

CHAPTER 13

CLASSICAL GREECE: DISTRIBUTION

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I INTRODUCTION

All regions bordering the Mediterranean Sea make use of the relatively easy connectivity it provides.¹ People and goods move around fairly easily, but not without the risk of wreckage or piracy. This condition allows both for the growth of refined demand and at the same time for its corollary – specialization of production. Distribution refers to the circulation and allocation of products and services, providing for both basic needs and luxuries. We consider the motors of distribution from two complementary sides: production and demand. Production is a result of environmental factors and sociopolitical forces, depending on opportunity as much as on limitations. Demand grows from need and desire, which arises when goods are known and available.² Social constraints and chance shape consumption; hence demand follows value-rational decisions.³ A distribution system's success or failure in supplying needs and desires depends on institutions, the formal and informal rules a society employs. Institutions, however, result from negotiations within a society, guided by social norms and values. They are both realities and cultural creations, changing their meanings and causing conflict. Thus, a society's ability to adapt to changing outside parameters and to adjust its institutions determine the performance of its distribution system.

II OBJECTS

The image of classical Greece as an essentially self-supporting agricultural system, creating little surplus and low aggregate demand (with just a few exceptions, such as the urban agglomeration of Athens) is increasingly being questioned. The growing number of shipwrecks suggests expanding seaborne trade,⁴ although in quantifying these data we must be wary of the impact of patterns of archaeological research and post-depositional transformations of the record.⁵ Production of certain goods clearly exceeded local

¹ Horden and Purcell 2000. ² Foxhall 1998: 297.

³ Weber 1972: 44–5. ⁴ Horden and Purcell 2000: 371, table 5. ⁵ Morris 2005.

needs in some regions: Egypt, Sicily, and regions bordering the Black Sea, for instance, produced more grain than they consumed,⁶ Thasos, Chios, and the Chalcidice produced more and better wines than other parts of the Mediterranean. The demand for delicacies and standards of living grew, although democratic ideology partially restrained private luxury at Athens.⁷

(a) *Foodstuffs*

Food production, especially of grain, the core element, was subject to unpredictable weather and natural catastrophes. Years of glut and severe shortage followed each other in the various micro-regions, while neighboring micro-regions might have completely different experiences. Unpredictable crop failures created sudden local demand for extra food, and *poleis* had to respond to food shortages by storage or import.

Many historians now believe that Athens depended less on regular grain imports than was previously thought, and that this dependency began later than had been assumed. They sometimes suggest that the desire for better quality wheat, not simple hunger, drove Athens' grain imports.⁸ During the fifth century, the Athenians seem to have had no serious grain-supply problems, whether because home production within Attica met their needs, or because the empire supplied them. The sources contain few references to food crises until the Peloponnesian War, and there were few state grain distributions to citizens (e.g., in 445/4 BC, when the Egyptian pharaoh gave the Athenians 30,000 or 40,000 *medimnoi* of grain – well over a thousand tons).⁹

After the Peloponnesian War, however, the supply of grain ranked high on Athens' political agenda. Xenophon implies that any aspiring politician had to understand the grain supply (Xen. *Mem.* 3.6.13), and Aristotle listed the five most important subjects for political oratory as state revenues (*poroi*), war and peace, defense of the *chora*, imports and exports (i.e., concern with food supply), and legislation. The politician needed to know when grain imports were required so he could decide whether to make trade agreements with other states (Arist. *Rh.* 1359b19–1360a17). By the late 330s or the 320s, if not earlier, grain supply was a regular formal item on the assembly's agenda, along with the defense of the *chora* (Arist. [*Ath. Pol.*] 43.4). In 355 and 330 BC, Demosthenes (20.31; 18.87) reminded the Athenians of the fact that they consumed more imported grain than any other people and regarded it as every patriotic citizen's duty to take care of grain shipments to the Piraeus (18.301).

⁶ Gernet 1909; Isager and Hansen 1975: 20–7.

⁷ The following in part summarizes points made in Chapters 12 and 14.

⁸ Particularly Sallares 1991: 73–81.

⁹ Philoch. *FGrH* 328 F119 *apud* schol. V. Ar. *Vesp.* 718; Plut. *Per.* 37.

Sicily was famous for the abundance and fine quality of its grain.¹⁰ In 481 BC, the Syracusan tyrant Gelon offered to provide grain for the whole Greek army till the end of the Persian War (Hdt. 7.158), and when Thucydides described Nicias' attempts to discourage the Athenians from going to Sicily in 415, he had Nicias tell the assembly that as well as having many horses, the Sicilians had the advantage of living on home-grown grain (Thuc. 6.20.4).

In Xenophon's time, *emporoi* found grain not only in Sicily, but in the Aegean and Black Sea (Xen. *Oec.* 20.27); and during the later fifth century, Athens attempted to control significant sources of grain within the Aegean and Hellespont, such as Euboea.¹¹ The Black Sea area became a really important grain source by the late fifth or early fourth century. Herodotus says that Xerxes saw ships loaded with grain sailing through the Hellespont for Aegina and the Peloponnese in 480 BC (Hdt. 7.147.2–3), but archaeological evidence does not seem to indicate a major grain trade with the Black Sea during the fifth century.¹²

Olives seem to have been produced in sufficient quantity in most regions of the Aegean, perhaps even yielding a surplus, but some areas did have to import oil. Olive trees did not grow in the Argolid, Arcadia,¹³ the Macedonian plain, Chalcidice, or Southern Thrace. Oil production could be profitable, but was risky and labor intensive. It varied, however, in different parts of Greece due to climatic conditions and a good crop could only be expected every second year.

Wine was produced around much of the whole Mediterranean and in Greek colonies in the Crimea. Much of it was probably consumed locally – a quality that Athenians called *trikotylos* (“holding three *kotylai*,” the amount that could be bought for one obol).¹⁴ But shipwrecks and amphora finds from settlements and shipwrecks show that high quality wines were transported over long distances. Amphoras from famous wine-producing regions such as Chalcidice,¹⁵ Chios,¹⁶ Lesbos, Samos, and Thasos¹⁷ have been found around the Mediterranean and the Black Sea during the classical period,¹⁸ and even places with lower quality wine, like Peparethos,¹⁹ are represented by finds and discussed in literary sources.²⁰ Thasos strictly controlled the quality and export of its wine.²¹ Wine shipped to Egypt in

¹⁰ Thuc. 3.86.4; 6.90.4; Soph. fr. 600 Pearson *apud* Plin. *HN* 18.65; De Angelis (2000) for Sicily's agricultural potential.

¹¹ Ar. *Vesp.* 715–18; Thuc. 7.28.1; 8.5. ¹² Noonan 1973; Tsetskhladze 1998. ¹³ Roy 1999: 338.

¹⁴ Hesych. s.v. *trikotylos oinos*. ¹⁵ Papadopoulos and Paspalas 1999.

¹⁶ Sarikakis 1986. ¹⁷ Salviat 1986.

¹⁸ Parker 1992: nos. 737, 539, 879, 1228, 72, 1058, 1227, Halonnesos wreck cf. Gibbins 2001: 283–4; Tektas Burnu wreck cf. Carlson 2003: 581–600.

¹⁹ Parker 1992: nos. 879, 1058, Halonnesos wreck cf. Gibbins 2001: 283–4.

²⁰ Dem. 35.35 on wine transport to the Pontus; Athen. 1.29d–f, 31a–b, on the quality of different wines.

²¹ *IG* XII suppl. 347.1–11 of 425–400 BC; Salviat 1986.

475 BC in exchange for natron, however, was classified not by its place of origin but by year – the current or the previous one.²² Putting wine in amphoras sealed airtight with pitch enabled its wide transportation and made aging and storage possible. Demand for high quality wines drove transport techniques and specialization among producers.

