

## 6: ASIA MINOR

*Andreas Victor Walser*

### INTRODUCTION

Comprising around 750,000 square kilometers, Asia Minor is larger than Spain or Gaul and forms the largest landmass in the northern Mediterranean.<sup>1</sup> From the Aegean coast in the west to Mount Ararat in the east, it extends roughly 1,500 kilometers, 500 to 600 kilometers from the Black Sea in the north to the Mediterranean in the south. The mountainous peninsula is part of the Alpide belt and can be subdivided into several main regions. The fertile coastal region of western Asia Minor is highly fragmented, both by mountain ranges and by the sea cutting deeply into the land, but it is also characterized by several large, fertile alluvial plains. The climate here is typically Mediterranean, with hot, dry summers and mild, wet winters. Along the northern as well as the southern shores, long mountain ranges traverse the peninsula. In general, these mountains fall steeply to the sea, especially in the north, and do not provide easy access to the interior. Apart from the vast expanses of Pamphylia and Cilicia in the south, alluvial plains are sparse. The climate is Mediterranean on the southern shore, subtropical with heavy precipitation in the north of Asia Minor. Between the mountain ranges in the north and south lies the Central Anatolian Massif. Plateau-like, semiarid high plains and basins are the defining characteristics of this area. The climate, while still Mediterranean in the west, becomes continental toward the east, when the central massif rises up to the East Anatolian High Plateau with its deep river valleys and high volcanic mountains. Summers are still hot, but winter temperatures can fall well under freezing point. Overall, Asia Minor is characterized by sharp contrasts even on a regional scale, in both its topography and climate. Differences in precipitation in adjacent areas can be large, and variations over the years are significant (Chapter 25, this volume).

<sup>1</sup> For a history of ancient Asia Minor in all of its aspects, see now Marek 2016; *ibid.*, 7–14 for the geography. In what follows, the literature references are limited to recent titles and those that are most essential.

Geography alone might explain why ancient Asia Minor never formed a unified economic space in any meaningful sense of the term. The coastal areas were always connected more closely by the sea with other areas of the Greek world than by land with central Anatolia or more remote regions of the peninsula. This is especially true for western Asia Minor, which throughout its history has been an integral part of the Aegean world, closely intertwined with the Aegean islands and mainland Greece even when political constellations made such connections unfavorable, as at the time when Asia Minor was part of the Persian empire.

This chapter surveys the economy of Asia Minor from the late archaic and classical periods to the end of the Hellenistic period. It looks at Asia Minor as part of the Greek world and focuses on the economy in those parts of Asia Minor that were settled by Greeks. In many ways, the economy of Greek Asia Minor was not fundamentally different from the economy on the mainland or in other regions of the Greek world: it was a Mediterranean agrarian economy with a limited, though significant, role for trade, services, and commerce. Ecological conditions in western Asia Minor were very similar to those on the mainland, the technologies applied in economic production more or less the same. Greek culture defined two basic elements of the economic setting: (1) the *oikos* (household) as the basic social unit of production and consumption and (2) the polis (city-state) as the principal institutional framework (see, by contrast, Chapter 2, this volume). These fundamental structures of the economy are discussed in depth in other parts of this book. The purpose of this chapter is, therefore, not primarily to give a comprehensive and rounded picture of the economy of Asia Minor, but to focus on its specifics.

## POPULATION

Estimates of population figures for the ancient world are notoriously difficult, but those for Asia Minor are vague even by the standards of ancient demography. In his pioneering study on the population of the Graeco-Roman world, J. Beloch estimated the size of the population of Asia Minor as around 11 to 13 million in the later Hellenistic period, with 4 to 4.5 million populating the west, two million in the regions south of the Taurus, and 5 to 6.5 million in Anatolia north of the Taurus. More recent estimates, often based on Beloch's, lead to similar figures.<sup>2</sup>

<sup>2</sup> Beloch 1886, 223–42, with total numbers on 242; cf. Broughton 1938, 812–16; Aperghis 2004, 46–8, 56–8 (3–5 million in western Asia Minor, 0.5–1.75 million in Cilicia under Seleucid rule); Scheidel 2007, 48 (9–10 million around 165 CE).

As vague as they are, comparisons with census data from the late nineteenth and early twentieth centuries suggest that they may well be in the right order, but they convey little beyond a very general sense of magnitude. Considering the manifest regional differences between almost desert-like areas in central Anatolia and fertile alluvial plains at the coasts, an estimated average population density of fourteen to fifteen persons per square kilometer is of limited significance, and obviously the numbers say nothing about demographic development in Asia Minor. It seems reasonable to assume that it corresponds to the general long-term demographic trends in the first millennium;<sup>3</sup> an increase of the population is certainly to be expected, but it does not seem likely that it was in the same magnitude during the archaic and classical periods. However, archaeological surveys do not show a significant break between the classical and the Hellenistic period but rather suggest continuous economic development and growth.

