

# Florentine Cloth in Damascus

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## *Introduction: Hoshino vs. Ashtor*

As is widely known, Eliyahu Ashtor proposed a compelling theory about economic trends in the late Middle Ages<sup>1</sup>. He contended that the decline of economic activity in the Levant should be attributed largely to the Mameluke regime, which imposed heavy taxes, confiscated private wealth, and granted exclusive privileges to Mameluke entrepreneurs. Such restrictive policies effectively stifled free competition in the Near East. Conversely, economic activities were allowed to flourish in Europe, where large-scale enterprises were created, methods of production were improved and innovated, and good materials were obtained, thus causing a general reduction in the cost of European products.

Ashtor's "dumping" hypothesis could be considered as part of a wider theoretical framework. He insisted that there was a "dumping" of European woolen cloth in the Levantine markets in the early 15th century, and that this dumping effected not only the Levantine woolen industry, but its cotton and linen industries as well<sup>2</sup>.

Put simply, Ashtor's interpretation of the word "dumping" means a drastic reduction in the price of goods that causes a substantial increase in imports<sup>3</sup>. However, he does not satisfactorily identify the underlying reason for the phenomenon of "dumping" in this period, because his explanation relies heavily upon data whose very important constituent is Florentine cloth prices<sup>4</sup>. Furthermore, he regards cloth as a typical example of the kind of European product which was imported into the Levant<sup>5</sup>, thus theorizing that its fall in price at this juncture is symbolic of the

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1 Cf., Ashtor, *A Social and Economic History*; *Apogée*; *Aspetti della espansione italiana*; *Studies of Levantine Trade* (several articles); *Les lainages*; *L'exportation*.

2 Ashtor, *L'exportation*, pp. 305-308.

3 Cf., Ashtor, *L'exportation*, p. 308.

4 Cf., Ashtor, *L'exportation*, pp. 308 ff. This article includes Al-Makrizi's description of the large-scale import of European woolen cloth into Cairo (*ibid.*, p. 305), but neither the price nor the quantity of the imported cloth is mentioned.

5 Cf., Ashtor, *L'lainages*; *Aspetti*.

wider economic relationship between the Levant and Europe.

On the other hand, Hidetoshi Hoshino—a late professor of Bologna University and specialist in the history of the Florentine woolen cloth industry—opposes Ashtor’s theory<sup>6</sup>. He was able to demonstrate that cloth from Northwest Europe (particularly from Flanders) was of extremely high quality until the middle of the 14th century, and that Italian cloth was inferior in the Mediterranean markets of this period.

Although Lombardian cloth was of higher quality than Florentine cloth, Florence began to raise the standard of its cloth during the 1320s by using English wool and imitating Northwest European cloth (“*panni alla franciescha*”)<sup>7</sup>. By the second half of the century, the Florentines had already gotten away from the stage of imitation, and were producing cloth comparable in quality to the best that Northwest Europe could offer.

In this way, Florentine cloth rapidly gained ascendancy in almost all of the high quality cloth markets in the Mediterranean. Contemporaneously, production of cheap cloth in Florence disappeared, and its products became standardized into two categories. The best of these was “*San Martino*” cloth, named for its production area and made from English wool, while “*Garbo*” cloth, made from other high quality wools such as those of Western Mediterranean, constituted the second category. This standardization was confirmed by law in 1408. By the 1420s, the Florentine cloth industry had fallen into recession, and there was a marked decline in the production of low quality *Garbo*. Florence overcame this depression in the second half of the century by exporting *Garbo* to Turkish markets and, from this time onwards, the production of this type of cloth underwent rapid expansion.

In summary, Ashtor maintains that this alleged “dumping” of European (including Florentine) cloth had its roots in the early 15th century, while Hoshino insists that there was a trend toward the production of high quality cloth in Florence at this time.

The two scholars differ in their interpretation of the abbreviation “D”, which frequently occurs in price lists contained within the Zane Documents. Ashtor proposes that this “D” should be read as *ducat* (*ducat*)<sup>8</sup>, while Hoshino believes that it should stand for *dirhem* (*dirhem*). Ashtor insists that the *ducat* price, or the price expressed in *ducats per panno* (piece) of Florentine cloth, fell drastically between the late 14th century and the early 15th century. However, according to Hoshino, who based his interpretation of these monetary units upon the “*pratica* (or *manuale*) *di mercatura*” of the time, the price—per *picco*, (*pic* i.e. Levantine yard) did not fall, therefore there was no dumping<sup>9</sup>. Hoshino believes that the interpretation of “D” may be essential for the formulation of an answer to the question of whether or not such “dumping” actually occurred.

6 Hoshino, *L'arte della lana*.

7 See, Saito, *Il libro commerciale di Rinuccio di Nello Rinucci* (i.e. State Archive of Florence, *Carte Del Bene*, n. 63). This article minutely analyzed the production of “*panni alla franciescha*”, and was presented by Hoshino in his *L'arte della lana*, pp. 24, 38-nota 2).

8 See, Ashtor, *L'exportation*, p. 314 (table “*Prix des draps florentins*”).

9 Hoshino, *Arte della lana*, pp. 188 f. (nota 116).

Therefore, before investigating the question of whether such “dumping” took place, it is first necessary to clarify the interpretation of the abbreviation “D” in the Zane documents.

### I. Did “D” mean *ducato*, or *diremo* (*dirhem*)?

#### I. The abbreviation “D”

Table 1 was compiled by Ashtor<sup>10</sup>, and contains price data mainly from the Damascene market. The information taken from the Datini documents refers to the 1380s and 1390s, and the entries for the 1410s (except for No. 8) were found in the Zane documents.