Gourmets also craved other delicacies, like eel from Lake Copais (Ar. *Ach.* 880–94). Salted fish, on the other hand, were within reach of ordinary people and were imported to Athens and Corinth from as far as the Black Sea.²³ Megara had both fish and salt,²⁴ while Rhodes and Carystus were famous for their fishing grounds.²⁵ Pulses and legumes supplemented the diet. The first could be stored, but transport of the latter was limited to short distances. Meat consumption normally took place in ritual contexts, but sacrifices could provide large amounts of meat that was sold or stored. An amphora containing butchered animal bones in the Tektas Burnu shipwreck shows that salted meat was transported.²⁶ This might have been for the crew's consumption, but Hermippus describes transport of beef ribs from Thessaly to Athens.²⁷

(b) *Timber, metals, minerals*

Houses, temples, and ships all needed timber. Large trees suitable for shipbuilding were available in Macedon, Chalcidice, Thrace, southern Italy, the south shore of the Black Sea, and Asia Minor. During the first half of the fifth century, Athens could probably still meet her timber needs for shipbuilding from local mountain slopes and the Boeotian border, or from neighboring Euboea. But Macedonian timber and pitch were in high demand, leading to an alliance between Amyntas III of Macedon and the Chalcidians at the beginning of the fourth century.²⁸ Building accounts from fourth-century sanctuaries tell us that Delphi was supplied by Arcadia and Macedon, Eleusis by Thourii, Corinth, the west coast of Turkey, Syria, and Lebanon.²⁹ The demand for firewood was normally met locally, but toward the end of the classical period there is evidence that even this could be transported long distances. A letter of 350–325 BC from Torone mentions seven talents of firewood to be transported from Chalcidice to Athens.³⁰

Metals were scarce and had to be shipped. Sometimes this happened in bullion, as seen in shipwrecks, but often it had already been worked into vessels or coins.³¹

²² Briant and Descat 1998: 66–72. ²³ Salmon 1984: 128; Braund 1995. ²⁴ Ar. *Ach.* 521, 760.

²⁵ Ael. *VH* 1.28; Lynceus *apud* Athen. 8.360d; Arcestratus fr. 165 *Suppl. Hell. apud* Athen. 7.301f–302a, fr. 181 *Suppl. Hell. apud* Athen. 7.304d.

²⁶ Carlson 2003. ²⁷ Hermippus 63 *PCG apud* Athen. 1.27e.

²⁸ Rhodes and Osborne 2003: no. 12, 390s–380s BC.

²⁹ Meiggs 1982. ³⁰ *SEG* 43.488 with Davies 2001a: 23. ³¹ Treister 1996.

Minerals were important commodities in high demand. Salt, needed for food preservation, was produced in shallow coastal basins and moved long distances inland. Without alum, dyeing or bleaching of textiles and tanning skins were impossible. Apart from deposits mentioned in later sources, in classical times it came from Egypt and possibly from Phocaea.³² The Elephantine papyrus palimpsest, a customs account of 475 BC from an unknown port in the Egyptian delta, provides excellent evidence about the shipping of mineral soda (natron) from its major source in Egypt.³³ Ionian Greeks and Phoenicians engaged in this specialized high-value trade, using relatively small ships and carrying extremely mixed cargoes to Egypt.

(c) *Craft products*

Most textiles were probably produced within the household, but some *poleis* were known for particular wools or clothes: Megara produced a famous working outfit for slaves,³⁴ while Miletus specialized in higher-value goods.³⁵

Linen, like hemp, was needed mainly for shipbuilding, and linen clothes were quite exotic.³⁶ Linen was produced in Egypt, the Near East, northern Europe, and Colchis,³⁷ while hemp is reported from Thrace.³⁸

Textiles rarely leave traces in the archaeological record, but pottery has high archaeological visibility. Archaeologists frequently warn historians not to take the distribution of painted pottery as direct evidence for the amount of trade in other goods or for large-scale production.³⁹ Some archaeologists suggest that the shipment of fine Athenian pottery “piggy-backed” on other commodities, or was merely “profitable ballast,”⁴⁰ but ballast seems to be the wrong concept, considering the mixed loads of shipwrecks. Some scholars see a regular network of direct trading links in the distribution of Athenian and Corinthian pottery, arguing that production and distribution aimed at or exploited specific markets.⁴¹ Taking the shipwreck evidence, however, much trade was cabotage in rather muddled movements and most pottery moved as a by-product to agricultural products. Even if bigger loads of painted or glazed pottery were found, they never made up the whole or a major amount of the cargo.⁴² This does not, however, generally argue against direction in carrying the freight, as the traders and producers might have well known where consumers were eagerly awaiting certain commodities.

³² Nenci 1982. ³³ Porten and Yardeni 1993: 82–195; Briant and Descat 1998.

³⁴ Ar. *Ach.* 519; *Pax* 1002; *Vesp.* 444; Xen. *Mem.* 2.7.6; *IG* II² 1672.103, 1673.45–6.

³⁵ Alexis of Samos *FGrH* 539 F2; Klytos of Miletus *FGrH* 490 F2; Timaeus *FGrH* 566 F50.1–3.

³⁶ Hdt. 2.37. ³⁷ Hdt. 2.105, 3.47. ³⁸ Hdt. 4.74. ³⁹ Cook 1959.

⁴⁰ Gill 1991; 1994; for objections, see Boardman 1988a; 1988b; Johnston 1990; Lawall 1998.

⁴¹ Osborne 1996b; Salmon 2000; cf. Lawall 1998. ⁴² Parker 1992: no. 1058; Carlson 2003.

Transport containers are clearly witnesses of the trade in oil and wine, but they were also filled with olives, honey, almonds, pistachios, fish sauce, pitch, or salted beef. Amphoras in themselves do not tell us their content. Herodotus reports that the wine amphoras which were annually exported to Egypt by Greeks and Phoenicians and which could very well be those mentioned in the Elephantine palimpsest were reused for bringing water into the desert – certainly not the only occasion for reuse.⁴³

(d) *Slaves*

The distribution of slaves does not leave physical traces, but large numbers of imported chattel slaves labored in the silver mines of Laurion and in agriculture on Chios and Corcyra.⁴⁴ Most of these slaves were probably imported from outside Greece.⁴⁵

III CONDITIONS

(a) *Transport by land and sea*

The Aegean connected people and the goods they needed. But seaborne trade had its challenges, including wreckage or pirates. There was little sailing in the Aegean during winter, but the Elephantine palimpsest informs us that ships came to Egypt all year, except January and February. The evidence from shipwrecks suggests that most of the seaborne traffic in the Mediterranean was over short distances, using small boats with extremely mixed cargoes. Athenian trade looks rather more sophisticated, but this may be the result of Athens' empire and long experience with maritime law.

Transport was much easier by sea than overland. Moving goods by road required negotiations, protection money, and was impeded by deliberate obstructions, and outright violence.⁴⁶ Nevertheless, goods did move by land within micro-regions. Thucydides (1.13.5) claims that Corinth gained her wealth and significance as a node both of land and of sea communication. Boeotia was well known for land routes supplying southern Greece with metals since the eighth century BC, and the passes around Delphi were used both for transhumance and the exchange of resources.⁴⁷ Thucydides (7.28.1) mentions an important land route between Oropos and Athens, saying that transport by land was quicker than costly shipping around Cape

⁴³ Hdt. 3.6.

⁴⁴ Thuc. 8.40.2; Theopomp. *FGrH* 115 F122 *apud* Athen. 6.265b–c; Thuc. 3.73.

⁴⁵ See Reed 2003: 21–3 on the external slave trade.

⁴⁶ Horden and Purcell 2000: 377; for bandits see Van Hooff 1988.