All this does not take us very far when we are interested in the economy of Greek Asia Minor. At least as significant as the development of population size are changes within its structures, and they are of utmost importance when we focus on Asia Minor in the periods under discussion and more specifically on *Greek Asia Minor*. Migrants from different parts of the Greek mainland first arrived there probably in the eleventh century. Successive phases of migration over the following centuries led to the creation of a still comparatively small number of Greek communities in the coastal areas,<sup>4</sup> first in the west, later in the south and north.

Asia Minor was, of course, not an untouched continent when the Greeks arrived – it was inhabited by local populations. We can only speculate about the first interactions between settlers and indigenous people, immigrants and residents, processes of mixture, absorption, and displacement. The result was in any case not simply an ever-growing area of Asia Minor that was “Greek,” but rather a “hybrid Greek/non-Greek cultural mixture.”<sup>5</sup> The local populations that inhabited Asia Minor when the Greeks arrived did not form a homogenous group but rather a complex patchwork of diverse cultures with various languages.<sup>6</sup>

Up until the end of the fifth century and even beyond, Greek influences on these indigenous cultures remained limited. Only then did Greek acculturation intensify in Caria and Lycia in southwestern Asia Minor, and by the middle of the third century, the local cultures of these

<sup>3</sup> Cf. Chapter 11.

<sup>4</sup> Many questions regarding the Greek “colonization” of Asia Minor remain controversial; recent summaries are provided by Mitchell 2017; Marek 2016, 117–38; Graves 2011; Harl 2011.

<sup>5</sup> Mitchell 2017, 14.

<sup>6</sup> The literature is vast. Cf. Marek 2016, 397–400 and, for a bibliography, 713–15.

areas were deeply “Hellenized.” Nevertheless, the role of indigenous traditions, in religion and beyond, remained strong and influential. Much the same is true for other regions and populations, and also in those areas of central and eastern Asia Minor where Greek culture only became dominant in the course of the Hellenistic period. The Hellenization of Asia Minor did not lead to a uniform “Greek” cultural landscape, and some indigenous communities remained largely separated from Greek culture, even though they were in close contact with it.

The Greeks were not the only foreigners that settled in Asia Minor. A significant Iranian diaspora that at least in part went back to the time of the Achaemenid empire (550–330) becomes visible through the textual material. According to Philo, Jews lived in every city of Asia, and they are indeed well represented in the literary, documentary, and architectural evidence.<sup>7</sup> Several groups of Celtic Galatians were brought to Asia Minor as soldiers and settled in central Anatolia, where they continued to live in their tribal structures. Italians started to immigrate in the second century and were soon present in large numbers.<sup>8</sup>

## URBANIZATION AND COLONIZATION

From the archaic period onward, “Greekness” is inseparably connected with the polis as the defining form of social and political organization. At the beginning of the Hellenistic period, still only a small part of Asia Minor was organized as city-states with urban centers and a surrounding territory.<sup>9</sup> The amount of land organized in polis territories and administered by, and through, communities of citizens then grew gradually. Following the great king’s example, Alexander’s successors founded new cities in Asia Minor, at first primarily in the coastal regions; but new poleis also were already appearing deep in the Anatolian hinterland in the early third century.<sup>10</sup> In many cases, the foundations were as much rearrangements and resettlements of preexisting communities as they were genuinely new settlements. The inhabitants of these poleis created by *synoikismos* (the process whereby dispersed settlements joined into one polis) were often a varied mixture of “Greek” soldiers in the service of the kings, often of Macedonian or Thracian origins, and

<sup>7</sup> Philo *Leg.* 33 (= 245).

<sup>8</sup> Cf. Weiskopf 1987 (Iranian diaspora); van der Horst 2014 (Jews and Judaism); Mitchell 1993, 11–58 (Celts); Ferrary 2002 (Italians).

<sup>9</sup> Mitchell 2017, 22–8.

<sup>10</sup> Cohen 1995 provides an inventory of the Hellenistic settlements in Asia Minor.

indigenous people, who were integrated into the poleis either as full citizens or as dependent communities with lesser rights. Many of the new settlements, especially those established by the Seleucid and Attalid kings in the third and second centuries, were not self-governing poleis, but colonies of Greek or non-Greek settlers with a more or less distinct military character.<sup>11</sup> Over time, such *katoikiai* could nevertheless develop into cities with a more civic character and receive polis status.<sup>12</sup>

While the Hellenistic period saw the appearance of more than a hundred new cities in Asia Minor, older poleis also disappeared, especially in the regions first settled by Greeks in western Asia Minor. Existing poleis were merged and then formed so-called *sympoliteiai*, either by constituting a new polis or by the integration of the citizens of smaller poleis into a larger one.<sup>13</sup> This often happened on the initiative of a higher authority – a king or his local governor – and against the resistance of the locals.<sup>14</sup> These new foundations, re-foundations, or mergers of cities had profound economic consequences.<sup>15</sup> As political unifications in the first place, they did not necessarily imply large movements of populations in the beginning, but they nevertheless caused fundamental changes in the economic landscape and shifted the movement of people and goods. The urban centers, chosen deliberately for their favorable positions, could attract more and more people and – as centers of production, demand, and distribution – draw and concentrate resources. Only this made possible the rise of large Hellenistic cities like Ephesus or Miletus, with their theaters and gymnasia, temples and *stoai*, and led to the emergence of urban centers on a rather different scale than the small towns in mountainous regions.

