

Commodities

From the early beginnings of the Ottoman state to the capture of Constantinople in 1453, Turchia was an area of intense commerce, one facet of which was the trading activity of the western merchants, among whom the Genoese and Venetians held a dominant position. The exchange of goods consisted broadly of the export of raw materials from Turchia and the import into the area of luxury items, although Turchia did produce and export quality products of its own, such as worked cloth. At the same time, Turchia acted as a transit market for eastern luxuries such as silks and spices.

The Genoese were extremely active in the trade in Turchia, not merely coming into the coastal ports from which the goods were exported, such as Theologos and Balat (Palatia), but placing their own agents in such commercial centres as Bursa, Edirne, Gelibolu and Samsun.¹

The Turks, although appearing by name much less often in the sources, were also active. At the end of the fourteenth century the İsfendiyar ruler Süleyman Paşa was trading copper with the Genoese.² In the same period a Turkish trader sold alum to a Genoese official in Chios.³ At the beginning of the next century, Hacı Mustafa traded copper in Chios⁴ and Katib Paşa sold cotton to Genoese merchants there.⁵ In the 1430s Ahmed of Licomedea (?Nicomedea, Izmit) bartered grapes for cloth,⁶ Ramadan of Samsun, Ali

¹ For example Piero Palavexin in Bursa and Polo Moroson in Samsun, 1439.vii.8 = Badoer, *Libro*, col. 325, p. 652; 1437.xii.18 = *ibid.*, col. 44, p. 89.

² 1390.i.11 = ASG, Notario, Donato de Clavaro, c. 476, doc. 26. See appendix 5, document 3 below.

³ 1394.ii.18 = ASG, Notaio, Donato de Clavaro, Sc. 39, filza 1, doc. 97/240.

⁴ 1404.xii.31 = ASG, Notaio, Gregorio Panissario, Sc. 37, filza 1, doc. 48; Paola Piana Toniolo, *Notai Genovesi in Oltremare. Atti Rogati a Chio da Gregorio Panissaro (1403–1405)* (Genoa, 1995), doc. 52, p. 105.

⁵ 1414.iv.2 = ASG, Notai, Giovanni Balbi, Sc. 46, filza 1, doc. 286. See appendix 5, document 11 below.

⁶ 1436.i.14 = Badoer, *Libro*, col. 42, p. 84, col. 13, p. 27; 1436.i.14 = *ibid.*, col. 43, p. 86, col. 42, p. 85. There is a further entry concerning one *hyperpyron* to be paid to Ahmed, presumably in connection with the same transaction. 1436.i.19 = *ibid.* col. 42, p. 84, col. 16, p. 33.

Basa (Paşa), Chazi Rastan (Kadı), Choza Ise (Hoca Isa)⁷ and Mustafa all sold wax.⁸ In the same period a Turk called Saliet, Ismail and an unnamed Turk traded in crepe ('veli crespì') and Chazi Musi turcho (Kadı Musa) in muslin ('veli').⁹

As well as selling, Turks also bought commodities from westerners. In 1436 Jael, factor for Choza Muxalach (Hoca Mu'ala'), bought a large quantity of Florentine cloth, paying the very considerable sum of 1,625 *hyperpyra* 23 *karati*.¹⁰ He purchased the cloth by bartering spices and incense.¹¹ The following year an unnamed Turk bought glassware ('bochaleti').¹² Apart from trading, Turks earned money from western merchants in other ways. In 1437 a Turk called Jacsia (?Yahya) acted as a porter ('charatier') for hides bought in Edirne.¹³

Turchia was not merely a market to which western merchants came to sell their goods and ship their purchases home; they also bought western imports which they then traded elsewhere in the region, as was done, for example, in 1437 when goods bought in Samsun were taken to Trabzon and sold there.¹⁴

Certain commodities appear to have been dominant in Genoese-Turkish trade. Thus alum, cloth, grain and slaves in particular were commodities of major importance in the commerce between Turchia and the western states. Other items formed part of this commerce but have left fewer traces in the extant documentation. Among them was soap, a luxury commodity in the trade between the west Mediterranean and the Levant. Its manufacture dates back to Roman times when the process used in its production was

⁷ The Ottoman term *hoca* in this period meant a merchant of importance, a patron, İnalçık, 'Sources', p. 183.

⁸ 1437.vi.6 = Badoer, *Libro*, col. 71, p. 144, col. 36, p. 73 (Ramadan of Samsun); 1438.iv.31 = *ibid.*, col. 190, p. 382, col. 194, p. 391 (Ali Basa). In another entry concerning Ali Paşa and the sale of wax he appears on one page as Ali Basia and on the other as Choza (Koca) Ali: 1438.iv.31 = *ibid.*, col. 194, p. 390, col. 186, p. 375; 1438.xi.4 = *ibid.*, col. 200, p. 202, col. 200, p. 240, col. 231, p. 465 (Chazi Rastan); 1438.iv.26 = *ibid.*, col. 190, p. 382, col. 186, p. 375 (Choza Ise). The name is spelt 'Ise' in the first entry and 'Isse' in the second; 1438.iv.26 = *ibid.*, col. 190, p. 382, col. 186, p. 375 (Mustafa). The name is written with an accent, Mustafâ, as is the name Ali. This presumably was a guide to how they were pronounced, with the stress falling on the final syllable, as it does in modern Turkish.

⁹ 1436.ix.10 = Badoer, *Libro*, col. 7, p. 14, col. 8, p. 17; 1436.x.10 = *ibid.*, col. 22, p. 45; 1437.iii.24 = *ibid.*, col. 48, p. 96, col. 52, p. 105, (Saliet); 1437.viii.20 = *ibid.*, col. 88, p. 178, col. 68 (*bis*), p. 139 (Ismail); 1436.vii.8 = *ibid.*, col. 48, p. 96, col. 68 (*bis*), p. 139 (unnamed Turk); 1436.viii.20 = *ibid.*, col. 29, p. 58, col. 68 (*bis*), p. 139 (Chazi Musi turcho).

¹⁰ 1436.x.25 = Badoer, *Libro*, col. 27, p. 54, col. 12, p. 25.

¹¹ 1436.x.10 = Badoer, *Libro*, col. 26, p. 52, col. 27, p. 55; 1436.xi.10 = *ibid.*, col. 13, p. 26, col. 26, p. 53.

¹² 1437.x.4 = Badoer, *Libro*, col. 88, p. 178, 'per veri case 4', col. 68, p. 137: 'per casa per el trato de una casa ne la qual iera bochaleti 500, venduda a un turcho perp.28'.

¹³ 1437.iv.30 = Badoer, *Libro*, col. 56, p. 112, col. 36, p. 73: 'per agozo de pele 300, che pexò chant. 14, a asp. 5 per chanter'.