⁴⁷ Szemler 1989; Kase and Szemler 1991; Morgan 1988: 313–38; Wagner-Hasel 2000: 266–77; cf. Jameson 1989: 12–14.

Sounion. Recent research on land routes has revealed diverse networks in the Laconian mountain ranges and the deme of Atene in southern Attica.⁴⁸ At Athens, special officials (*hodoποιοι*) were responsible for maintaining streets and roads.⁴⁹

To facilitate shipping, *poleis* had to invest in harbor installations. Not all harbors were primarily intended for commercial dealings, and even Athens' port, Piraeus, had a military aspect. Delos' investment in harbor facilities probably provided safer access to its sanctuary.

As well as securing harbor infrastructure, *poleis* instituted *emporía*, places where exchange could be supervised, and taxes and duties collected. The word *emporion* evades simple translations. We might distinguish two different but related meanings.⁵⁰ On the one hand, there were *emporía* on the periphery of the Greek world, isolated places like Naucratis in Egypt in archaic times or Pistiros in Thrace in the fourth century BC, characterized by an array of traders from different *poleis* and regions, and by exchange with non-Greeks.⁵¹ But the word also refers to the harbor or a district of it within a *polis* but separated from the *polis* proper where external exchange took place. The best known example of this kind of *emporion* lay in Piraeus.

Piraeus, a focus of commercial activities where produce not readily available elsewhere could be obtained (Isoc. *Paneg.* 42), was conceived particularly by conservative authors as a "world apart." Clear indications of a real separation between the town and the *emporion* are lacking, but the rhetoric of otherness emphasized a division between the civic *polis* and the commercial dealings of metics (resident aliens) and foreigners. The "Piraeus economy" developed its own values, both material and moral, and some tension arose between the Piraeus and the city.⁵² Piraeus in some ways constituted a unique administrative unit within the Athenian state. Here, the world of commerce prevailed. Seen from a less rhetorical perspective, however, the two worlds do not seem so far apart, and citizens and non-citizens collaborated on many levels.⁵³

(b) *The knowledgeable trader*

Johannes Hasebroek's picture of the Greek trader as poor, foreign, and illiterate can no longer be maintained;⁵⁴ the lead letters found since Hasebroek wrote show that traders wrote business contracts. Archaic and early classical trade was more sophisticated and better organized than Hasebroek and Finley thought, and the activities of the associates of Cleomenes of

⁴⁸ Christien 1989: 18–44; Armstrong et al. 1992: 293–310; Lohmann 1993: 235–9.

⁴⁹ Arist. [*Ath. Pol.*] 54.1. ⁵⁰ Bresson and Rouillard 1993; Hansen 1997; cf. Möller 2001.

⁵¹ Chankowski and Domaradzka 1999; Loukopoulo 1999; Möller 2000.

⁵² Von Reden 1995b; Cartledge 1998: 28; Roy 1998.

⁵³ Velissaropoulos 1977; Mossé 1983; Garland 1987. ⁵⁴ Hasebroek 1928; Wilson 1997–8.

Naucratis, who sent letters to inform each other about prevailing prices, show that communication among merchants was quite highly developed in the fourth century.⁵⁵ This kind of business correspondence tells something about how information was used for profit but does not give evidence of private book-keeping, or of more sophisticated accounting techniques.⁵⁶ Surviving accounts such as the Elephantine palimpsest come from contexts of Near Eastern state administration and nothing similar has yet been discovered from Greece. Some scholars believe that there must have been some private accounting, presumably on perishable materials like papyrus. Bresson suggests that an *emporos* would have had business correspondence on lead, wooden tablets, *ostraka*, or papyrus on board his ship.⁵⁷ Xenophon (*An.* 7.5.14) reports finding bits of papyrus covered with writing (*bibloi gegrammenai*) among the flotsam of shipwrecks on the Black Sea coast. *Emporoi* apparently carried written contracts on board (*Dem.* 32.16), and strangers of all kinds needed documents for identification. An Athenian decree of the mid-fourth century provides for the manufacture of such a *symbolon* for a messenger sent to Sidon, and Aristophanes alludes to its function (*Av.* 1212–15).⁵⁸

Hasebroek not only held that Greek traders were illiterate, but also that at Athens metics and foreigners exercised trade while Athenians financed it. This seems equally problematic. Not only were some Athenian citizens known by name actively involved in trade,⁵⁹ but also Xenophon's Socrates (*Mem.* 3.7.6) describes the assembly as including *emporoi* (long-distance traders) along with peasants, craftsmen, and market dealers. We have no reliable statistics on numbers of metics and citizens among financiers, as our sources are forensic speeches that remain vague about people's status and origin.⁶⁰ Money-lending in this risky business required inside knowledge, so there were many former traders among the lenders, whereas *emporoi* and *naukleroi*, the shipowners, were probably not all as poor as is sometimes suggested.⁶¹ Honorary decrees show that not everyone in the business was a foreigner of modest means. Yet even if Athenian citizens can be detected among the traders, sea-borne trade was international in its personnel.⁶² Greek trade was a private initiative and private money went into it, although

⁵⁵ *Dem.* 56.8–10; cf. *Arist. [Oec.]* 1352a16–23, b15–20; cf. Migeotte 1997: 38 with n. 24; Bresson 2000: 183–206.

⁵⁶ Macve 1985. ⁵⁷ Bresson 2000: 141–6.

⁵⁸ *IG* II² 141; *Syll.*³ 185; cf. Gauthier 1972: 75, 81–2, 119; Velissaropoulos 1980: 282–301; Herman 1987: 62–9.

⁵⁹ Mossé 1983.

⁶⁰ Reed 2003: 39–40, however, has two Athenians out of six definite lenders of maritime loans.

⁶¹ Isager and Hansen 1975: 71–2 n. 78, 73 n. 81; Velissaropoulos 1980: 48–51; Hansen 1984: 72; Montgomery 1986; Engen 2001: 188–94; but for Reed (2003: 34–42), they were far from being a “merchant aristocracy.”

⁶² Reed 2003: 27–33.

sometimes (as in the case of grain) magistrates supervised it closely. As a rule, however, Greek states did not maintain merchant fleets or a trading policy.⁶³

The ancient sources treat *kapeloi* (retail sellers, including shop- and tavern-keepers [Ar. *Thesm.* 347]) with suspicion because of their need to buy cheap and sell dear (Xen. *Mem.* 3.7.6). Aristocratic authors assumed that men acting outside the norms of friendship (*philia*) were inclined towards deceit. The *kapelos* represented the typical figure in the *agora*, practicing his profession in the *ergasterion*, both workshop and shop, as opposed to the *emporos* who traded between *poleis* (Pl. *Resp.* 317d).⁶⁴ Harris' list of occupations suggests that there were as many different sellers as there were commodities,⁶⁵ although we should be wary of taking these as evidence for a complex division of labor.

IV MEANS

In classical Greece, many goods circulated through reciprocity, the mutual exchange between social equals. Friendship reduced transaction costs: the dangers of deceit, excessive pricing, or violence were minimized. Athens, as head of an empire, fostered redistribution, or rather "mobilization," as Neil Smelser called it, subdividing Karl Polanyi's redistribution into mobilization and redistribution proper.⁶⁶ While in a redistributive system economic resources move toward a center and then back out to support producers, mobilization serves the rulers' interests and wealth. By directing the movement of goods and money toward herself, Athens decided on their redistribution. In the Funeral Oration, Thucydides has Pericles describe Athens as self-sufficient both for war and peace, having the power to receive goods from all over the world, harvesting home grown and imported products alike.⁶⁷ At the same time, Athens also stimulated market exchange by developing monetary institutions. This market, however, does not so much correspond to the notional construct of economists who use it to mark out the domain within which a theoretically balanced price is established. Business in the marketplace of ancient *poleis* did not stop to be guided by values and norms which could result in rather unequal pricing according to social proximity or distance. Market exchange remained one "pattern of integration" or "mode of transaction" among several employed by Greeks to distribute goods.⁶⁸ All in all, the Greeks were quite successful in developing institutions that reduced transaction costs and fostered exchange.