These processes of intensive urbanization notwithstanding, large parts of Asia Minor preserved a decidedly rural character throughout the Hellenistic period, and poleis emerged, if at all, only under Roman rule, as in Pontus or Galatia.

## AGRARIAN PRODUCTION FOR LOCAL MARKETS AND CONSUMPTION

Even in the more densely urbanized regions of western Asia Minor, agriculture was always the most important economic activity that

<sup>11</sup> The epigraphic evidence for these kinds of settlements has increased considerably in recent years: cf., e.g. Thonemann 2011; 2015a. The earlier evidence is reviewed by Daubner 2011.

<sup>12</sup> Famously illustrated by Toriaion: *SEG* 47, 1745; *ISultan dağ* 393.

<sup>13</sup> On the *sympoliteia* in general: Schuler and Walser 2015; Walser 2009; in Asia Minor: Reger 2004.

<sup>14</sup> Teos and Lebedus (*RC* 3–4) or Latmus and Pidasia (Wörrle 2003) are well-known examples.

<sup>15</sup> Cf. Scheidel 2007, 80–5.

occupied by far the most people and made the largest contribution to total production. As stated above (p. 78), agriculture in Asia Minor was very similar to that in mainland Greece or on the islands (Chapter 8, this volume). Here and there, we find a Mediterranean polyculture, with a rain-fed production primarily oriented toward the famous triad of grain, wine, and olives. Other agrarian activities, like animal husbandry, usually played a much smaller role. By far the largest part of the production was consumed by the producers themselves or was distributed locally through markets in the cities and villages, providing for the nutritional needs of the local communities. This form of agriculture should not be mistaken for subsistence farming, but still only a few, specialized agricultural products reached markets beyond the local level.

What we know specifically about agriculture in Asia Minor in the classical period is essentially based on a few literary sources. They show that the Achaemenid kings claimed ownership of all land in Asia Minor.<sup>16</sup> In the eyes of the kings, the *chora basileos*, the king's land, self-evidently also included the Greek poleis and their territory. Accordingly, the kings felt free to provide members of their family or friends with large stretches of land that could include indigenous villages or even Greek poleis.<sup>17</sup> There also existed large fortified rural estates, like that of a Persian nobleman raided by Xenophon's soldiers in the vicinity of Pergamum.<sup>18</sup>

The picture becomes much fuller in the Hellenistic period, when epigraphical sources provide more detailed information. With few exceptions, the inscriptions come from the coastal areas in the west and south. Archaeological surveys that provide important supplementary information usually cover small areas within these same regions. These are marked by similar environmental conditions, normally allowing rain-fed agriculture and the cultivation of olives. In consequence, we still know little about agriculture in inner Anatolia, where the evidence becomes more abundant only in the Roman imperial period.

In contrast to the situation under Achaemenid rule, in the Hellenistic kingdoms there existed a sharp division between the territories of the Greek city-states and land that was not under their control. As recent studies have shown, however, the differences between these two basic categories of land were less clear than previously thought. On

<sup>16</sup> On land tenure in Achaemenid Asia Minor: Schuler 1998, 137–57, with references to earlier literature.

<sup>17</sup> Themistocles was famously rewarded with the cities of Magnesia on the Maeander, Lampsacus, and Myus: Thuc. 1.138; Plut. *Vit. Them.* 29.7.

<sup>18</sup> Xen. *An.* 7.8.8–23.

the one hand, the status of poleis varied considerably. While some were formally recognized as free and autonomous by the kings, others were in varying degrees subject to royal command and had to negotiate their rights and obligations toward the crown. On the other hand, nor was the land beyond the borders of the cities' territories simply the property of the king. The king's land – the *chora basilike* – that was directly administrated by royal functionaries only represented one part of the total. Other land belonged to settlements with a more-or-less Greek character without polis status, like the military colonies mentioned earlier. Rural communities of mainly indigenous people managed their land and affairs with a certain degree of autonomy as well and were only indirectly governed by the royal authorities. The kings also granted large estates to private individuals, usually subordinates or supporters, who held them frequently as de facto property even if the royal grant may have been under retention of title.<sup>19</sup>