¹⁴ 1437.xii.18 = Badoer, *Libro*, col. 152, p. 306, col. 152, p. 307.

described by Pliny the Elder.¹⁵ In the fourteenth century, good soap for trade to the Levant had to be supple and made in small pieces while the boxes in which it came had to be so small that there were three to a *migliaro*.¹⁶ Nearly 200 years later, Venetian soap was still preferred to that produced in Anatolia, which, being made of tallow (*sego*), was not good. For this reason Turkish women washed their cloths with Venetian soap.¹⁷

Soap was traded into the Levant¹⁸ by western merchants who brought it from Venice, Ancona, Gaeta, Messina and Apulia, Cyprus and Rhodes to the markets of Constantinople and Pera,¹⁹ of Chios,²⁰ Mytilene²¹ and Lesser Armenia.²² The Mamluks sought after it and it was sold in the markets of Alexandria.²³ In Anatolia, the Genoese were active in importing soap into Theologos,²⁴ from Naples,²⁵ Gaeta²⁶ and Chios,²⁷ and into Balat.²⁸ The Venetians too traded soap into Aydın²⁹ and it was sold in

¹⁵ Pliny the Elder, *Natural History*, Loeb Classical Library (Cambridge, Mass., 1942), bk. 28, ch. 51, para. 191.

¹⁶ 1345.v.26 = Pignol Zucchello, *Lettere di Mercanti a Pignol Zucchello (1336–1350)*, ed. Raimondo Morozzo della Rocca, Comitato per la Pubblicazione delle Fonti Relative alla Storia di Venezia, Fonti per la Storia di Venezia, Sez. IV, Archivi Privati (Venice, 1957), no. 15, p. 38: 'El savone che mandate si fate che sieno di buona sorte e fate che le piache sieno sotigli e piccole e che le chasse sieno sì piccole che ne vada .III. per migliaro'.

¹⁷ Bassano, *Costumi e i modi particolari della vita de'Turchi: ristampa fotomeccanica dell'edizione originale – Roma, 1545*, ed. F. Babinger (Monaco di Baviera, 1963), p. 22.

¹⁸ Soap was one of the items traded by the Venetian merchant Pignol Zucchello: 1345.v.15 = Zucchello, *Lettere*, no. 14, p. 34; 1344.iii.19 = *ibid.*, no. 8, p. 22; 1345.v.26 = *ibid.*, no. 15, pp. 37, 38; 1345.x.4 = *ibid.*, no. 16, p. 41 and 1345.x.5 = *ibid.*, no. 17, p. 42 (same soap); 1345.x.5 = *ibid.*, no. 18, p. 43; 1345.x.27 = *ibid.*, no. 19, p. 45.

¹⁹ Francesco Balducci Pegolotti, *Fr Balducci Pegolotti, La Pratica della Mercature*, ed. A. Evans, The Medieval Academy of America 24 (Cambridge, Mass., 1936), p. 33; 1437.viii.23 = Badoer, *Libro*, col. 97, p. 196, col. 100, p. 203 (from Messina); 1437.viii.22 = *ibid.*, col. 96, p. 194, col. 97, p. 197 (also from Messina as the entry involves the same people as in the immediately preceding reference); 1437.ix.2 = *ibid.*, col. 119, p. 240, col. 97, p. 197 (from Gaeta); 1436.i.22 = *ibid.*, col. 43, p. 86, col. 16, p. 33, col. 17, p. 35 (from Ancona).

²⁰ 1349 (?) = Zucchello, *Lettere*, no. 67, p. 125 (Venetian soap).

²¹ 1437 = Badoer, *Libro*, col. 96, p. 194, col. 97, p. 197 refers to a payment for soap, removed from a sack on a ship in Mytilene: 'a di dito per saoni de raxon de ser Piero Michiel e Marin Barbo per l'amontar de peze 8 de saon ch'el me dise aver tolte de un sacho per far un prexente a Metelin, meto fose r 10, cusi d'avixo'.

²² Pegolotti, *Pratica*, p. 59.

²³ Piloti, *L'Egypte au commencement du quinzième siècle d'après le traité d'Emmanuel Piloti de Crète (incipit 1420) avec une introduction et des notes par P-H Dopp* (Cairo, 1950), p. 20.

²⁴ 1377 = G. Musso, *Navigazione e commercio genovese con il Levante nei documenti dell'Archivio di Stato di Genova (secc. XIV–XV) con appendice documentaria a cura di Maria Silvia Jacopino* (Rome, 1975), pp. 169–70 (100 *kantars* of soap to Theologos).

²⁵ 1376.vi.22 = John Day, *Les Douanes de Gênes 1376–1377* (Paris, 1963), vols. I–II, vol. I, p. 271.

²⁶ 1377.iii.13 = ASG, Notai Ignoti, A, 7.1., doc. 99, published in Musso, *Navigazione*, pp. 232–3.

²⁷ 1394.ix.24 = ASG, Notaio, Donato de Clavaro, Sc. 39, filza 1, doc. 182; 1408.ii = Philip R. Argenti, *The Occupation of Chios by the Genoese and their Administration of the Island 1346–1566* (Cambridge, 1958), vols. I–III: vol. I, p. 422.

²⁸ Piloti, *L'Egypte*, p. 72.

²⁹ 1337.iii.9 = Zachariadou, *Trade and Crusade*, doc. 1337A, clause 7, p. 191; 1353.iv.7 = *ibid.*, doc. 1353A, clause 20, p. 214.

Antalya³⁰ and in Samsun where, in 1437, it fetched 205 *aspers* per *kantar*.³¹ Calculating on an exchange rate of 19 *aspers* of Samsun per *hyperpyron*,³² the soap sold in Samsun for 10.79 *hyperpyra* per *kantar*, comparable with what it would have fetched in Constantinople where in the same period soap from Ancona sold for 10 *hyperpyra* six *karati*,³³ that from Messina for 9.5 *hyperpyra* per *kantar*³⁴ and soap of unspecified origin at 10.5 *hyperpyra* per *kantar*.³⁵ Soap continued to be imported into the Ottoman empire into the sixteenth century.³⁶

Soap was clearly a profitable item of trade, for in 1344 the merchant Francesco Bartolomei wrote from Chios to ask Pignol Zucchello in Venice to send him soap as he considered this commodity a good investment and one which, provided it was of good quality, he could do better with than any other.³⁷

Being profitable, soap was, like any commodity, subject to plunder, as is attested by a surviving notarial document. In 1413 a settlement was organised between Vicencio Rubeo and Masimo Formica, arbitrators for Nani(?) de Paci, and Petro de Alticio, procurator for Lillio de Blaxio, part of which concerned forty-five cases of soap plundered by Petro de Laranda when on the ship of Johannes Alfiri(?) de Ancona, and forty boxes, also plundered by Petro, this time from Lillio's warehouse in Gelibolu.³⁸

Soap was taxed on entry into the beylik of Aydın where, during the first part of the fourteenth century, the tax levied was either two gold *florins* per 23.5 *batman*³⁹ or per Cypriot *kantar*, if the soap was in a sack, or at the rate of one gold *florin* per *cassa*.⁴⁰ Aydın imposed a rate of two pieces of soap per *cassa* or two *stavrate*⁴¹ in 1337⁴² and 5 *çiliatos* (*gigliato*) per *cassa* in 1353.⁴³ Interestingly soap only appears as attracting a special customs rate in Aydın, no special rate being applied to it in the treaties between Venice and Menteşe or in extant documents from the reign of Mehmed II.

³⁰ Pegolotti, *Pratica*, pp. 57–8.

³¹ 1437.xii.18 = Badoer, *Libro*, col. 44, p. 89.

³² This rate is given by Badoer: 1437.xii.18 = Badoer, *Libro*, col. 44, p. 89. See also appendix 1 below for exchange ratios for Samsun *aspers* to *hyperpyron*.