⁶³ de Ste. Croix 1972: 393–6. ⁶⁴ Knorringa 1926; Hasebroek 1928: 1–5.

⁶⁵ Harris 2002: 88–97. ⁶⁶ Smelser 1959. ⁶⁷ Thuc. 2.36.3, 38.2.

⁶⁸ Polanyi 1968: 149, 151; Dalton 1975: 92; Bohannon and Dalton 1962: 1.

(a) *Reciprocity*

One way to guarantee peaceful exchange was to offer strangers protection through *xenia*, “ritualized friendship,” which created hereditary obligations. The official institution of *proxenia* made a *proxenos* the collective *xenos* of all members of a particular foreign *polis* coming to his *polis*. *Symbola*, permanent bilateral treaty relationships between *poleis*, regulated litigation between their nationals and gave both sides the protection of *asylia*. *Xenia* was already important in the Homeric poems, and remained significant as other institutions developed.⁶⁹

(b) *Marketplaces*

Although all *poleis* had marketplaces in their midst, their workings in the classical period are best known from the Athenian *agora*. We must be careful about applying Athenian conditions to other *poleis*, since the details of Athenian democratic ideology may not have applied everywhere. The Athenian *agora* provided the stage for civic life, politics, litigation, and commerce. At this central place people constantly reassessed and readjusted their relationships by public speech and behavior. Their haggling and negotiating for status, including deception and denigration of political opponents, has been called “competitive reciprocity.”⁷⁰ Neither spatial nor linguistic boundaries separated commercial from political activities. The *agora* was a site of exchange where citizens gained *time*, a term referring both to the status of people and to the price of objects.⁷¹

In the Athenian *agora*, both home-grown products from the *chora* and those imported via Piraeus were available, each commodity in its own corner (Xen. *Oec.* 8.22). Even if most landowners likely consumed their own products, people needed essentials they could not produce themselves, including those offered by specialized craftsmen. There is no evidence for further *agorai* in Attica outside the city of Athens, Piraeus, and the mining district of Laurion, which may mean that the country folk distributed goods through exchanges with neighbors rather than via marketplaces. On the occasion of religious festivals, however, temporary markets took place at the sanctuaries.⁷²

The central marketplace at Athens gained in importance as rich landowners started using it to make money by selling their products. Plutarch (*Per.* 16.4) says that Pericles sold the yearly produce of his estates in bulk and bought what was needed from the *agora*. Buying food in the *agora* came to

⁶⁹ Gauthier 1972: 17–18. ⁷⁰ Millett 1998: 220.

⁷¹ Von Reden 1995a; de Ste. Croix 1972: 267–9 and Harris 2002: 76, however, distinguish between commerce and politics.

⁷² De Ligt and De Neeve 1988.

be considered more democratic than self-sufficiency, as moral value came to be assessed by behavior in the *agora*, not by agrarian achievements.⁷³ Surface surveys seem to reveal that a new pattern of landholding emerged from the late sixth century onward, implying maximizing strategies oriented more toward production for markets than toward subsistence. This prompted Ian Morris to see the outline of a “New Model” of classical agriculture.⁷⁴ The tendency to produce for the market grew even stronger during the fourth century, when lease documents suggest increasing demand for public land to lease and rich men eagerly rented even small plots.⁷⁵ The need for extra cash, in particular to meet the demand for *eisphora* (contributions to military funds), may lie behind this. *Eisphora* and other taxes on the rich required a high degree of liquidity; this, and the large scale of pay for public service, suggest that monetization was quite high.⁷⁶ State pay presupposed and encouraged a cash-based market.⁷⁷

Not all Athenians accepted the role of the *agora* as a marketplace. The concept of idealized equality among citizens encouraged alienation of market exchange as far as possible beyond the tight bonds of the civic community, transferring it preferably onto marginal groups without citizenship.⁷⁸ Aristotle’s ideal *polis* separated the “free *agora*” below the sanctuaries – free because no commercial transaction was to take place there and no craftsman or farmer would be allowed to enter – and the commodity market, the latter occupying a site which could be reached by land and sea equally easily (Arist. *Pol.* 7.1331a30–b4).

Aristophanes’ comedies include several bargaining scenes (e.g., *Ar. Pax* 1197–1264; *Ach.* 867–958), naturally making fun of one or both negotiating partners. Their haggling is displayed as a kind of public competition, the audience applauding both the comic actor in the theater and the successful negotiator in the *agora*. Although Aristophanes surely presents the liveliest possible picture from the Athenian *agora*, comic inversion makes its interpretation a subtle matter. A scene from Middle Comedy exhibits a trick still practiced by market traders today, placing ripe figs on top of a basket, masking the bad ones underneath (Alexis *PCG* 133 *apud* Athen. 3.76d). Only personal relationships could reduce transaction costs in this case.⁷⁹ The negative image of fishmongers is made clear in a scene from New Comedy where a particularly despicable example of this species, hiding the servile brand on his forehead under long hair, takes payment in the heavy coins of one state and gives change in the lighter coins of another (Diphilos *PCG* 67 *apud* Athen. 6.225a–b).

Commodity prices fluctuated. Variations in grain price were, not surprisingly, a topic of discussion in the *agora*. Dikaionpolis, having set up his

⁷³ Von Reden 1995a: 106–II.

⁷⁴ Morris 1994b: 364.

⁷⁵ Osborne 1988.

⁷⁶ Osborne 1991a.

⁷⁷ Howgego 1995: 19.

⁷⁸ Morris 1994c.

⁷⁹ Cf. North’s orange example (1981: 34–7).

own *agora* in Aristophanes' *Acharnians*, asks the Megarian who comes to trade about news from Megara: "What else at Megara? How's the price of grain?" The Megarian answers: "Where we are it's mighty high (*polytimatos*), like the gods."⁸⁰ The famous Athenian blockade of Megara accounts for the high prices in this case, but the pun on *polytimatos* – "highly honored" for gods, "very costly" for commodities – clearly indicates scarcity driving up prices. When Theophrastus' "Rustic Man" approaches the city he inquires about the price of hides and salt-fish (*Char.* 4.15). Plato (*Leg.* 917b–c) accepts day-to-day price fluctuations in response to supply and demand in his near-ideal market, but forbids haggling and "praising up" commodities. A collection of prices from classical sources, however, tells us very little, since the data are inadequate for statistical analysis. In their proper context, prices reveal their role by a complex of factors, including personal relationships and ideology.

While grain was in the hands of the *emporos*, he could ask a price that seemed appropriate to him. Thus Xenophon (*Oec.* 20.27–8) could claim that the *emporoi* are *philositoi* (fond of grain), buying grain where they heard that it grew in abundance, and selling it not wherever they were without thinking, but wherever grain had the highest value. Some *poleis* seem to have bought grain from the *emporoi* at a "just price," i.e., one acceptable to the residents and leaving a margin of profit to the merchants. Exceptionally high prices for grain were subject to attempts at price fixing, albeit within the *polis* at resale, as there is no hint that anyone ever tried to regulate the wholesale price. The aim of the "official price" was stabilization, escaping unpredictable oscillations and, most frequently, preventing speculation and unjustified profits.⁸¹

(c) *Administrative personnel*

Nearly all *poleis* must have had supervisors of marketplaces and grain supply, but information is fullest for Athens. Because of its importance for Athens' naval power and grain supply, Piraeus received special attention. Ten *epimeletai tou emporiou* (overseers of the *emporion*) appointed by lot took responsibility for supervising exchange. Our only information on their duties concerns grain: they had to compel incoming ships to convey two-thirds of their grain to the market in the city (Arist. [*Ath. Pol.*] 51.4) and to enforce a law forbidding transport of grain to destinations outside Athens (Dem. 35.51).