We are not very well informed about the settlement and land-holding structures within these different categories of land, and it is not to be expected that they were uniform. The Greek poleis were already complex entities that rarely correspond to a simple model of an urbanized center, where the inhabitants lived, and a surrounding agrarian hinterland, where they were tilling the soil and harvesting the crops.<sup>20</sup> The territory of many cities comprised *demoi* or *komai*, small villages on the periphery that sometimes developed around a rural sanctuary or fortification or had been independent communities in earlier times. As subdivisions of the polis, they could enjoy considerable political and administrative autonomy. Some city-states also housed larger groups of people without full citizenship, whose legal status is often very difficult to define. Some of them were of indigenous origin and worked land owned by the city and paid tribute to it.<sup>21</sup>

Furthermore, archaeological surveys have called attention to the significance of dispersed and isolated residential farmsteads. In general, these farmsteads were not small subsistence farms, but rather larger, sometimes fortified building complexes that must have been the center

<sup>19</sup> I follow the views developed in Schuler 1998, 159–94, summarized and confronted with diverging views, e.g. Boffo 2001, in Schuler 2004, 514–19. Cf. also Thonemann 2009, with a penetrating analysis of the status of “private” estates and the famous Mnesimachus inscription *ISardis* 1.

<sup>20</sup> The topic has been intensively discussed in recent years. For short summaries: Walser 2015, 415–16; Schuler 2004, 519–21; Chandezon 2003b, 202–4, all with further literature; Schuler 1998, 195–215 remains fundamental.

<sup>21</sup> The literature on this topic is controversial. Beyond the titles already cited, cf. Papazoglou 1997, with critical remarks by Ph. Gauthier, *Bulletin épigraphique* 1998, 107.

of at least medium-sized estates. This dispersed settlement structure is of considerable economic significance. It allowed intensified agrarian exploitation of land that was not easily reachable from the main urban center of the polis. The inherent interpretative difficulties of the archaeological evidence make it difficult to trace the development of the settlement structure over time. Both in Cyaneai in Lycia and in the territory of Miletus in southern Ionia – two of the best-explored areas – the number of isolated farmsteads seems to have increased considerably in the Hellenistic period. In the hinterland of Miletus, the cultivation of less-fertile and marginal areas also intensified in the Hellenistic period. Since this required considerable investment, it seems to have been driven by larger estate-holders and could have led to a concentration of rural possessions at the expense of small peasant landholders. There are, however, no clear signs that this was a general trend in western Asia Minor.<sup>22</sup>

Overall, we lack evidence to assess the average size of landholdings and the distribution of possessions. Comparison with mainland Greece suggests, however, that small and medium estates owned by citizens were of considerable importance.<sup>23</sup> Illuminating insights into the inner structure of agricultural domains are provided by an exceptional group of land-lease records from the city of Mylasa in Caria.<sup>24</sup> The descriptions of the plots and estates clearly reflect the mixed character of agriculture in this region: the plots of land, sold to the city and immediately leased back by the previous owners, must have been primarily used for the cultivation of cereals, but regularly contained areas that were reserved for viticulture. On some plots stood olive, or rarely fig, trees; olive presses are mentioned as part of the inventory as well as, in rare cases, stables or beehives.

Villages of various sizes and legal statuses were clearly the dominant form of settlement in the *chora*. Their inhabitants were of Greek or indigenous origin, and they worked, sometimes side by side, farms owned by themselves, their landlords, or the kings to whom they paid tribute. These communities did not look much different from the villages and farmsteads within the territories of the poleis. Large estates that were directly managed by royal functionaries or the administrators of a private owner and worked by slaves, dependent workers, or

<sup>22</sup> Cyaneai: Hailer 2008 and more generally Kolb 2008, *passim*; Miletus: Lohmann 2004, 346–9; on the question of concentration of landed property, *ibid.*, 348.

<sup>23</sup> Cf. my tentative considerations on Ephesus in Walser 2008, 169–71.

<sup>24</sup> The richness of these documents, now collected in Pernin 2014, is demonstrated by Chandezon 1998.



leaseholders certainly existed, but how they functioned and what their significance was is, again, hard to assess.<sup>25</sup>

Little can be said on the animal husbandry that was an integral, if rather marginal, aspect of Greek mixed agriculture.<sup>26</sup> Small stocks of sheep and goats were probably regularly raised on many farms and grazed on marginal land unsuited for the cultivation of crops or on fallow. Larger animals, like donkeys, mules, and especially cattle, were bred primarily as work animals. Oxen were indispensable as draft animals and particularly well suited for heavy labor such as plowing and transport.<sup>27</sup>

Animal husbandry was especially important in mountainous or dry regions and areas not well suited for mixed agriculture. According to Strabo, Bithynia and Pontus, as well as the Anatolian interior, provided especially fine grazing grounds. Already in the Achaemenid period, these regions were known for breeding horses, mules, and sheep on a larger scale.<sup>28</sup>

#### AGRARIAN PRODUCTION FOR INTRAREGIONAL MARKETS AND TRADE

A small range of agrarian products from Asia Minor met demands beyond the needs of local consumers and were exported. Wine from southwestern Asia Minor, including the adjacent islands of Cos and Rhodes, became popular in the Aegean and beyond from the third century onward. It must have been produced on a large scale and its cultivation seems to have been considerably expanded especially in the Rhodian *peraia*, the large area opposite the island on the mainland that was controlled by the Rhodian state.<sup>29</sup>

Wool from Asia Minor and especially Ionia was held in high esteem throughout antiquity. The “Milesian sheep,” a race bred specifically for its wool, allowed the production of textiles of the highest quality. Its significance is shown not only by frequent mentions in

<sup>25</sup> On large-estate management: Chandezon 2011, particularly 104–8.

