year in their own amphorae. But this raised the problems of who was responsible for the wine at any part of the stage and, indeed, whose wine it was – as Gaius, *Inst*. 2. 79, wrote: 'If you make wine from my grapes, the question is whether it is my wine' (cf. *Dig*. 41. 1. 7). This sort of situation might have arisen when a dispute occurred over a contract for the sale of grapes on the vine, after the grapes had been pressed. If the dispute was over the original contract, the situation for a settlement could be complicated, since the original grapes no longer existed, but the wine had been made by the *negotiator*, who had paid and provided the labour.

The period during which wine was left in the estate's *dolia* also raised questions, as, for example, when someone had willed an estate with its *instrumentum,* was the heir entitled to wine in the estate's *dolia* which had already been sold and part-paid for (*Dig.* 33. 7. 27. 3)? Finally, what happened when the *dolia* were needed for the next vintage but the *negotiator* had not turned up to take last year's wine away? The jurists were very circumspect, recommending not that the wine be poured away, but that it be transferred to other storage and the cost put down to the buyer (*Dig.* 18. 6. 1). In this the jurists recognise the particular case of the *mercator*, 'who regularly buys and sells wine' (*Dig.* 18. 6. 2).

Nice legal problems can illuminate what happens to the wine once it is in the hands of merchants. Some might store the wine and use some of it for their own purposes, while intending to sell the bulk of it. If the merchant then wills the contents of his store-room (*promptuarium*), the lawyers had to provide a formula ('sufficient for a year's supply for himself and his household') to distinguish between what had been intended for the household's store and what was to be traded: 'This tends to happen in the cases of *mercatores* or whenever a store of wine or oil which was normally sold on is left in an inheritance' (*Dig.* 33. 9. 4. 2).

The sale, transport and marketing of goods could be carried out in a variety of ways with a range of people involved. The *negotiatores* should normally be seen as the large-scale wholesalers who finance the trade. They may, or may not, also play the role of *mercatores* who are directly involved in the transport and sale of the product. There are also the people involved in the financing and organisation of the shipping of goods. Here the *navicularii* seem to play the same role as financiers of shipping as the *negotiatores* do for trade as a whole, although their role may also merge with that of the *mercator*. Then there are the actual masters of the ships. The roles and titles of the various individuals who may be involved are not clear-cut. Almost all combinations seem possible. For example, there is the famous example of Sextus Arrius from the Dramont A wreck. His name appears both on the anchor and stamped on the lids of the amphorae that formed part of the cargo. He presumably both owned the ship and was carrying, as at least part of the cargo, goods in which he himself was trading (see Hesnard and Gianfrotta 1989). The true complexity of the world of trade comes out in the famous inscription recording the honours held by Gnaeus Sentius Felix, a prominent citizen of Ostia at the end of the first century AD. He was senior official, or patron, or co-opted member of the *collegia* of superintendents of sea-going ships, the shippers from the Adriatic, of a guild which met in the wine forum, of the bankers, of the wine-dealers of the city of Rome, of the corn measurers of Augustan Ceres, of the corporation of rowers, and of the ferry-boat men of the Lucullus crossing, of the citizens from the forum and the public weigh-house, of the oil-dealers, of the young cabmen, of the guild of the catchers and sellers of fish – to leave aside a host of other bodies involved in the administration of Ostia, but not directly in trade (*CIL* xiv. 409).

Ostia, of course, was an exceptional entrepôt, but on a smaller scale a similar range of people could be found at any of the many major ports in the Mediterranean. Lower down the social scale were jobs for porters and stevedores on the docks (on the use of free labour in cities see Brunt 1980). In a world of expanding markets there were many niches and opportunities here to be exploited by the ambitious at all levels of society (this is the multiplier effect which Keith Hopkins saw at work in the economies of ancient cities (Hopkins 1978, 107 n. 19)). The legal evidence in particular suggests that they did so.