Like the *emporion*, the *agora* was supervised by state officials. Five *agoranomoi* (market magistrates) were allotted for Piraeus and five for the city. They were legally responsible for ensuring that what was sold was in good

⁸⁰ Ar. *Ach.* 758–9, translation J. Henderson (Loeb).

⁸¹ Bresson 2000: 183–206.

condition and genuine (Arist. [*Ath. Pol.*] 51.1). Possibly they fixed maximum prices on some products, though price fixing was clearly exceptional (apart from grain).⁸² They fined anyone lying in the *agora* and collected market taxes and the special fee for alien traders.⁸³ Similar officials are attested at several *poleis* from the fourth century on.⁸⁴ Athens also had a special board of ten *metronomoi* (measure magistrates), again with five for the Piraeus and five for the city. They were responsible for all weights and measures and for ensuring that salesmen used honest standards (Arist. [*Ath. Pol.*] 51.2).

The grain trade had its own special officials, called *sitophylakes* at Athens. They controlled the price of unground grain, ensuring that millers sold flour in accordance with the price paid for barleycorns, and that bread-sellers sold loaves in accordance with the price paid for flour. They prescribed the weight of loaves (Arist. [*Ath. Pol.*] 51.3), which may mean that the weight varied according to the price of wheat.⁸⁵ They were responsible for enforcing the rules of the grain trade and overseeing bidding for grain. They initiated and presided over trials for refusal to accept valid coinage up to ten drachmas in the grain market, and they kept records of the amounts and origins of imported grain.⁸⁶ There were originally five *sitophylakes* for the city and five for Piraeus, but later, probably during the difficult 320s BC, this was increased to twenty for the city and fifteen for Piraeus (Arist. [*Ath. Pol.*] 51.3). *Sitophylakes* are rarely attested outside Athens, and even then, only much later; but other *poleis* probably had similar officials, such as the *sitometrai* whom Aristotle (*Pol.* 4.1299a23) says were common economic officials.⁸⁷

(d) *Legislation and jurisdiction*

Even if coins were minted as a powerful way to demonstrate sovereignty, their effectiveness in reducing transaction costs cannot be denied.⁸⁸ The Athenian Coinage Decree, of perhaps c. 420 BC, was most likely a political statement, denying allied cities the right to mint coins in order to assert Athenian domination,⁸⁹ but recent interpretations have also recognized its economic significance.⁹⁰ The decree probably simplified the collection of tribute and promoted the grain trade.⁹¹

⁸² Millett 1990: 192; Migeotte 1997: 37–8.

⁸³ Dem. 20.9; Hyp. *Athenog.* 14; Ar. *Ach.* 896; Dem. 57.34.

⁸⁴ Oehler 1893. ⁸⁵ Migeotte 1997: 35.

⁸⁶ Lys. 22.8, 16; Dem. 20.32; *Agora* 1 7180.18–9. 22–4, cf. Stroud 1974: 179–80.

⁸⁷ Gauthier 1981: 17–18; Migeotte 1998: 231–5.

⁸⁸ Finley 1973a: 166–9; Martin 1985; Howgego 1995: 39–44; Trevett 2001.

⁸⁹ ML 45; Finley 1965a: 23–4.

⁹⁰ Lewis 1987; Figueira 1998; von Reden 2002b. ⁹¹ Martin 1985: 206.

In 375/4 BC Athens issued a law on the acceptance and testing of silver coinage, be it Athenian or foreign.⁹² Good coins had to be accepted in the *agora* and *emporion*. One public slave called the *demosios dokimastes* (public validator) was appointed for Piraeus and another for Athens to control the quality of Athenian coins. Usually Athenian coins were much sought after for their high quality, so this law might reflect financial difficulties. It also illustrates Athens' efforts to be attractive to foreign traders in the fourth century by regulating private business and reducing transaction costs.

To ensure smooth commercial transactions and encourage traders to enter her port, Athens also established a special legal procedure called *dikai emporikai* (private cases involving maritime traders). The evidence for special maritime courts is weak.⁹³ The cases under the jurisdiction of the *thesmothetai* (statute-setters)⁹⁴ were introduced around 350 BC and gave foreigners the same procedural rights as citizens for certain types of dispute. Scholars long believed that the word *emmenos* (Arist. [*Ath. Pol.*] 52.2) meant that trials had to be resolved within one month, but Cohen has argued that it means they were monthly opportunities to initiate such cases.⁹⁵ There is also disagreement over when the trials took place. Some accept the manuscript reading of Dem. 33.23 and conclude that they took place during the winter months,⁹⁶ while others think it more likely that they were held during the busy sailing season.⁹⁷

V PUBLIC REVENUES AND THEIR REDISTRIBUTION

A *polis* was the association of its citizens and from some perspectives there was no clear distinction between public and private matters. On the revenue side, the interests of the citizens and the *polis* corresponded: both needed *prosodoi*, revenues or income. In his mid-fourth-century treatise the *Poroi* (usually translated *Ways and Means*), Xenophon recommends measures increasing Athens' *prosodoi* after losing the Social War against her former allies which often strike modern readers as more characteristic of a private household than the public sphere.⁹⁸ Public interventions were carried out by the people for the people, and notions of the economy as a separate field of action were weakly developed.

Athenian democratic discourse represented the citizens essentially as shareholders in a company – as “those who have a share of the polity” (Arist. *Pol.* 5.1302b26). The members shared goods such as grain distributions and power, but also obligations and disasters. Even payments to jurors

⁹² Stroud 1974; Buttrey 1979; 1981; Stumpf 1986; Dreher 1995: 90–106; Figueira 1998: 536–47.

⁹³ Todd 1993: 334–6; Cohen 1973, with MacDowell 1976: 84.

⁹⁴ Arist. [*Ath. Pol.*] 59.5. ⁹⁵ Cohen 1973: 23–7.

⁹⁶ Cohen 1973: 42–59; MacDowell 1978: 232; Rhodes 1981: 583. ⁹⁷ Todd 1993: 335.

⁹⁸ Descat 1998; Bresson 2000: 257–60; cf Harris 2001 for critical remarks.

or magistrates could be seen as the redistribution to shareholders of some of the income from community activity.⁹⁹ The use of mass political power to counterbalance the unequal distribution of wealth has been seen as a key feature of Athenian democracy.¹⁰⁰ Wealth inequality, however, was not considered inherently undemocratic, but Athenians expected the rich to use their resources to ensure communal security and the general benefit of the citizenry.¹⁰¹

But there was one resource that the Athenians did not redistribute: silver. In the late sixth century the citizens of Siphnos shared out the revenue from gold and silver mining, but when the Athenians enjoyed a spectacular silver strike in 483/2 BC, Themistocles persuaded them to invest their windfall in building warships.¹⁰² Together with public building programs and pay for office, jury duty, and assembly attendance, the decision to build and then man and maintain a great fleet created the concept of independent public-sphere spending.¹⁰³

When the Spartans considered going to war against Athens in 432/1 BC, their king Archidamus indicated their weaknesses in pointing out that compared to Athens, the Spartans had no money in a common treasury, and lacked the capacity to raise it from private individuals. To him, Athens' strength lay in her *prosodoi* (incomes), while the Spartans did not ask their allies to pay tribute.¹⁰⁴ Although the Spartans had the largest territory of any Greek state, a large workforce of helots, and much silver and gold treasure, they failed to make this wealth serve public purposes. Their investment in a few excellently trained hoplites proved less successful than Athenian investment in ships and masses of trained rowers maintained by direct pay. Athens spread her assets, while Sparta's were concentrated into fewer and fewer hands. Finally, Sparta was hit by bankruptcy during the Corinthian War (394–390 BC), and this became permanent after the Battle of Leuctra in 371.¹⁰⁵

As long as Athens controlled the Aegean, she profited from monitoring the flow of goods, securing her import needs, and accumulating reserves on an unprecedented scale. By mobilizing from the subject cities tribute, customs duties, taxes, and land for Athenian settlers, Athens experienced great prosperity. Under Pericles, state revenues were no less than 1,000 talents a year (roughly 600 from the allies, and 400 from Athenian sources). At its height (probably in the early 430s BC), Athens had a reserve of 9,700 talents of coined silver, deposited on the Acropolis.¹⁰⁶ The Second

⁹⁹ Manville 1990: 7, 35; Davies 1992: 304; Cartledge 1998: 19.