<sup>26</sup> Chandezon 2003a, 183–258 collects and comments on the epigraphic evidence from Asia Minor. Isager and Skydsgaard 1995, 83–107 provide a general overview.

<sup>27</sup> Cf., e.g. an inscription from Teos in the fourth century mentioning cattle as work animals, donkeys, sheep: Robert and Robert 1976, 320–32, with extensive commentary.

<sup>28</sup> Strab. 12.3.13, 15, 30, 38–9; 4.7; 6.1; 8.16. Strab. 11.13.8 on large numbers of animals as tribute to the Achaemenid kings. Cf. Broughton 1938, 617.

<sup>29</sup> On wine production in the *peraia*: Salviat 1993; Lund 2000 on exports to the eastern Mediterranean; for a summary: Chandezon 2003b, 198–9. Badoud 2018 provides a recent study on Rhodian exports to Sicily and Italy.

ancient texts but also by the fact that already in the fourth century, the taxation and commerce of wool is a prominent subject of legal regulations and contracts between poleis.<sup>30</sup> Other agrarian products, like honey from the southwest or figs from Caria and the Maeander valley, were exported as well. Yet they were niche products with limited economic significance outside of the local context.<sup>31</sup>

### NONAGRARIAN PRODUCTION

By comparison with agriculture, nonagrarian production was of minor importance, as elsewhere in the ancient world. As a necessary supplement to agriculture, it played a role everywhere, but it was only in certain areas and under specific environmental conditions that it gained larger significance. The evidence is comparably rich for the Roman period, but highly limited and dispersed for earlier periods. The sources were collected and categorized more than ninety years ago by T. S. Broughton.<sup>32</sup> More recent epigraphical discoveries have added to this material but have not changed the general picture. A new synthesis, making full use of archaeological finds, is still missing, and I will confine myself to a few select observations.

Mining of metals in Asia Minor goes back well beyond the arrival of the Greeks.<sup>33</sup> Strabo mentions the occurrence of precious and semi-precious metals in many areas of the peninsula, but most mining activities had ceased before his own time, most likely because they had become unprofitable. Gold and silver deposits existed in western Asia Minor – as in the Aiolis, on Mount Tmolus, and Mount Sipylus – but they seem to have been exhausted during the Hellenistic period. The Attalids extracted silver on Mount Ida, but these deposits were of minor importance, as were those in the Pontic region. Iron existed in the Pontic mountains and was of considerable importance at least in the classical period. Deposits of copper, tin, lead, zinc, and iron all occurred in Asia Minor, but we know very little about their exploitation before the Roman imperial period. At least for now, it is unclear to what

<sup>30</sup> The sources are collected in Broughton 1938, 817–23; regulations and contracts are known from Aigai (*StV* III 456), Teos (Robert and Robert 1976, 320–1), and Erythrai (*IErythrai und Klazomenai* 15).

<sup>31</sup> For these and other agrarian products, see the extensive collection of sources by Broughton 1938, 607–20.

<sup>32</sup> Broughton 1938, 817–39.

<sup>33</sup> Recent research on metals in Asia Minor has focused on the Bronze and the Early Iron Age. Cf., e.g. Yalçın, Özbal, and Paşamehmetoğlu 2008 and “Antolian Metal,” the series of conference proceedings published by Yalçın as supplements to the journal *Der Anschnitt* since 2000.

degree metal production in Asia Minor covered the needs of its population and what quantities of the different metals had to be imported. Metalworkers must have been active in virtually all cities and larger villages. They are well represented in inscriptions from the Roman period.

Asia Minor was rich in fine marbles.<sup>34</sup> Only easy access to this material, as well as other building stones of high quality, made the splendid development of the Greek cities of Asia Minor in the Hellenistic and Roman periods possible. Many larger cities quarried marbles in their own territory, and these marbles were mostly of local importance. Not so the famous marble from the Proconnesus, the small island of Marmara, which in the Hellenistic period belonged to the territory of Cyzicus: at least from the fourth century onward, its white marble was widely exported to the cities of Asia Minor and well beyond. In the Roman period, the Phrygian city of Docimeium was another important exporter of marble, but its marbles were certainly already known before.