³³ 1436.i.22 = Badoer, *Libro*, col. 43, p. 86.

³⁴ 1437.viii.23 = Badoer, *Libro*, col. 97, p. 196.

³⁵ 1437.viii.22 = Badoer, *Libro*, col. 96, p. 194.

³⁶ Bassano, *Costumi*, p. 22.

³⁷ 1344.iii.19 = Zucchello, *Lettere*, no. 8, p. 22.

³⁸ (?)1413.vi. = ASG, Notaio, Giovanni Balbi, Sc. 46, filza 1, doc. 69.

³⁹ According to Schilbach, the *batman* of Theologos differed in weight from that of Balat, the Theologos *batman* being equivalent to 9.993 kg, and the *batman* of Balat to 15.741 kg (Erich Schilbach, *Byzantinische Metrologie* (Munich, 1970), pp. 197–8). Zachariadou, however, suggests (*Trade and Crusade*, p. 152) that the weight was the same for both beyliks.

⁴⁰ Pegolotti, *Pratica*, p. 56. A *cassa* was a soap container used in the Black Sea region and Romania (Zachariadou, *Trade and Crusade*, p. 151).

⁴¹ Professor Zachariadou has suggested that the *stavrate* was probably the *crocetto* of Pegolotti (*Trade and Crusade*, pp. 142–3).

⁴² 1337.iii.9 = Zachariadou, *Trade and Crusade*, doc. 1337A, clause 7, p. 191.

⁴³ 1353.iv.7 = Zachariadou, *Trade and Crusade*, doc. 1353A, clause 20, p. 214.

Collection of the tax on soap was handled by tax farmers in the beyliks of Menteşe and Aydın. In the treaty of March 1337 between Menteşe and Crete a clause specified that if the emir of Aydın made peace with Venice but kept wine, alum and soap subject to *apalto*, then the emir of Menteşe, İbrahim, would make alum subject to *apalto* in Balat only.⁴⁴ The imposition of *apalto* on soap was, however, soon lifted for the Venetians.⁴⁵ It is presumably indicative of the importance of soap as an import that it was specifically mentioned in the treaties between Menteşe, Aydın and Crete, usually in conjunction with alum and wine.

Other luxury items were imported from the west into Turchia, including the aromatic gum, mastic, used for chewing and as a base for perfume,⁴⁶ which was produced only in Chios.⁴⁷ From there it was exported both to the west, being sold in Pisa in the early fourteenth century,⁴⁸ and to other parts of the eastern Mediterranean including Damascus and Alexandria.⁴⁹ Mastic sales in Turchia at the end of the fourteenth century were controlled by *apaltatores* of the Maona of Chios, a group of whom in 1394 bought for eight years control of the sales of 200 *kantars* annually in Turchia and Romania, for which they paid 25 gold *ducats* per *kantar*. They similarly controlled mastic sales in Egypt and Syria for ten years from January 1396, for an annual sale of 114 *kantars*, for the price of 190 gold *florins* per *kantar*. This indicates that Turchia and Romania were importing considerably more mastic than Egypt and Syria, and gives an idea of the price of mastic in Turkish markets in this period, for the mastic cannot have sold, at least under normal circumstances, for less than 25 *ducats* per *kantar*, and indeed should have sold for a price significantly more than this in order to make the deal attractive to the *apaltatores*.⁵⁰ Mastic was also imported by the Turks. In 1404 Cagi Mostaffa (Hacı Mustafa) bought thirteen boxes of mastic from Elias Sacerdotus to be handed over in Bergamo or Jasmati (?Çeşme).⁵¹

⁴⁴ 1337.pre-iv. = Zachariadou, *Trade and Crusade*, doc. 1337M, clause 28, pp. 199–200. This clause is repeated in the treaty of 1375 between Crete and Menteşe: 1375.iv.22 = *ibid.*, doc. 1375M, clause 28, p. 223. As it is a straight copy of the clause of the 1337 treaty, as are other clauses which are clearly no longer relevant, it seems probable that it is anachronistic and does not in fact reflect the situation in 1375.

⁴⁵ 1337.iii.9 = Zachariadou, *Trade and Crusade*, doc. 1337A, clause 11, p. 192 ; 1337.pre-iv. = *ibid.*, doc. 1337M, clause 22, p. 198; 1375.iv.22 = *ibid.*, doc. 1375M, clause 22, p. 222; 1403.vii.24 = *ibid.*, doc. 1403M, clause 22, p. 231 (doc.1403M DVL, clause 22, p. 231, uses the word *dacium* in place of *gabella*). 1407.vi.2 = *ibid.*, doc. 1407M, clause 22, p. 236 refers to no *amalium* on soap.

⁴⁶ Angeliki E. Laiou, *Constantinople and the Latins. The Foreign Policy of Andronikos II 1282–1328* (Cambridge, Mass., 1972), p. 149.

⁴⁷ Piloti, *L'Egypte*, pp. 71–2.

⁴⁸ Pegolotti, *Pratica*, p. 207. It sold there in the early part of the fourteenth century for four *solidi* per *centinaio*.

⁴⁹ Piloti, *L'Egypte*, p. 72. It sold there at the end of the fourteenth and beginning of the fifteenth centuries for 100 *ducats* per *cassa*.

⁵⁰ 1394.vi.17 = ASG, Notaio Donato de Clavaro, Sc.39, filza 1, doc. 224/299.

⁵¹ 1404.xiii.31 = ASG, Gregorio Panissario, sc.37, filza 1, doc. 49; Toniolo, *Notai Genovesi*, doc. 53, p. 106.

Other luxury items, such as gems, were traded round the eastern Mediterranean and brought into Turchia by western merchants. In 1439 a ruby weighing around 15 *karati* and valued at 100 *hyperpyra*, was sent to Edirne.⁵² Some of this trade went through Chios, and gems leaving the island were placed under *gabella*.⁵³ Glass too was imported.⁵⁴

Turchia was not just a market for imported luxuries; it also exported items such as spices. Antalya was a market for indigo, sold there by the *peso sotile*, henna, sold by the *calbano* (steelyard balance),⁵⁵ saffron and sesame.⁵⁶ The last two spices were exported from other parts of Turchia, including Alanya, Balat, where the Genoese were active in exporting these commodities, and Gelibolu.⁵⁷ The gum tragacanth too was exported from Antalya and 'draganti di Turchia' is listed in the manual of the Florentine merchant Francesco Balducci Pegolotti.⁵⁸ Tragacanth sold in Alexandria, Majorca and Venice.⁵⁹

Antalya was also a market for pepper,⁶⁰ a commodity bought by the Genoese and other western merchants in various parts of Turchia and exported to cities in western Europe. Pepper from Theologos was imported into Genoa, where it was taxed on entry in 1377.⁶¹ Pepper was also traded in Bursa⁶² where it was sometimes bought by bartering. In 1439 Damian Spinola bought pepper there for Giacomo Badoer, bartering twenty-four sacks of canvas and five sacks of wool which had been sent to him for that purpose.⁶³ In 1437 Azi Baba, described variously as a Saracen ('sarain')⁶⁴ and as a Moor ('more'),⁶⁵ bartered five *kantars* of pepper and musk for cloth valued at 717 *hyperpyra* 14 *karati*.⁶⁶ At other times pepper was bought with cash. In 1437 Elia Dedimari, a Jew, sold 20–25 *kantars* of pepper to Antonio Contarini at 60 *hyperpyra* per *kantar* (5.45 *aspers*), for part of which sale he was to be paid 5,100 *aspers* (463 *hyperpyra* 15 *karati*).⁶⁷ These *aspers* were sent by Giacomo Badoer in Constantinople to Antonio

⁵² 1439.ii.3 = Badoer, *Libro*, col. 199, p. 401, col. 386, p. 774.