¹⁰⁰ de Ste. Croix 1981: 96–7; Finley 1983: 139–40.

¹⁰¹ Ober 1989: 199–205.

¹⁰² Hdt. 3.57.2; 7.144.

¹⁰³ Kallet-Marx 1993; 1994; Kurke 2002: 95.

¹⁰⁴ See, however, the Spartan inscription listing contributions by friends of the Lacedaimonians of c. 427 BC (Loomis 1992).

¹⁰⁵ Thuc. 1.80–1, cf. 1.19; Polyb. 6.49.8–10; Plut. *Lyc.* 9; Pl. *Alc.* 122d–123a; Austin 1994: 542–3.

¹⁰⁶ Thuc. 2.13.3; Xen. *An.* 7.1.27; *IG* 1³ 259–90.

Athenian League (378/7–338/7 BC) explicitly promised not to levy a *phoros*, the detested tribute raised by the fifth-century empire. *Syntaxeis*, more neutral “contributions,” are first attested in 373, but generated far smaller amounts than the fifth-century *phoros*.¹⁰⁷

Fourth-century Athens needed new revenues. During the crisis after the Social War of 357–355 BC, Eubulus created or reorganized a fund called the *theorikon* with the object of covering the costs for citizens to attend major theatrical festivals. But soon it was being claimed that the theoric official in fact controlled the whole administration.¹⁰⁸ Silver production picked up again, trade flourished (as seen in forensic speeches), and the revenues increased to 400 talents in 347/6 (Dem. 10.37–8). Under Lycurgus’ guidance (338/7–324 BC), Athens’ state revenues rose to about 1,200 talents, all from regular internal sources.¹⁰⁹ Public building programs reached a scale unknown since Pericles’ day, and the fleet was modernized and enlarged.¹¹⁰

Although riches flowed into the city in the fifth century, Athenians continued to believe that the wealth of the rich should be available for the citizenry’s general benefit. Most Greeks viewed direct taxation as tyrannical and degrading.¹¹¹ Voluntary contributions, rewarded by prestige and political influence, could probably mobilize adequate resources in older times, but by the fourth century these “contributions,” known as *leitourgiai* (liturgies), were assigned on a regular basis and legally enforced. What remained was the rhetoric of *charis* (“gratitude” and “benefaction”): liturgies performed in the right spirit earned the donor gratitude from the people.¹¹² Xenophon has Socrates describe to Critobulos the obligations of the wealthy: making sacrifices, entertaining *proxenoi* and friends, and accepting liturgies. These included keeping a public horse, funding a group of plays or performances at state festivals (the *choregia*), supporting the *gymnasium* and athletes exercising there (the *gymnasiarchia*), and holding offices. Wartime liturgies included the *trierarchia*, equipping and commanding a warship, and the *eisphora*, an emergency levy on capital wealth. Xenophon felt that the Athenians would punish anyone who performed these duties poorly as they would punish a robber of their own property (Xen. *Oec.* 2.5–6).

There were at least 60 liturgies each year, more likely 97; and the Panathenaic festival every fourth year raised their number to over 118. Some liturgies were sought after, but military liturgies (for which lists were kept and exemptions were not allowed) were highly unpopular.¹¹³ Between 300

¹⁰⁷ *IG* II² 43; *Syll.*³ 147; Dem. 49.49; Theopomp. *FGrH* 115 F98; Plut. *Sol.* 15.2–3; Austin 1994: 551–2.

¹⁰⁸ Aeschin. *In Ctes.* 25.

¹⁰⁹ Plut. *Lyc.* 842F. At 841B–C, the author says Lycurgus was in charge of 14,000 or even 18,650 talents.

¹¹⁰ Rhodes 1979/80: 312–14. ¹¹¹ Dem. 22.54–5; Boeckh 1886: vol. 1, 366–7.

¹¹² Wagner-Hasel 2000: 152–65; Ober 1989: 226–30; Kallet 1998: 54–8.

¹¹³ Dem. 4.35–6; 20.18, 21, 26; Arist. *Pol.* 5.1309a17–21; Davies 1967.

and 1,200 men were liable to liturgies at Athens (most scholars lean toward the higher number).¹¹⁴ The wealth required to belong to this group was between three and four talents.¹¹⁵ We have most information on this institution from Athens, but there were also *choregiai* at Siphnos and trierarchs at Sparta.¹¹⁶

The *eisphora* was probably first levied in 428/7 BC, although Thucydides' wording is ambiguous. In the fourth century it gradually became a more systematic and regular levy on a group of perhaps 3,000–3,500 citizens (roughly 10 percent of the citizen body).¹¹⁷ The *eisphora* remained, however, irregular and unpredictable. Between 378/7 and 355 only a little over 300 talents were raised in *eisphorai* (Dem. 22.44). It was usually levied at a flat rate of 1 or 2 percent on capital wealth, and those with property under a certain figure, perhaps 2,500 drachmas,¹¹⁸ were exempt. When the Athenians reorganized financial management in 378/7, they assessed the taxable wealth of all citizens and metics in Attica at a value of 5,750 talents (Polyb. 2.62.7). Demosthenes (14.19, 30) mentioned a sum of 6,000 talents for 354 BC, which could represent a rounded figure or a new assessment. The sum does not represent all Athenian wealth, since the assessment only covered declared wealth (movable and immovable, cash, personal belongings, slaves, land, houses, whereas mining concessions could have been exempted). There was no register of landed property and no available bureaucracy, so the assessment depended on the citizens' honesty. Only sykophants and a procedure called the *antidosis* (a challenge to exchange property) could reduce tax evasion. In addition to the contributions of the wealthy, Athens had other sources of revenue, detailed in Pseudo-Aristotle's *Constitution of Athens*:¹¹⁹ customs and excise payments, court fines, sale of confiscated property, rents from public and sacred land, royalties on silver mining concessions.

At Athens there were no income taxes, and only metics paid a poll tax (the *metoikion*) at a rate of twelve drachmas per year for men and six drachmas for women who had no son paying the tax.¹²⁰ But Greek states made wide use of indirect taxes, because they found it difficult to tax income from landed property on a regular basis.¹²¹ Harbor and market dues, taxes on sales and auctions, and all imports and exports were taxed, levied at a flat rate *ad valorem*, with no distinction made between citizen or non-citizen, or free or slave. The value of a shipload arriving at the Piraeus was probably estimated at a conventional price, not the prevailing market price, since this

¹¹⁴ Jones 1957: 85–6 (1,200); Davies 1981: 15–28 (300); Rhodes 1982 [1985]: 5; Hansen 1990: 353; Austin 1994: 548.

¹¹⁵ Gabrielsen 1994: 52. ¹¹⁶ Isoc. 19.36; Thuc. 4.11.4; cf. Xen. *Hell.* 7.1.12.