There is a powerful alternative to this model – it is to emphasise the role of the freedman and the *institor*, the person who manages an enterprise on behalf of another. By means of these institutions the rich landowner might reap the rewards of trade indirectly by creaming off the profits through putting his or her representatives in place at each of the key stages in the trade (Manacorda 1989; Aubert 1994). In this model we should not envisage a free market, with opportunities to be exploited by anyone who can get a niche in it, but rather a relatively closed market in which profits largely return directly or indirectly to the wealthy landowner. No one can doubt that wealthy people did carry on business overseas through their slaves and freedmen. For example, *Digest* 40 deals with the circumstances in which a person frees his slaves at a time when he believes he is solvent, but in fact he is not so:

> This often happens to people who carry on business through their slaves and freedmen overseas (*transmarinas negotiationes*) or in regions

> where they are not themselves living. They are often not aware of the losses incurred over a long period and bestow the favour of freedom on their slaves, manumitting them without intent to fraud.
> (*Dig*. 40. 9. 10)

The implication of the passage, it is worth noting, is that such a system carries with it real risks. There can be no doubt that there is ample evidence, particularly in the legal texts, for both main types of organisation of trade:

- commerce carried on between individuals who have no connection with each other and whose transactions are impersonal and have to be moderated simply by the law;
- commerce in which the individuals concerned have connections other than the transaction itself, such as being the slave or freedman representative or client of someone else.

So, for example, at each stage in trade a person involved may very well be dealing not with the principal but with a representative, his slave or freedman acting as an *institor*. But what there is little or no evidence for is the set-up where all the people involved were in some way the subordinate of the original wealthy producer. There is little or no evidence that the whole process of producing a good, getting it onto the market, transporting it, and selling it retail is usually, or ever, kept 'in house'. Slaves, freedmen, business managers, clients, and the like complicate the picture of the organisation of trade, but they do not undermine a model of a dynamic mercantilism, which brought benefits to a wide range of individuals directly or indirectly.

It is gratifying that this model of a relatively dynamic economy in which large numbers of independent operators take part and make their livelihoods is confirmed by the best and fullest body of evidence available for the structure of the trade in a particular good – that is, the trade in olive oil from southern Spain. The amphorae which carried this oil, the well-known large bulbous amphorae, usually designated Dressel 20, frequently have not just stamps on them, but other painted inscriptions, which appear in a largely standard format and reflect the practices used in production and trade (for an admirable summary of a long and complex debate see Liou and Tchernia 1994). The stamps, usually on the handle, are of the producer of the amphorae. Many of the production sites have been identified in the Guadalquivir valley in southern Spain. These areas were occupied by multiple workshops, which to judge from the names on the stamps were owned and operated by different people, who had not connection with one another. One of the painted inscriptions found frequently on these amphorae, the one labelled δ by scholars, gives the estate where the oil in the amphorae was produced, and its owner or his representative. There is no significant overlap between the list of names of the oil producers and the makers of the amphorae. The two parts of the trade lie in different hands. Another painted inscription, identified as β, undoubtedly represents the shipper, the *navicularius* or *mercator*. So, for example, there is the funerary inscription, found near St. John Lateran in Rome (*CIL* vi. 1935 = *ILS* 7489) to L. Marius Phoebus, who in the middle of the second century AD was described as *mercator olei Hispani ex provincia Baetica*, 'merchant in Spanish oil from the province of Baetica'; his name appears in a number of β inscriptions from the great dump of Dressel 20 amphorae in Rome, known as Monte Testaccio (*CIL* xv. 3943–3956) (L. Marius Phoebus is also described on his tombstone as a *viator tribunicius*, that is one of the *apparitores*, who attend and work for magistrates – in this case carry messages; his role as a trader may be important to his obtaining this position, which was one of some social standing). Again, there is no obvious overlap or link with the names which appear at other stages of production. This is a world of diversity, of multiple independent participants, linked only by business relationships, and, in particular with very little concentration of ownership or control, a conclusion which surprised Liou and Tchernia (1994, 152).