⁵³ 1408.ii : Argenti, *Chios*, vol. I, p. 422. In 1381 there was a dispute involving pearls between merchants in Chios: 1381.ii.15 = ASG, Notario, Antonius Felani, C. 175, 110v–111r.

⁵⁴ E. Ashtor, *A Social and Economic History of the Near East in the Middle Ages* (London, 1976), p. 262.

⁵⁵ Pegolotti, *Pratica*, pp. 57–8.

⁵⁶ Piloti, *L'Egypte*, p. 60.

⁵⁷ Piloti, *L'Egypte*, pp. 60, 61, 62, 63, 73.

⁵⁸ Pegolotti, *Pratica*, pp. 294, 376.

⁵⁹ Pegolotti, *Pratica*, pp. 70, 123, 138.

⁶⁰ Pegolotti, *Pratica*, pp. 57–8. It was sold there by the *peso sotile*.

⁶¹ 1377.viii.19 = Day, *Douanes*, vol. II, p. 928.

⁶² 1436.xi.8 = Badoer, *Libro*, col. 33, p. 66, col. 33, p. 67; 1437.xii.28 = *ibid.*, col. 134, p. 270, col. 227, p. 457. There is a further entry connected with expense on the pepper: col. 134, p. 270, col. 290, p. 583.

⁶³ 1439.ii.26 = Badoer, *Libro*, col. 388, p. 778, col. 385, p. 773, col. 372, p. 747.

⁶⁴ 1437.xii.4 = Badoer, *Libro*, col. 148, p. 298.

⁶⁵ 1437.ix.17 = Badoer, *Libro*, col. 148, p. 299.

⁶⁶ 1437.xi.18 = Badoer, *Libro*, col. 148, p. 298, col. 111, p. 225, reading 'muscio' for 'musico'.

⁶⁷ 1437.viii.21 = Badoer, *Libro*, col. 93, p. 188, col. 92, p. 187. There is another entry for 19

Contarini in Bursa with orders that he should buy pepper.⁶⁸ There was a 1 per cent charge for the purchase of these *aspers* in Constantinople.⁶⁹

There is some extant information for prices of pepper in Bursa in the late 1430s and on the expenses involved in purchase. Three prices are given by Badoer for 1436 and 1437 of 60, 63.3 and 69.5 *hyperpyra* per *kantar*, giving an average of 64.3 *hyperpyra*, which can presumably be used as a rough guide to pepper prices in this period. The expenses given for the same period were 4.5 per cent and 5 per cent of the purchase price, again a rough guide to what costs western merchants were likely to incur on pepper bought in Turchia.

In 1436 Christofal Bonifazio sent to Constantinople from Bursa 10 pounds (*pondi*) of pepper which he bought for 785 *aspers* (69.5 *hyperpyra*) per *kantar*. The gross weight of these sacks was 25 *kantars* 79 *rotoli*, the tare for the sacks was 82 *rotoli* and for dust at 1 per cent was 26, making a net weight of 24 *kantars* 71 *rotoli*. The expenses involved in the purchase were 16 *aspers* for cartage to his house, 10 *aspers* for storage, 100 *aspers* for ten sacks, 30 *aspers* for 15 ropes, 20 *aspers* for binding, 20 *aspers* for insurance ('*siagardana*'), 40 *aspers* for weighing ('*pexador*'), eight *aspers* for the courier, and 75 *aspers* for cartage to the sea, 150 *aspers* for customs, 50 *aspers* for storage and provisions at 2 per cent, making 388 *aspers*. Thus the total expenses on pepper bought for 19,397 *aspers* were 907 *aspers*, or around 4.5 per cent.⁷⁰ The following year Christofal Bonifazio sent one pound (*pondo*) from Bursa, weighing 2 *kantars* 86 *rotoli* of Constantinople, 259 *rotoli* net weight of Bursa, costing 665 *aspers* per *kantar* (total of 1,722 *aspers*) to Constantinople. The expenses were 2 *karati* for sending the pepper from Bonifazio's house for weighing and back, 64 *aspers* (6 *hyperpyra*) for sending it to Constantinople, and 34 *aspers* (3.2 *hyperpyra*) for provisions. The total expenditure on the pepper purchased for 1,722 *aspers* (164 *hyperpyra*) was 98 *aspers* (173 *hyperpyra* 7 *karati*), or around 5 per cent.⁷¹

kantars 31 *rotoli* bought from Elia Dedimari by Giacomo Badoer, 1436.xi.15 = *ibid.*, col. 47, p. 94, col. 126, p. 255.

⁶⁸ 1437.vii.24 = Badoer, *Libro*, col. 47, p. 94, col. 92, p. 187.

⁶⁹ 1437.vii.24 = Badoer, *Libro*, col. 92, p. 186, col. 77, p. 157.

⁷⁰ 1436.xi.8 = Badoer, *Libro*, col. 33, p. 66, col. 33, p. 67. The *asper*–*hyperpyron* exchange rate is given as 11 *aspers* 4 *tornexi* to 1 *hyperpyron*. There are several other entries under the same date for pepper from Bursa but it seems that they are dealing with the same pepper. One is for 5 pounds (*pondi*) of pepper, gross weight 13 *kantars* 90 *rotoli*, tare for sack and rope 30 *rotoli*, at 6 *rotoli* per sack, tare for dust 14 *rotoli* at 1 per cent, net weight 13 *kantars* 46 *rotoli*, bought in Bursa by Christofal Bonifazio at the same rate of 785 *aspers* per *kantar* (68 *hyperpyra* 22.5 *karati*) (1436.xi.8 = *ibid.*, col. 33, p. 66, col. 33, p. 67). A second entry is again for 5 pounds of pepper, this time specified as being from the 10 pounds sent from Bursa by Christofal Bonifazio, gross weight of 13 *kantars* 18 *rotoli*, tare of 30 *rotoli* for the sacks and cords at 6 *rotoli* per sack, and 13 *rotoli* for dust, making a net weight of 12 *kantars* 75 *rotoli*, selling at 785 *aspers* per *kantar* (68 *hyperpyra* 22.5 *karati*) (1436.xi.8 = *ibid.*, col. 18, p. 36, col. 33, p. 67.) The figures in the two separate entries for 5 sacks each of pepper add up to the combined figure for the 10 sacks.

⁷¹ 1437.xii.28 = Badoer, *Libro*, col. 134, p. 270, col. 227, p. 457. There is a further entry connected with expense on the pepper: col. 134, p. 270, col. 290, p. 583.