¹¹⁷ Thuc. 3.19.1; Hansen 1990: 353. ¹¹⁸ Austin 1994: 547.

¹¹⁹ Arist. [*Ath. Pol.*] 47.2–48.2; cf. Ar. *Vesp.* 658–9. ¹²⁰ Boeckh 1886: 400.

¹²¹ Migeotte (2003) has collected instances for direct taxation from the fifth century onward without generally changing the picture.

would surely have led to litigation, but no trace survives in the sources.¹²² The motivation behind import duties seems to have been purely fiscal; there is no sign that Greeks thought in terms of protective customs barriers. A typical tax was one-fiftieth (*pentekoste*). This sum was levied at Piraeus on all goods imported or exported through the harbor, no matter their origin or nature, but not on goods in transit. It was payable when the goods were released (Dem. 35.29–30).

Athenian administrators did distinguish between the *pentekoste* on grain and that on other goods, farming the two taxes out separately (Dem. 59.27). The collection of taxes was normally auctioned to private contractors who provided sureties and paid a lump sum to the state, recouping themselves by making a profit on the collection. Probably in 402/1 BC, the *pentekoste* was auctioned for thirty talents to Agyrrhios, who proposed the Grain Tax Law in 374/3, and some friends. The next year, Andocides and his friends leased it for thirty-six talents (Andoc. 1.133–4). This implies a turnover of commodities worth at least 2,000 talents. Harbor dues at ports in the Thracian Chersonese earned some 200 talents annually (Dem. 23.110). Taxes of this kind were potentially a major revenue source for *poleis*,¹²³ though the yield varied according to economic activity. Tax farming meant a loss of income to the states, but relieved them of the costs of collection and administration, and guaranteed a predictable revenue stream.

Much of this revenue was directly or indirectly redistributed to the citizens. For fifth-century Athens, Lisa Kallet estimates the cost of running the democracy at 75 talents and Athens' total costs at over 300 talents, not including the cost of operating the fleet in wartime and other extraordinary expenditures.¹²⁴ Mogens Hansen estimates the cost of the democracy at 100 talents in the fourth century.¹²⁵ Athens spent most of the tribute she received from her fifth-century subject cities on the fleet, which gave pay to the many Athenians serving on the triremes, and also spent some of the tribute on adorning the city. According to Plutarch, Pericles justified the policy of spending the allies' money on the architecture of the acropolis by saying that Athens repaid their favor, i.e. the contributions, by making war on the enemy. Once Athens was sufficiently equipped, she should show her abundance by such works bringing her everlasting glory and putting "the whole city under public pay" (*emmisthos polis*) (Plut. *Per.* 12.3–4). Plutarch may not mean a full employment policy so much as an effort to distribute a monetary surplus among the citizens in pursuit of a normally unproductive public purpose.

Athens introduced military pay no later than 441, and possibly as early as the 450s or even 460s. From the mid-fifth century on, public officials were

¹²² Rosivach 2000: 48. ¹²³ Xen. *Hell.* 5.2.16 on Olynthus; Dem. 1.22 on Thessaly.

¹²⁴ Kallet 1998: 46. ¹²⁵ Hansen 1991: 315–16.

paid. Pseudo-Aristotle ([*Ath. Pol.*] 24.3) says that tribute and taxes supported more than 20,000 men, including 6,000 jurors, 1,600 archers, 1,200 cavalry, 500 councilmen, 500 guards of the dockyards, 50 guards on the acropolis, and about 700 domestic and 700 overseas officials. In 431 BC, Athens also had 2,500 hoplites and 2,000 men appointed by lot in 20 guardships and various other ships collecting the tribute. The *prytaneion*, orphans, and the guards of prisoners were all publicly financed too. The *Athenaion Politeia* is not clear whether fourth-century officials still received public pay or were merely fed by the state.¹²⁶ Pseudo-Aristotle also mentions the following payments: 1.5 drachmas (= 9 obols) for the Principal Assembly each month, 1 drachma for other assemblies, half a drachma for jury courts, five obols per day for members of the Council of 500, and an additional obol for food for the 50 *prytaneis* (members of the council's presiding committee) on duty each month. The nine archons got four obols per day for maintenance, but had to keep a herald and a flute-player. The archon for Salamis got a drachma per day. The directors of games could dine in the *prytaneion* for one month of the year, ambassadors sent to Delos got one drachma per day from Delos, and officials sent to cleruchies got money for food.¹²⁷

Assembly pay was introduced in 403, and by 393 had reached 3 obols per session for the first 6,000 citizens entering the meeting.¹²⁸ Between 409 and 407 BC skilled workers at the Erechtheion earned one drachma per day, and unskilled workers 3 obols, the same as soldiers and sailors in these years. Pericles introduced jury pay, perhaps in the early 450s. The rate was at first 2 obols, then 3, but did not rise again till the 320s.¹²⁹ The significance of the *diobelia* ("two obol pay") instituted by Cleophon and attested by inscriptions between 410 and 406/5, is controversial, but it may have supported citizens incapacitated during the Peloponnesian War.¹³⁰

VI SECURING THE GRAIN SUPPLY

The mechanisms of the grain supply are best known from Athens.¹³¹ During the second half of the fifth century, Athens not only obtained her own supply by directed trade under the rules of her empire, but also controlled grain distribution in much of the Aegean. A decree of 426/5 BC¹³² grants Methone the right to export a fixed amount of grain per year from Byzantium without further payment for ships carrying the grain. How many *medimnoi* Methone took home is not preserved, but we can estimate the

¹²⁶ Hansen 1979; Gabrielsen 1981. ¹²⁷ Arist. [*Ath. Pol.*] 62.2.

¹²⁸ Ar. *Eccl.* 186–8, 289–310; Arist. [*Ath. Pol.*] 41.3.

¹²⁹ See Rhodes 1981: 691–7 on all kinds of pay.

¹³⁰ Xen. *Hell.* 1.7.2; Arist. [*Ath. Pol.*] 49.4; 28.3; Buchanan 1962: 35–48.

¹³¹ Teos also enacted a law to secure her grain supply, c. 475–450 BC (ML 30.6–12).

¹³² IG 1³ 61; ML 65.

amount in comparison with Aphytis in Chalcidice, which won a similar privilege two years earlier. The Aphytians were granted up to ten thousand *medimnoi* a year¹³³ – approximately 400 tons. The Methonians had to notify the tax officials called *hellespontophylakes* (guardians of the Hellespont). The guardians were not allowed to impede the Methonians, and had to prevent anyone else from doing so. This is the only clear evidence for officials controlling shipping through the Hellespont. Their responsibilities probably involved collecting the duty to which the inscription alludes.¹³⁴ When in 410 BC the Athenians asked for a *dekate*, one-tenth of the cargo of all ships sailing through these straits,¹³⁵ this does not seem to have been a new measure. This tax could have been farmed out, like the renewed *dekate* at Byzantium in 390 (Xen. *Hell.* 4.8.27). The Black Sea grain route through the Hellespont was crucial to Athens; its loss was a constant fear (Xen. *Hell.* 5.1.28–9).