Most regions outside of the central plateau of Asia Minor were rich in wood, which was used as firewood, charcoal, and for products like resin and pitch.<sup>35</sup> Especially important was the wood of large trees, like pines and cedars, suitable for shipbuilding. It was easily available in the Troad, the Pontic region, and in the mountainous areas along the southern coast. Several cities, like Cyzicus, Amastris, or Side were also renowned for their wharfs and shipbuilding.

Salt was produced in various forms: from seawater, at the great salt lakes in the interior, and by mining. Beyond its everyday use in cooking, salt was indispensable for the preservation of fish. Fishing was certainly practiced on a small scale all along the coasts of Asia Minor, as well as in some lakes and streams.<sup>36</sup> A few cities, like Byzantium, Cyzicus, or Parium, however, could profit from the seasonal runs of migrating fish, especially tuna and mackerel that crossed between the Aegean and the Black Sea. Several late Hellenistic and early Roman inscriptions from Cyzicus and Parium on the Hellespont provide rare insights into the fishing industries in this area.<sup>37</sup> They show that in this period these cities had leased out the exclusive right to catch fish in certain sectors of the coast to associations of fishermen. They also manned watchtowers that

<sup>34</sup> The papers in Ismaelli and Scardozzi 2016 provide a recent overview.

<sup>35</sup> On wood, see Rousset 2010, 47–50 with copious references.

<sup>36</sup> On fishing in general, now Bresson 2016b, 175–87; Marzano 2013, with a focus on the Roman period.

<sup>37</sup> *IParium* 4–5; Robert 1960, 94–5. The inscriptions are explained by Robert, *ibid.*, 80–97.

were built along the coast for the observation of the passing schools of fish. The importance of the fishing industry even for a city like Cyzicus with a large territory is demonstrated by the fact that a tuna fish was depicted not only on the coins of the city but also on its official emblem.<sup>38</sup>

The artisanal trades as well as any professional services rarely enter our sources during the period under discussion. Metalworkers, potters, stonemasons, builders, as well as butchers, bakers, bankers, teachers, and many others must have been active in virtually all cities and larger villages, and in epigraphical sources from the Roman period they are very well represented, in funerary texts as well as in inscriptions set up by professional associations. While the latter become frequent in the Roman imperial period, the evidence for them is poor in earlier periods. A late-fourth-century inscription from Ephesus provides a rare glimpse into the organization of trades, listing several persons with their profession: a cattle butcher, an oil seller, a shoe seller, a seller of sandals, and a goldsmith. The specificity of these professions points to the high technical specialization of trades and crafts. This great “horizontal division of labor” is best attested in classical Athens, but the situation in one of the larger cities of Asia Minor was probably comparable.<sup>39</sup>

## TRADE

Our knowledge about trade networks within Asia Minor and between Asia Minor and the rest of the Greek world is once again limited. The high degree of urbanization as well as the diversity of microregions in Asia Minor implies an intense retail trade over short and medium distances. The surpluses from agricultural production, both from peasant farmers and larger estates, were distributed through local markets, both within cities and in the countryside, and exchanged against goods from the nonagrarian sector.<sup>40</sup> This kind of everyday trade, however, rarely left traces in our sources.

Wholesale commerce over longer distances in the Greek world was dominated by the grain trade that was essential for the food supply in certain areas, especially Athens. In contrast to mainland Greece, however, Asia Minor did not seem to have reached its carrying capacity and was, under normal circumstances, able to feed its population with the

<sup>38</sup> Killen 2017, 224–7.

<sup>39</sup> For the situation in Athens, see Harris 2002b and Chapter 14, this volume.

<sup>40</sup> Chapter 14, this volume.

foodstuff produced locally and regionally. Even the largest cities, like Ephesus, which might have reached a population of up to 200,000 inhabitants in the Hellenistic period, seem to have been largely self-sufficient. This does not mean, however, that these cities were not dependent on imports of grain by ship over longer distances under tenuous circumstances and in times of crisis. In the early Hellenistic period, Ephesus was highly worried about the provision of grain and took various measures to promote imports. Similar concerns in other cities are also well documented.<sup>41</sup>

We know little about other imports into Asia Minor, but they were undoubtedly common and surely did not only include luxury items, but also slaves and raw materials. The imports were certainly mainly exchanged against the agricultural and nonagricultural products already mentioned, with wine, wool, and textiles being the primary exports.

## COINAGE

Coinage was famously invented in western Asia Minor, either by the Lydian kings or the Greeks in the second half of the seventh century.<sup>42</sup> Over the next centuries, Asia Minor saw the circulation of a plethora of different coinages in various standards that mirror the complex and ever-changing political landscape.<sup>43</sup>

The first coins were minted in electrum, an alloy of gold and silver,<sup>44</sup> both by the Lydian kings and by the cities of Sardis, Cyzicus, Phocaea, Ephesus, and Miletus, as well as Samos. They were soon followed and gradually displaced by coins in pure gold and silver. When the Persians conquered western Asia Minor soon after 550, they seem to have continued to strike Lydian coinage in considerable quantities.<sup>45</sup> Darius I (521–486), however, changed the system by the introduction of two new types of coinage: a gold coin, the *daric*, and a silver coin, the *siglos*, both depicting the Achaemenid king. With minor adjustments, this system remained in place until the end of the Persian empire. Since the Greeks rarely struck coins in gold, the *daric*

<sup>41</sup> Walser 2008, 302–9 on Ephesus and other cities in Asia Minor; further Davies 2011, 187–8; in general: Migeotte 1991.