Turchia was an area of horse breeding and among the commodities it exported was livestock. Marco Polo commented on the outstanding breed of horses called Turki and excellent mules found in Turkomania (Anatolia) which sold for high prices.⁷² A vital military asset, horses were much prized in Turchia and given as gifts. Mehmed Aydınoğlu sent an excellent horse to ibn Battuta as a present and Umur Aydınoğlu presented Şeyh İzz al-Din with three horses, all harnessed.⁷³ The Germiyan ambassador to Murad I gave good horses as *peşkeş*, and horses, together with mules and camels, were sent to him from the *sancakbeyis*.⁷⁴

Both the beyliks of Menteşe and Aydın exacted export taxes on livestock leaving their territories. Horses exported from Menteşe by the Venetians, and presumably by other western merchants, were charged at the rate of 3 *aspers* per animal, and pack horses, asses or mules at 2 *aspers* per beast, the same rate being levied on cattle.⁷⁵ In Aydın too there was an export tax imposed on livestock exported by western merchants.⁷⁶

Both the Genoese on Cyprus and the Venetians on Crete looked to Turchia as a source of horses. A supply of horses was important to Crete where, in 1356, the Venetian senate granted a total exemption from tax on all imports of horses and other beasts.⁷⁷ Venice assigned money to the authorities on the island for the purchase of horses, increasing the amount of money assigned for this in 1333 from 2,000 *hyperpyra* to 4,000 *hyperpyra* with instructions that the entente with the Ottoman ruler Orhan over the import into Crete of horses and corn was to be handled by the Cretan authorities.⁷⁸ In 1363 the Cretan authorities sought to have the 500 *hyperpyra* allocated to buying horses in Turchia increased to 1,000 *hyperpyra*, as 500 *hyperpyra* was considered insufficient.⁷⁹ The numbers bought could be fairly large. In 1383 there was a proposal in Cyprus to buy 200 horses from Anatolia (probably from Karaman)⁸⁰ and in the early 1360s the authorities on Crete bought 500 horses from Turchia.⁸¹

The Turks were not always willing to export their horses. In 1365 the Hospitallers were forced, due to Turkish annoyance over the capture of

⁷² Marco Polo, *The Travels of Marco Polo*, trans. Aldo Ricci, with introduction and index by Sir E. Dennison Ross (London 1931), p. 50. While admiring the horses, Marco Polo was not so impressed by the people. They were, he said, 'a primitive people and dull of intellect'.

⁷³ ibn Battuta, *Voyages*, vol. II, pp. 302, 307, 311.

⁷⁴ Aşıkpaşazade, *Altosmanische Chronik*, p. 52, 53; Aşıkpaşazade, *Tevarih-i al-i 'Osman*, pp. 56, 57; Neşri, (*Menzel, Cod.*), pp. 55, 56; Neşri, *Kitab-ı Cihan-nüma*, pp. 204, 206.

⁷⁵ 1331.iv.13 = Zachariadou, *Trade and Crusade*, doc. 1331M, clause 3, p. 187; 1337.pre-iv. = *ibid.*, doc. 1337M, clause 20, p. 198; 1375.iv.22 = *ibid.*, doc. 1375M, clause 20, p. 222; 1403.vii.24 = *ibid.*, doc. 1403M, doc. 1403M DVL, clause 20, p. 230; 1407.vi.2 = *ibid.*, doc. 1407M, clause 20, p. 236.

⁷⁶ 1353.iv.7 = Zachariadou, *Trade and Crusade*, doc. 1353A, clause 19, p. 214.

⁷⁷ 1356.vii.7: Thiriet, *Régestes*, vol. I, doc. 300, pp. 82–3.

⁷⁸ 1333.xi.16: Thiriet, *Régestes*, vol. I, doc. 38, pp. 30–1.

⁷⁹ 1363.vi.8: Thiriet, *Régestes*, vol. I, doc. 410, pp. 106–7.

⁸⁰ 1383.viii.1 = ASG, Notario, Giovanni Bardi, C. 381, fos. 148r–151r.

⁸¹ 1363–5 = Andraea Naugerii, 'Historia Veneta', in *RIS*, vol. XXIII, col.1049.

Alexandria that year by King Peter of Cyprus, to buy horses in Apulia rather than Turchia.⁸² Some years later the Venetians sent an ambassador to the emir of Theologos to try and persuade him to reconsider his restriction on the trade in these animals.⁸³

Apart from livestock, Turchia also exported skins and hides, which, in Menteşe and Aydın, were not, for the Venetians, to be placed under *apalto*.⁸⁴ It seems that there was some sort of restriction in Menteşe over the sale of tanned hides (*pellamen*) and leather (*corame*), for permission was granted to Venetians trading there to buy them in the territories and markets of Menteşe, and not merely from the butchers.⁸⁵ The Genoese too traded in hides, exporting tanned leather from Balat.⁸⁶ Tanned leather and goatskin (*pele de chastron*) were exported from Gelibolu,⁸⁷ and sheepskin (*montonine*) and leather (*chordoani*) from Bursa and Edirne.⁸⁸ Goatshide was produced in Anatolia and goats' hair, which sold well in Turchia, was used by the Turks to make cloths and ropes for their Arab horses.⁸⁹ Named Turkish merchants occasionally appear in the sources trading in hides with western merchants. In 1438 Azi (?Aziz), a Turk, sold to Jeronimo Badoer 800 'pele de chastron de Mar Mazor crude' for 16 *hyperpyra* per *kantar*.⁹⁰

Turks were also involved in other capacities in the trade in hides, acting for example as carriers. In 1437 a Turk called Jascia (?Yahya), a carrier, was involved with Sulia dal Mistrini, also described as a carrier, in the sale to an agent of Badoer of 20 bales of sheepskin ('pelle de chastron'), containing 1,000 hides, for which Sulia received, for carterage of 700 hides, weighing 33 *kantars*, at 5 *aspers* per *kantar*, 14 *hyperpyra* 21 *kantars*,⁹¹ and Jascia, for

⁸² 1365.xii.4, Anthony Luttrell, 'The Hospitallers of Rhodes Confront the Turks: 1306–1421' in Philip F. Gallagher (ed.), *Christians, Jews and Other Worlds. Patterns of Conflict and Accommodation*, (New York, London, 1988), p.113, n. 55, citing the archives in Malta.

⁸³ 1400.viii.19 : Thiriet, *Régestes*, vol. I, doc. 988, pp. 12–13.

⁸⁴ 1337.iii.9 = Zachariadou, *Trade and Crusade*, doc. 1337A, clause 11, p. 192; 1337.pre–iv. = *ibid.*, doc. 1337M, clause 22, p. 198; 1375.iv.22 = *ibid.*, doc. 1375M, clause 22, p. 222; 1403.vii.24 = *ibid.*, doc. 1403M, clause 22, p. 231; 1407.vi.2 = *ibid.*, doc. 1407M, clause 22, p. 236.

⁸⁵ 1331.iv.13 = Zachariadou, *Trade and Crusade*, doc. 1331M, clause 14, p. 189;

⁸⁶ Piloti, *L'Egypte*, p. 73.

⁸⁷ Piloti, *L'Egypte*, pp. 62, 63. 1438.xi.26 = Badoer, *Libro*, col. 277, p. 556, col. 197, p. 397. In 1438, seventy 'pele bianche' from Gelibolu were exported from Constantinople.