Imperial Athens created a network of institutions and administrators, but few *poleis* had such administrative means to secure their grain supply. In food shortages they relied on the generosity of foreign rulers or rich individuals, well attested by honorific decrees from 350 BC on.¹³⁶ They might also have public reserves, as Athens did in the stoas around the *agora* or the *emporion*,¹³⁷ or the possibility of taking private stocks into public hands, as the Four Hundred oligarchs attempted to do at Athens in 411 BC, or the Selymbrians who sold off privately stored grain to the public at a fixed price to raise funds.¹³⁸

After losing their empire, the Athenian diplomacy established special trading privileges with the Bosporan kingdom north of the Black Sea. Athenians were exempted from the duty of 3.3 percent (*triakoste*) which the kings charged on all grain exports (Dem. 20.32; 34.36). Demosthenes (20.31–2) estimated that this benefaction was worth 13,000 *medimnoi* – 500 tons – of grain to Athens each year. Leucon, king of the Cimmerian Bosporus (393–353 BC), provided Athens with 400,000 *medimnoi* of wheat annually, but in the year of the great famine (357 BC), he sent so much grain that Athens made a profit of fifteen talents on its sale (Dem. 20.33). Bresson suggests that Leucon's grain was sold the same way as the tax grain mentioned in the Grain Tax Law of 374/3 BC, at a reasonable price.¹³⁹ The Athenians rewarded Leucon as benefactor of their *polis* with citizenship without being liable for liturgies (Dem. 20.30). In 346, his sons were honored with the same rights and golden crowns for renewing the old Athenian privileges (Syll.³ 206). The Athenians treated the relationship

¹³³ *IG* 1³ 62; *ATL* II D 21. ¹³⁴ Rubel 2001. ¹³⁵ Xen. *Hell.* 1.1.22; Polyb. 4.44.3–4.

¹³⁶ Garnsey 1988: 82–5; Migeotte 1997: 43–4 for *emporoi* selling at low prices.

¹³⁷ Schol. *Ar. Ach.* 548a–c Wilson; Dem. 34.37.

¹³⁸ Thuc. 8.90.5; Arist. [*Oec.*] 2.2.17, 1348b33–1349a3. ¹³⁹ Bresson 2000: 208–10.

between the benefactors, acting as private persons, and themselves, acting as a corporate body, in terms of personal friendship and reciprocal gifts.¹⁴⁰

Without the possibility of relying on imperial power, fourth-century Athens could only hope to be an attractive destination. After the Social War, Xenophon felt the need to suggest ways to draw foreign traders back to Athens,¹⁴¹ and Athens passed several laws to secure a sufficient supply of grain. One prohibited persons resident in Athens from shipping grain to harbors other than the Piraeus.¹⁴² Any ship harbored in Piraeus was required by law to unload two-thirds of its cargo and bring it to the city (Arist. [*Ath. Pol.*] 51.4). What happened to the last third is the object of debate, but it may have been sold at Piraeus.¹⁴³ Importers who were neither Athenians, nor metics, nor aliens who had borrowed money in Athens, but sailed into Piraeus to see if grain was selling high, were under no obligation to sell. The Athenians had the option of seizing a trader's ship and its cargo (*katagein*), with the assumption that the state would pay for the grain it confiscated, but this would have discouraged traders from coming to Athens at all.¹⁴⁴

It was forbidden for Athenian residents to extend a maritime loan to a ship unless it agreed to import grain to Athens (Dem. 35.51), but several legal speeches describe violations of this law. One trader and his partner took out a maritime loan at Athens for the round trip Athens–Egypt–Athens, but after picking up grain in Egypt, unloaded it at Rhodes upon hearing that prices had fallen at Athens (Dem. 56.5–6).

Once the grain arrived in Piraeus, the grain sellers (*sitopolai*) put it up for sale. Lysias' speech "Against the *sitopolai*" gives some glimpses of their activities. In this case, the traders were metics who were accused of breaking the law by buying more than 50 *phormoi* ("baskets") of grain. The nature of their offense is debated: the *sitopolai* may have violated a law against hoarding, or one against operating a cartel and collaborating in buying.¹⁴⁵ The intention of the *sitopolai* is obscured by the rhetorical use of the verbs *synoneisthai* and *sympriasthai*, meaning almost interchangeably in different contexts throughout the speech "to accumulate by buying," "to buy in a single transaction," "to buy to hoard," and "to buy in association with others." In addition to buying too much grain, the *sitopolai* were accused of manipulating the price, either by exceeding the legal mark-up of one obol or by fraudulently changing the price by claiming that each sale came from a separate stock. We cannot be sure whether the margin of one obol was in relation to the drachma (resulting in a profit of 16.7 percent) or to the *medimnos* (resulting in a tiny profit).¹⁴⁶ Either way, taking one drachma

¹⁴⁰ Mitchell 1997: 40. ¹⁴¹ Xen. *Vect.* 3.2–5, 12–14; 4.40; cf. Isoc. 8.20–1.

¹⁴² Dem. 34.37; Dem. 35.50–1; Lycurg. 27. ¹⁴³ Gauthier 1981. ¹⁴⁴ Garnsey 1988: 140.

¹⁴⁵ Kohns 1964; Seager 1966; Figueira 1986; Tuplin 1986. ¹⁴⁶ Migeotte 1997: 36.

more the same day sounds like a good profit, and turned the jurors against the accused.¹⁴⁷

In 374/3 BC, the Athenians enacted a law taxing the three cleruchies at Lemnos, Imbros, and Scyros¹⁴⁸ with a *dodekate* (one-twelfth) on the grain harvest. The tax was to be farmed out and collected in kind, not cash, to secure the public grain supply. Individuals and groups of six (*symmoriai*) were allowed to bid in fixed shares of 500 *medimnoi* (100 *medimnoi* of wheat, 400 of barley) for the right to collect one-twelfth of the grain harvest. The Athenians ordered the tax farmers to convey to Piraeus the wheat and barley produced by this tax at a specific time and at their own risk. From there it was to be brought up to the city, stored in the Aiakeion, and sold in the *agora* by public officials. They were newly appointed to supervise the tax farmers' correct delivery of the grain, its weighing according to written instructions, and its sale in the *agora* in spring when home-grown supplies abated, at a price set by the assembly. They had to account for their sales and to assign the proceeds to the *stratiotika*, the military fund.

From the 350s, *sitonai* (grain-buyers) were commissioned to buy up grain with public money supplemented by private donations to procure food in crises. The orator Demosthenes was – at least to us – one of the most famous *sitonai*.¹⁴⁹ Pooling money by subscribing to funds like this became quite common in Hellenistic times.¹⁵⁰

VII CONCLUSIONS

In classical Greece, distribution had grown to such an extent that an urban elite had no difficulties in consuming delicacies like fine wines from famous vineyards or eels from Lake Copais. But not only a happy few benefited from larger movements of people and goods. Most *poleis* buffered the risk of famine by increased import of staples. The volume of transport grew. There were no major technological developments during the classical period, but communication improved, and effective desire for finer foods and cultivated living expanded. Athens in particular benefited from her power to mobilize resources. Some were invested in unproductive splendor, but others were redistributed for the citizens' general benefit. Local, interregional, and long-distance trade increased: urban demand fostered local and interregional trade of products which had to be consumed quickly. Staples, timber, minerals, and fine wines were transported all around the Mediterranean. Although markets were not well developed, the institutional and organizational structures of distribution worked well. Administrators struggled to

¹⁴⁷ Todd 1993: 316–20.

¹⁴⁸ *Agora* 1 7557; Stroud 1998 with Osborne 2000; Faraguna 1999; Harris 1999; Engels 2000; Rhodes and Osborne 2003: no. 26.

¹⁴⁹ Dem. 18.248; Plut. *Mor.* 8.45F; cf. Din. 1.43. ¹⁵⁰ Migeotte 1992: 341–3; Engels 2000: 119–24.

keep grain prices low and to assure supplies. Numerous public officials were employed to supervise the workings of the marketplace. Where administration and the undeveloped market failed, cities had recourse to friendship, securing grain from benefactors. The persistence of cultural norms and values can be seen in the representation of commercial dealings in the *agora* and Piraeus. Although a fair amount of disembedded exchange took place among citizens and non-citizens alike, ideology nourished the notion of perfect friendship and beneficence.