<sup>42</sup> Chapter 16, this volume.

<sup>43</sup> Metcalf 2012 offers accessible surveys on the coinage of Asia Minor in different periods.

<sup>44</sup> Recent research suggests that the alloy used for the minting of coins was not naturally occurring, as hitherto assumed, but rather artificially produced: cf. Wartenberg 2016.

<sup>45</sup> Alram 2012.

was popular and circulated widely all over the Greek world. The *sigloi*, on the other hand, had to compete with Greek silver coins and were rarely in use outside of Asia Minor; even here they played a marginal role. The Greek poleis under Achaemenid rule, as well as local dynasts, were free to coin their own money, and many of the more important cities did so.<sup>46</sup> As a result, the Achaemenid coins formed only a small part of the monetary supply in Asia Minor and circulated side by side with the more numerous local and imported Greek issues.

The parallel circulation of coins issued by central authorities and those struck by the civic mints of the poleis remained a defining feature of coinage in Asia Minor after the end of Persian rule. In the Hellenistic period, it was not so much the monetary system but the quantity of money that changed.<sup>47</sup> Its main sources were the Achaemenid treasuries from Susa and Persepolis, which provided Alexander the Great with precious metal of an equivalent value of no less than roughly 450 tons of gold. Alexander started to bring these enormous amounts of gold and silver into circulation, and throughout the following centuries the Hellenistic kings continued to issue royal coins in somewhat smaller, but significant, quantities.

In spite of the gigantic influx of royal coins, the cities in Asia Minor continued to issue more or less sporadically their own coins to satisfy their needs.<sup>48</sup> At least in the third century, their ability to do so was not restricted by the imperial authorities. In considerable number, they issued both their own posthumous Alexander-type and civic coins. In general, they seem to have concentrated on the production of small silver denominations and bronze coins. The situation in Asia Minor changed fundamentally, when, shortly after the peace of Apamea in 188, the Pergamene king Eumenes II created a closed-currency system (see also Chapters 5 and 20, this volume).<sup>49</sup> Even though his *cistophoroi*, named for the *cista mystica* depicted on its obverse, weighed only three-quarters of Attic-standard tetradrachms, they had to be exchanged and accepted by royal fiat at the same value (compare Chapter 5, this volume). The *cistophoroi* were produced in large numbers in different cities of the Attalid kingdom. Several cities, however, continued to strike civic tetradrachms in full weight, probably destined to be used in transactions with the Greek world outside the Attalid kingdom.

There is little doubt that by the end of the Hellenistic period, the economy of Asia Minor was highly and thoroughly monetarized. The fact

<sup>46</sup> Konuk 2012 for Greek coinage up to the Ionian Revolt.

<sup>47</sup> For a survey: de Callatay 2012; more technically: de Callatay 2005a. <sup>48</sup> Ashton 2012.

<sup>49</sup> Meadows 2013 for detailed discussion of the nature of this currency system. On the monetary history of Pergamum in general, Marcellesi 2012.

that civic mints brought large quantities of bronze coins into circulation was of particular importance; even small denominations of silver were unsuited to everyday retail transactions in local markets, but the bronze coinage provided a medium of payment that could be used even for these purposes and simplified, and therefore, promoted retail trade.

### THE STATE(S) AND THE ECONOMY

The interweaving of different strata of political authority did not only shape the monetary landscape, but public finances in Asia Minor in general.<sup>50</sup> Contrary to the Greeks in the mainland and the Aegean, the Greek communities in Asia Minor had to pay tribute to outside powers.<sup>51</sup> According to Herodotus, the Lydian king was the first among the barbarian kings to exact tribute (*phoroi*) from the Greek poleis.<sup>52</sup> When the Persians conquered the Lydian kingdom of Croesus, they too asked the Greeks to contribute their share to the needs of the empire. After the Ionian Revolt, Darius I had the tribute reassessed to a system based on the size of the cities' territories, and the land not controlled by the poleis was certainly taxed as well.<sup>53</sup> Not necessarily all revenues flowed into the king's coffer, but those from estates, villages, and even cities could be ceded to loyal noblemen. We know little about how tributes were levied, but early Hellenistic inscriptions suggest that they had to be paid partly in money and partly in kind.

When Alexander the Great "freed" Asia Minor from Persian rule, the tribute system changed, if only gradually, over the course of time. While the Greek poleis were exempt from tribute, the non-Greek communities continued to pay regular *phoroi*, now to the Macedonian king.<sup>54</sup> Still, Greek cities were asked to support the king's military endeavors with irregular financial contributions.