⁸⁸ 1438.xi.4 = Badoer, *Libro*, col. 277, p. 556, col. 266, p. 535, (one bale of 'montonine bianche' was sold in Bursa and six bales in Edirne); 1438.x.14 = *ibid.*, col. 154, p. 310, col. 266, p. 535, (fourteen bales of 'montonine bianche' were sent to Constantinople from Bursa); 1438.xii.22 = *ibid.*, col. 306, p. 615, ('montonine e chordani vermei abude de Adrenopoli'); 1439.ii.26 = *ibid.*, col. 414, p. 830, col. 367, p. 737, ('montonine bianche' sold in Edirne); 1439.ix.20 = *ibid.*, col. 358, p. 718, col. 234, p. 471, (1,000 'montonine' sold in Edirne, cost, including expenses, 3,176.5 *aspers* (310 *hyperpyra*)).

⁸⁹ Pegolotti, *Pratica*, p. 379.

⁹⁰ 1438.iii.7 = Badoer, *Libro*, col. 196, p. 394, col. 186, p. 375.

⁹¹ 1438.iv.30 = Badoer, *Libro*, col. 56, p. 112, col. 3, p. 7. The *asper*–*hyperpyron* exchange was 11 *aspers* 2 *tornexi* to 1 *hyperpyron*.

carriage of 300 hides, weighing 14 *kantars*, at 5 *aspers* per *kantar*, 6 *hyperpyra* 7 *karati*.⁹²

From Badoer's accounts it is possible to build up some guide to prices of hides sold in Turchia in the late 1430s. These were on average around 3.5 *aspers* per piece for sheepskin (*montonine*) and around 10 *aspers* for leather (*chordoani*). Sheepskins sold in 1437 for 4 *aspers* each, the price including unspecified expenses to bring them to Constantinople,⁹³ 4 *aspers* each,⁹⁴ the same rate in Bursa,⁹⁵ and 3 *aspers* each.⁹⁶ The following year sheepskins were sold in Bursa for 3.5, 3.25, and 3 *aspers* each.⁹⁷ In 1438, 584 white sheepskins were sold in Edirne for 3 *aspers* (2.85 *hyperpyra*) each.⁹⁸ In the same year Pipo de Jachomo bought various amounts of sheepskin in Turchia, possibly in Edirne,⁹⁹ paying 3.75 *aspers* (0.28 of a *hyperpyron*) each for red sheepskin¹⁰⁰ and 3 *aspers* (2.85 *hyperpyra*) each in Edirne for white sheepskin.¹⁰¹ Leather was more expensive, selling for 9 *aspers* per piece in Edirne,¹⁰² with red leather fetching 11.5 *aspers* per piece.¹⁰³ Goatskin (*pele de chastron*) was slightly cheaper than sheepskin (*montonine*), selling in 1437 for 2 *aspers* each.¹⁰⁴

Badoer's accounts also give an idea of the expenses incurred by western merchants buying and exporting hide from Ottoman territories. These were, on average, in the region of 13 per cent of the purchase price. In 1438, 2,075 sheepskins were bought in Bursa by Christofal Bonifazio for 6,571 *aspers*, being sold at 3.5, 3.25 and 3 *aspers* each, and sent from there to

⁹² 1438.iv.30 = Badoer, *Libro*, col. 56, p. 112, col. 36, p. 73. The *asper*–*hyperpyron* exchange was 11 *aspers* 1.5 *tornexi* to one *hyperpyron*.

⁹³ 1437.iii.16 = Badoer, *Libro*, col. 61, p. 122, col. 57, p. 115. The *asper*–*hyperpyron* exchange rate was 100:9.

⁹⁴ 1437.iii.16 = Badoer, *Libro*, col. 61, p. 122, ('montonine vermeie'). The *asper*–*hyperpyron* exchange rate was 100:9.

⁹⁵ 1437.vii.23 = Badoer, *Libro*, col. 61, p. 122, col. 33, p. 67 ('montonine vermeie'). The exchange rate was 11:1.

⁹⁶ 1437.iii.16 = Badoer, *Libro*, col. 61, p. 122, col. 57, p. 115, ('montonine bianche chonza de foia solamente'). The *asper*–*hyperpyron* exchange rate, although not given here, was 100:9 for the total of 30 *aspers* is given as the equivalent of 2 *hyperpyra* 17 *karati*.

⁹⁷ 1438.ix.18 = Badoer, *Libro*, col. 266, p. 534, col. 225, p. 453.

⁹⁸ 1438.x.20 = Badoer, *Libro*, col. 266, p. 534, col. 232, p. 467.

⁹⁹ That his purchases were made in Turchia is clear from the exchange rate given for *aspers* (10.5:1), this being the rate of exchange for Turkish *aspers*. Other entries for goods sent by Pipo de Jachomo at the same date place him in Edirne. He may therefore well have bought the hides and leather there, although this is not specified in the text.

¹⁰⁰ 1438.viii.18 = Badoer, *Libro*, col. 197, p. 396, col. 230, p. 462. The *asper*–*hyperpyron* exchange rate was 10.5:1.

¹⁰¹ 1438.x.20 = Badoer, *Libro*, col. 266, p. 534, col. 230, p. 463. The *asper*–*hyperpyron* exchange rate was 10.5:1.

¹⁰² 1438.viii.18 = Badoer, *Libro*, col. 197, p. 396, col. 230, p. 462.

¹⁰³ 1437.iii.16 = Badoer, *Libro*, col. 61, p. 122, col. 57, p. 115. The *asper*–*hyperpyron* exchange rate was 100:9. The entry of col. 57, p. 115 gives an incorrect total.

¹⁰⁴ 1438.iv.30 = Badoer, *Libro*, col. 56, p. 112, col. 17, p. 35. The sale consisted of 20 bales of 'pelle de chastron', containing 1,000 hides.

Constantinople.¹⁰⁵ The expenses incurred by Bonifazio in Bursa were 103 *aspers* for transporting them to his house, for tying them and for rope, 75 *aspers* for carterage at the rate of 10 *aspers* per *soma*, 248 *aspers* for weighing ('peazo') and customs at 35 *aspers* per *soma*, 60 *aspers* for storage at 4 *aspers* per *tango*, and 131 *aspers* and for provisions at 2 per cent. Thus the total expenses were 617 *aspers* on a purchase price of 6,571 *aspers*, (652.8 *hyperpyra*) or 9.4 per cent.

On top of this figure should be added other expenses involved in transporting the hides to Constantinople. The freightage charged for 3 *tangi* of sheepskins, made up of 450 skins, and transported by Statopira, a boatman ('barcharuol'), was 1 *hyperpyron* 18 *karati*.¹⁰⁶ The freightage charge for a further 5 *tangi*, consisting of 639 sheepskins, paid to Vasilicho, a boatman ('barcharuol'), was 2 *hyperpyra* 12 *karati*, and the cost of portorage ('chamali') was 8 *karati*. The cost of portorage for a further 6 *tangi*, sent by the boat ('barcha') of Manguzo, from Bursa, was 5 *karati*, while the freight charge for the remaining *tango* sent from Bursa on the boat ('grip'o') of Piero 'varoter', and for portorage ('chamalo') was 13 *karati*.¹⁰⁷ Thus the total freightage costs for transporting 2,075 hides from Bursa to Constantinople was 5 *hyperpyra* 8 *karati* which, if added to the 617 *aspers* (58.76 *hyperpyra*, i.e. *c.*58 *hyperpyra* 18 *karati*) expended in Bursa makes a total expenditure of 64 *hyperpyra* which gives a total percentage expense charge of 9.8 per cent on an initial purchase of 6,571 *aspers* (652.8 *hyperpyra*).