A dynamic economy, then, but clearly one with limits. There seems to be considerable growth which particularly accompanied the period of expansion of the empire and the establishment of the Augustan Peace. Contemporaries were aware of the changes: increased urbanisation, greater variety of goods, and changes in taste (much of this comes out in the contemporary debate about the dangers of *luxuria*). This pace of development then levels off during the first century AD. There is no sign of the economy 'taking off' to be transformed into a modern capitalistic economy. Failures of this sort lie at the heart of the contemporary debate about the economics of development (see Todaro 1994). The factors which contribute to economic development are many. Among the most important are the aggregate economic variables: growth of per capita output and population and rates of increase in total factor productivity, above all the productivity of labour. High levels of growth may be necessary conditions, but they are not in themselves sufficient. The pace of structural change in the economy must be high and must be accompanied above all by appropriate social and ideological changes. The growth in output and the rise in population in the Roman world up to the early empire may have been considerable, but they were not accompanied by a transformation in the productivity of labour. Nor were there the changes in thought and practice which could fuel progress. So the growth levels off.

It may be that it is largely inappropriate to think in terms of *the* Roman economy at all. The best model may be that of a network of micro-regional economies (on the complexity even of Roman Italy, see Foraboschi 1994). These micro-economies have their own natural rhythms and structures designed essentially to meet local needs (see Paterson 1991). But at certain periods some of these economies become more closely linked with the wider world and find a wider market for their goods. The key factor in establishing and maintaining these links was the work of the *negotiatores*. This exploitation of more distant markets could have significant effects on the structure and workings of the local economy. For example, the wine-producing area of Monte Massico on Italy's western coast on the edge of Campania for a time in the last two centuries BC found flourishing and extensive markets for its products. This in turn inspired the appearance of extensive areas of workshops to supply the *negotiatores* with amphorae around the main ports, most notably around Sinuessa. As the scale of export levels off and then declines at the end of the first century BC, these workshops disappear. There is still trade; but the amphorae now seem to be produced on individual estates (Arthur 1991). It is important to realise that these local developments are dependent on a much wider picture. They cannot be explained by local factors alone. Similarly, in southern Gaul kilns produced separate series of amphorae – some types for local distribution, and others for the wider export markets.

Somewhere about the beginning of the first century AD we may posit that the large-scale expansion of markets for goods such as wine and oil reaches a peak and then steadies. There are no great new markets to be found. What then happens is the creation of an 'economy of substitution' – in order to create markets for your goods you have to substitute them for the goods of others. So an increase in the exports from one area is normally matched by a decline in similar exports from another area. No new markets are created. The phenomenon was observed by contemporaries:

> So, in Latium and the land of Saturn, where the gods have taught their offspring of the fruit of the fields, we let contracts at auction for the importation of grain from our overseas provinces, so that we may not suffer from famine; and we lay down vintages from the islands of the Cyclades and from the regions of Baetica and Gaul.
> (Columella, *RR* 1. pref. 2, mid-first century AD)

This sort of claim has its origins in part in the strong theme of self-sufficiency, which runs through all the writers on agriculture, and on the constant complaints about the import of luxuries. However, archaeology confirms that Columella was right. An increasing percentage of imported amphorae in the early empire is mirrored by a significant decline in Italian amphorae on sites in Italy. But not just that; within Italy itself different regions (the west coast, the Adriatic coast, NE Italy and Istria, Apulia, Bruttium, etc.) competed with one another to claim their share of the market for Italian wine and oil (see Panella and Tchernia 1994). There is no doubt that this sort of model can be replicated for other regions in the Roman world.

The reasons why one region enjoys a period of popularity and expansion in the market of its goods and then declines in the face of competition from another region are bound to be complex and not always clear-cut. But it is difficult to imagine that any mechanism other than the enterprise of individual *negotiatores*, combined with changing tastes and expectations, can explain this phenomenon. Faced with the threat of being labelled 'anachronistic modernisers', historians have been too quick to establish their credentials by playing down the nature, scale and sophistication of trade and commerce in the Roman empire. *Auri sacra fames* is not the guiding principle of just one economic system, but of most. The fact that people exploited opportunities to create or expand markets does not in itself mean that we are dealing with a modern economy. Indeed, it would have been extraordinary if Rome's expanding control of its empire had not had major effects on the economies of the regions which it came to control. The merchants and businessmen who created and took the opportunities which the empire provided lie at the edges of the elite literary tradition. But they left their mark in many other areas: in the legal texts, when the law was adapted to meet and promote their needs; in epigraphy, where they record their achievements with pride; and in the archaeology.

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