With his policy in Asia Minor, Alexander set the tone for the following three centuries. It became a commonplace to promise that the Greek poleis should remain exempt from tribute or taxes, but in practice, all monarchs controlling parts of Asia Minor sought to assert tributary claims vis-à-vis the Greek poleis, even in those cities declared "free and autonomous." Opinions differ as to the total size of the tax burden, and it certainly varied from community to community. In any

<sup>50</sup> On public finances: Migeotte 2014; for the specific situation in Asia Minor also: Walser 2015.

<sup>51</sup> Schuler 2007 offers a succinct overview of tributes and taxation both in the Achaemenid and Hellenistic periods.

<sup>52</sup> Hdt. 1.6.2–3.      <sup>53</sup> Hdt. 6.42.2.

<sup>54</sup> Thonemann 2012, reinterpreting the crucial piece of evidence, *IPriene* 1.

case, recent evidence suggests that the kings and their administration interfered deeply with the finances of the cities and thereby had a significant impact on the economy.<sup>55</sup>

The Greek cities and communities without polis status were not only an important source of income for the kings but often were the recipients of their benefactions. Only poleis and communities under the kings' direct control could expect ongoing transfer payments. Others could still receive one-time benefits under specific circumstances and in times of special need, but other public revenues were obviously of much larger significance. One important source of income was public property in various forms: rents from land, both public and sacred (belonging to a god, but managed by the cities), from public buildings, revenues from mines, quarries, and so on. Revenue from local tolls and taxes was equally important. Virtually all cities levied customs duties, both on imports and exports, but also various other indirect taxes on commerce and services within the communities. It has often been assumed that the poleis did not directly tax private property and private production of citizens, even if they did levy such taxes from inhabitants without citizenship. Yet at least in the case of the poleis in Asia, considerable evidence militates against this view.<sup>56</sup> The cities had various other revenues, and as far as they were not claimed by royal authorities, the communities of Asia Minor used their financial resources for the same main purposes as those in the rest of the Greek world. What exactly the revenues and expenditures of a community were varied from community to community and constantly changed over time.

The economic significance of the royal administration and the poleis was naturally not limited to their economic activities alone. They also provided and guaranteed the institutional framework for individual agents. However, in this respect the situation in Asia Minor seems not to be fundamentally different from other regions of the Greek world and does not need to be addressed here in detail.

## CONCLUSION

From the late archaic to the early Roman imperial period, war was an almost ubiquitous phenomenon in the history of Asia Minor (Chapter 5, this volume). The constant threat of war tied up a large amount of

<sup>55</sup> Walser 2015, 419–21.

<sup>56</sup> The agreement of *sympoliteia* that Miletus and Pidasia decided upon in 187 illustrates the variety of direct taxes on agriculture strikingly, when it defines the taxes that the new citizens from Pidasia shall pay; see *Milet* 6.3, 149, ll. 18–35. Cf. Migeotte 2001.



resources: the training and supply of armies and navies or the construction and maintenance of walls and fortifications was costly; looming conflicts impeded trade and caused instability that furthered phenomena like piracy. The direct and indirect costs of war are impossible to assess, but they were undoubtedly considerable. When military conflicts broke out, pillages and devastations caused serious local and regional crises that often lasted for years.<sup>57</sup>

In general, however, the cities and communities demonstrated considerable resilience and recovered quickly. The Hellenistic period often appears as an age of war, but, paradoxically, during the same period many Greek cities in Asia Minor as well as the rural countryside seem to have flourished. It is impossible to say what this efflorescence could mean in terms of economic growth, and any long-term estimate would blur the differences in a fractured economic landscape over a fractured period of time. We must be content with the very general impression of prosperity we get when we look at splendid cities like Miletus, Ephesus, or Pergamum, or at densely populated countrysides such as in Lycia. The situation changed in the first century, when the Greeks in Asia Minor paid a heavy price for their resistance against Rome, not only during the First Mithridatic War (89–85), but also during the following years. Only the victory of Octavian over Mark Antony, ending the Roman civil war, brought stability to the eastern Mediterranean and a new golden era for Greek Asia Minor.

### *Further Reading*

While recent studies, including Bresson 2016b, rely heavily on sources from Asia Minor, no general survey of its economy from the archaic to the Hellenistic period exists. Marek 2016 provides an excellent overview for the Roman period, relevant to earlier periods as well. Broughton 1938 remains an invaluable collection of source material. Schuler 1998, as well as the studies by Chandezon, are essential for understanding agrarian structures and conditions of production. Several contributions in Metcalf 2012 survey the development of coinage in Asia Minor. Based on Migeotte 2014, Walser 2015 surveys the finances of the cities in Asia Minor.

<sup>57</sup> Generally, Chandezon 2000b. Walser 2008 for the economic crises caused by war.