The percentage figure from the same period for expenses on hide purchased in Edirne is considerably higher. In 1438 Pipo de Jachomo bought in Edirne 584 white sheepskins at 3 *aspers* each (2.85 *hyperpyra*), making a total of 1,752 *aspers* (166.86 *hyperpyra*).¹⁰⁸ The expenses on this purchase in Edirne were 4 *hyperpyra* 6 *karati* for freightage and portorage for six bales, 14 *hyperpyra* for provisions and 10 *hyperpyra* for 40 *pichi* of canvas, rope and tying the bales, for carriage to the port and onto the ship, making a total of 28 *hyperpyra* 6 *karati*¹⁰⁹ on a purchase of 1,752 *aspers* (166.86 *hyperpyra*), or *c.*17 per cent, which seems rather high.

In 1437 twenty bales of goatskin, containing 1,000 hides were sold at 2 *aspers* each, making a total of 2,000 *aspers*, and associated expenses were 87 *aspers* for portorage, tying and ropes, 40 *aspers* for brokerage (*sansaria*) at 1 per cent and provisions at 1 per cent, 24 *aspers* for weighing and 8 *aspers* for storage, a total for expenses of 159 *aspers* (14.3 *hyperpyra*). Other expenses were 19 *karati* for unloading at the warehouse and reloading on the boat

¹⁰⁵ 1438.ix.18 = Badoer, *Libro*, col. 266, p. 534, col. 225, p. 453.

¹⁰⁶ 1438.viii.7 = Badoer, *Libro*, col. 225, p. 452.

¹⁰⁷ 1438.ix.18 = Badoer, *Libro*, col. 225, p. 452, col. 227, p. 457. The *asper*–*hyperpyron* exchange rate was 10.5:1.

¹⁰⁸ 1438.x.20 = Badoer, *Libro*, col. 266, p. 534, col. 230, p. 463. The *asper*–*hyperpyron* exchange rate was 10.5:1.

¹⁰⁹ 1438.x.20 = Badoer, *Libro*, col. 266, p. 534, col. 232, p. 467.

(‘barcha’), and 6 *hyperpyra* 18 *karati* for port entrance and taxes to the Greeks, making a total of 7 *hyperpyra* 13 *karati*.¹¹⁰ Total expenses were thus 21.8 *hyperpyra* on a total purchase price of 2,000 *aspers* (180 *hyperpyra*) or 12 per cent in line with the percentage expenses in Bursa in the following year.

There are also instances of the export from Turchia of horse and cattle hides.¹¹¹ In 1437 one of the commodities bought by Antonio da Negroponte in Samsun was thirty-three pieces of tanned oxhide, which cost 714 *aspers* (37.57 *hyperpyra*) and which he resold in Trabzon at 65 and 75 *aspers* of Trabzon per piece, making a total of 1,708 *aspers* (42.7 *hyperpyra*).¹¹² Before expenses Antonio therefore made 5.13 *hyperpyra*, approximately 13.5 per cent. In 1438 Pipo de Jachomo sent fifteen oxhides from Turchia to Constantinople at a cost, including both purchase and transport expenses, of 22 *hyperpyra* 12 *karati*. If one calculates at approximately 13 per cent for expenses, the hides must have cost in the region of 19.6 *hyperpyra* or 1.3 *hyperpyra* per hide. In Constantinople they were valued at 1.5 *hyperpyra* each.¹¹³ Other tanned oxhides in Constantinople sold in the same period for 1 *hyperpyron* 18 *karati* (1.75 *hyperpyra*).¹¹⁴

Furs too were exported from Gelibolu and into Constantinople,¹¹⁵ from Stalimini¹¹⁶ (Limni, Lemnos) and from Samsun where, in 1437, twenty-six marten and four tanned ‘funie’(?) were bought for 445 *aspers* (23 *hyperpyra* 10 *karati*).¹¹⁷ Samsun also exported hair. In 1437, 304 *dexena* of hair, at 22 *aspers* (1.15 *hyperpyra*) per *dexena*, were bought there by Antonio da Negroponte for a total of 680 *aspers* (35.78 *hyperpyra*) and then sold by him in Trabzon for 2,038 Trabzon *aspers* (50.95 *hyperpyra*).¹¹⁸ approximately 42 per cent more than its sale price in Samsun. If one judges roughly from the expenses incurred on hide, the expenses may have been in the region of 13 per cent of the purchase price, making the mark-up on the hair fairly high, at 29 per cent of the original purchase price. This must indicate either that it was an expensive commodity *per se*, which seems unlikely in a country that

¹¹⁰ 1438.iv.30 = Badoer, *Libro*, col. 56, p. 112, col. 17, p. 35.

¹¹¹ Pegolotti, *Pratica*, p. 85 lists goods, including horse hides, from Turchia, Rhodes, Syria, Egypt and Armenia paying the *missa* tax in Cyprus.

¹¹² 1437.xii.18 = Badoer, *Libro*, col. 152, p. 306, col. 152, p. 307.

¹¹³ 1438.x.20 = Badoer, *Libro*, col. 215, p. 432, col. 230, p. 463.

¹¹⁴ 1438.vii.1 = Badoer, *Libro*, col. 215, p. 432.

¹¹⁵ Piloti, *L'Egypte*, p. 62.

¹¹⁶ 1398.i.10 = ASG, Notario, Giovanni Bardi, C. 382, fo. 45r.

¹¹⁷ 1437.xi.28 = Badoer, *Libro*, col. 102, p. 206, col. 152, p. 307. The exchange rate given on col. 102 is 17 *aspers* of Samsun to 1 *hyperpyron* so the exchange should have been for 445 *aspers* 26.17 *hyperpyra*. A note in the text states that the original figure was 26 *hyperpyra* 4 *karati* and that it was corrected to 21 *hyperpyra* 10 *karati*. The usual exchange rate at this time was 19 *aspers* per *hyperpyron*, calculating by which 445 *aspers* would equal 23.42 *hyperpyra*. In fact the rate of 19:1 is given on col. 152.

¹¹⁸ 1437.xii.18 = Badoer, *Libro*, col. 152, p. 306, col. 152, p. 307. The exchange rate of Samsun *aspers* per *hyperpyron* was 19:1, and for Trabzon *aspers* per *hyperpyron*, 40:1.

produced vast quantities of livestock and would thus have had large reserves of hair at its disposal or, much more likely, that it was sought after in Trabzon, where the terrain of the small state was not so suited to livestock rearing as were the lands of Turchia. The people of Trabzon may perhaps have used the hair, as the Turks did, for making ropes and coverings for horses.¹¹⁹

Another agricultural export from Anatolia was foodstuffs such as pulses which were sold in Antalya¹²⁰ and, together with grain, were charged an export tax for Venetians in Aydın of 4 per cent.¹²¹ In Menteşe, Venetians paid on exported pulses at the rate of 1 *asper* per *modium* throughout the fourteenth and into the fifteenth centuries.¹²² The Hospitallers too bought victuals in Anatolia.¹²³

One commodity that was exported from Turchia was timber. There was a ship-building industry in Antalya and timber from there was exported to Cairo,¹²⁴ as was pitch ('pece'),¹²⁵ which sold in Antalya by the steelyard balance.¹²⁶ On occasion Turkish rulers banned the export of timber from their territories to the west for the emir of Theologos, despite granting freedom of trade to the Venetians in 1400, refused to extend this to timber.¹²⁷ In 1379 the pope granted the Hospitallers permission to import corn and other foodstuffs from Anatolia, provided that there was no timber traded in return.¹²⁸ This would seem to indicate that timber was sometimes imported into Turchia. However, this seems unlikely as the Hospitallers would hardly have been trading timber with their enemies, even in return for foodstuffs and, in any case, Turchia was an exporter of timber and so not likely to be in need of supplies from outside. The explanation may be that this phrase is merely a formula included in such types of papal permissions, but without meaning.

Wax was exported from Anatolia, from Theologos, where it was taxed on

¹¹⁹ Pegolotti, *Pratica*, p. 379.

¹²⁰ Pegolotti, *Pratica*, pp. 57–8. They were sold there by the *moggio* and the *ghilla*.

¹²¹ 1353.iv.7 = Zachariadou, *Trade and Crusade*, doc. 1353A, clause 19, p. 214: 'frumentum vel alia victualia vel legumina'.

¹²² 1331.iv.13 = Zachariadou, *Trade and Crusade*, doc. 1331M, clause 3, p. 187; 1337.pre–iv. = *ibid.*, doc. 1337M, clause 20, p. 198; 1375.iv.22 = *ibid.*, doc. 1375M, clause 20, p. 222; 1403.vii.24 = *ibid.*, doc. 1403M, clause 22, p. 230; 1407.vi.2 = *ibid.*, doc. 1407M, clause 22, p. 236.

¹²³ Luttrell, 'Hospitallers', pp. 35, 113 and n. 55, citing the archives in Malta. That the Hospitallers exported foodstuffs from Turchia is shown by their difficulties in 1365 when, due to Turkish anger over the fall of Alexandria, they were forced to bring victuals from Apulia instead.

¹²⁴ Piloti, *L'Egypte*, p. 61. See also p. 73 where he talks of Rhodians going to Turchia to get timber which they took to Egypt, a trade which was by now no longer going on.

¹²⁵ Piloti, *L'Egypte*, p. 61.

¹²⁶ Pegolotti, *Pratica*, p. 34.

¹²⁷ 1400.viii.19 : Thiriet, *Régestes*, vol. II, doc. 988, p. 12.

¹²⁸ 1379.viii.6, Anthony Luttrell, 'Intrigue, Schism, and Violence among the Hospitallers of Rhodes: 1377–1384', *Speculum* 41 (1966), 35.

exit at 2 per cent,¹²⁹ and from Antalya where it was sold by the *peso sotile*.¹³⁰ At the end of the fourteenth and beginning of the fifteenth centuries it was exported from Anatolia, from Antalya, Alanya, Balat, and from the western parts of the empire, from Gelibolu and from Albania and Greece and Thessaloniki.¹³¹ The Genoese were active in trading it from Balat¹³² as were the Venetians, for whom wax was not placed in *apalto* in the beyliks of Menteşe and Aydın.¹³³ Some of the wax from Ottoman lands was shipped to Venice.¹³⁴ In 1381 a Genoese ship sailing from Theologos, and Alexandria and Beirut, carried wax as part of its cargo.¹³⁵ In 1402 wax was bought for Conradus de Pestino for Lodisius.¹³⁶ In 1437 Ramadan of Samsun sold 10 *kantars* 57 *rotoli* gross of wax, tare for the sacks and ropes of 34 *rotoli*, 'tara de fondi' at 4.5 *rotoli* per *kantar*, a total of 45 *rotoli*, leaving a net weight of 19 *kantars* 78 *rotoli* at 22.5 *hyperpyra* per *kantar*.¹³⁷ Wax was still being traded by western merchants after the fall of Constantinople, for Florentines were buying it in Bursa in the 1470s.¹³⁸

As in the case of hides and pepper, the accounts of Badoer for the late 1430s enable one to gain a rough idea of expenses involved in the wax trade in Ottoman territories. In 1438 Agustin di Franchi bought 3 sacks of wax in Gelibolu for 1,369 *aspers* (124.45 *hyperpyra*). The expenses consisted of 6 *aspers* (0.5 of a *hyperpyron*) for cartage and weighing ('chamali e pexador'), 5 *aspers* (0.46 of a *hyperpyron*) for brokerage ('sansaria'), 23 *aspers* (2 *hyperpyra*) for sacks, ropes and bagging, 5 *aspers* (0.46 of a *hyperpyron*) for bribing the weighing official ('magnaria al pexador'), 26 *aspers* (2.36 *hyperpyra*) for the 2 per cent customs tax, 9 *aspers* (0.8 of a *hyperpyron*) for storage and 27 *aspers* (2.45 *hyperpyra*) for provisions at 2 per cent. The total expenses were thus 101 *aspers* (9.18 *hyperpyra*) on a purchase price of 1,369 *aspers* (124.45 *hyperpyra*), or 7.4 per cent, less than the apparent average for hide and slightly more than that for pepper in this period.¹³⁹

While the accounts of Badoer give specific information for the late 1430s, similar information is apparently lacking for the earlier period. However,

¹²⁹ Pegolotti, *Pratica*, p. 56.

¹³⁰ Pegolotti, *Pratica*, pp. 57–8.

¹³¹ Piloti, *L'Egypte*, pp. 60, 61, 62, 63, 69.

¹³² Piloti, *L'Egypte*, p. 72.

¹³³ 1337.iii.9 = Zachariadou, *Trade and Crusade*, doc. 1337A, clause 11, p. 192; 1337.pre-iv. = *ibid.*, doc. 1337M, clause 22, p. 198; 1375.iv.22 = *ibid.*, doc. 1375M, clause 22, p. 222; 1403.vii.24 = *ibid.*, doc. 1403M, clause 22, p. 231; 1407.vi.2 = *ibid.*, doc. 1407M, clause 22, p. 236.

¹³⁴ 1438.iii.15 = Badoer, *Libro*, col. 195, p. 392, col. 191, p. 385.

¹³⁵ 1381.ii.15 = ASG, Notario, Antonius Feloni, C. 175, fos. 110v–111r.

¹³⁶ 1402.v.30 = ASG, San Giorgio, Sala 34 590/1306 (Peira Massaria), fo. 72v.

¹³⁷ 1437.vi.6 = Badoer, *Libro*, col. 71, p. 144, col. 48, p. 97.

¹³⁸ *Benedetto Dei, La Cronica dell'anno 1400 all'anno 1500*, ed. Roberto Barducci with preface by Anthony Molho (1990), p. 141.

¹³⁹ 1437.viii.5 = Badoer, *Libro*, col. 191, p. 384, col. 175, p. 353.

Badoer shows that items that do not appear in large numbers in other sources were being traded and were presumably bought and sold in similar quantities in the preceding century.

Certain commodities dominated the trade between the Turks and the western merchants. Of the exported commodities, the most significant were grain, slaves and alum while the most traded import was cloth.