Table 1 Price in Ducats of Florentine Cloth (drawn up by Ashtor)

No. #	Date Year Month Day	Place of Sale ##	1st Sort Ducats	2nd Sort Ducats	3rd Sort Ducats	Not specified (fine) Ducats	Source
1	1386, Sep. 1	Damas	35	46	54		Datini, 1171
2	1394, Aug. 23	Damas		22.5	45		Melis, Aspetti, p. 384
3	1395, May 30	Damas		43.3*			Datini, 1171
4	1395, Aug. 2	Damas		43.3			Datini, 1171
	1396, Feb. 23	Alex		20	30 dinars		Datini, 1171
5	without date (1398?)	Damas		30	45		Datini, 1171
	1410 ca.	Alex				30 dinars	G.P., Sent. 25, f. 41b & s.
6	1411, Mar. 30	Damas	18	25	33		Zane, Price list
7	1411, Oct. 8	Damas					Zane, Price list
8	1413, ...	Damas	17	19	23		G.P., Sent. 25, f. 24b
9	1413, Mar. 22	Damas	16	18	21	20	Zane, Price list
10	1413, Sep. 14	Damas	16	18	22		Zane, Price list
11	1413, Sep. 19	Damas	18	20	22		Zane, Price list
12	without date (1416?)	Damas	15	17	20		Zane, Price list
13	1417, Apr. 14	Damas	14	17	20**		Zane, Price list
14	before 1440	Damas					Uzzano, p. 114
	1443, ...	Trip	12	13	15	32-41.25	G.P., Sent. 102, f. 66a
15	1453, .....	Damas				30	Crist. del Fiore V, f. la

Original Notes (This Table is a translation of “Prix des draps florentins” in Ashtor’s L’exportation, p. 314.

\* The sort is unspecified.

\*\* The prices for the 1st and the 3rd sorts (called “fini”) are included in a letter addressed to the Firm Zane by his agent Nic[colo] Contarini.

Additional Notes

# This author has added nos. in order to provide clarification of the material.

## Damas = Damascus, Alex = Alexandria, Trip = Tripoli (Syria)

10 Ashtor, L’exportation, p. 314 (translated into English by the author).

Table 2 Ducat and Dirhem Prices of Florentine Cloth in Damascus (drawn up by the author)

No.	Date Year Month Day	Price of Cloth per Piece: left=ducats, right= dirhems: The original prices are not underlined. The converted prices are underlined.				Exchange Rate	Remarks (The documents are the same as in Table 1)
1	1386, Sep. 1	<u>27</u> */500	<u>35</u> /650	<u>46</u> /850	<u>54</u> /1000	18 1/2	Datum added
2	1394, Oct. 23*	<u>23</u> /450		<u>45</u> /900		20	[Datini, 710]
3	1395, May 30			<u>43</u> /900		20 3/4	
4	... Aug. 24*	[... / ...]	<u>31</u> /650		48/1000	20 3/4	
5	1398, Sep. 15			44*/950		21 1/2	Datum changed
6	1411, Mar. 26*	<u>13</u> */550	<u>18</u> */750	<u>24</u> */1000		42 1/2	Data changed
7	1141, Oct. 8	<u>17</u> */ <u>867</u>	<u>19</u> */ <u>969</u>	<u>23</u> */ <u>1173</u>		51	
8	1413, ...		20*/				Category unspecified
12	without date (1413*)	<u>15</u> / <u>435</u>	<u>17</u> / <u>493</u>	<u>20</u> / <u>580</u>		29	Deduced from rate
9	1413, Mar. 22	<u>16</u> / <u>464</u>	<u>18</u> / <u>522</u>	<u>21</u> / <u>609</u>		29	
10	1413, Sep. 14	<u>16</u> / <u>480</u>	<u>18</u> / <u>540</u>	<u>22</u> / <u>660</u>		30	
11	1413, Oct. 19*	<u>18</u> / <u>540</u>	<u>20</u> / <u>600</u>	<u>22</u> / <u>660</u>		30	
13	1417, Apr. 14	<u>14</u> / <u>420</u>	<u>17</u> / <u>510</u>	<u>20</u> / <u>600</u>		30	
14	before 1442*	<u>12</u> */360	<u>18</u> / <u>510</u>	<u>15</u> */ <u>450</u>		30	Measure unidentified
15	1453, Nov. 18*	30/ ...		: ... / 1300-1400*			V [?], c. 1t*

Notes: 1. Classification of cloth depends on each document. Its denominations are omitted.

2. Datum marked by an \* means that their figures, dates or locations are different from those in Table 1, or that the data are newly added.

3. The figures were rounded up, so some became a little different from those in Table 1.

The Datini documents need no introduction, but the Zane documents may not be as widely known. They are composed of letters (*lettere*), accounts or bills (*conti*), price lists (*valute*), lists of purchased goods (*accati*), and other types of documents addressed from various places to Antonio Zane, a patrician merchant of Venice. Ashtor uses the price lists from Damascus found within both sets of documents, and his theory that “dumping” occurred is based mainly upon a comparison of the records from the Datini and Zane documents.

Throughout the price lists from the Zane Documents, prices are recorded in the following manner: “pany Fi[orenz]a, p[rima] s[ort]a, D 22” (Florentine cloth, first sort, D 22)<sup>11</sup>. There is no key here to the interpretation of D, nor to the question of which cloth measurements were being used.

In order to gain a better understanding of this problem, here is a chart that enumerates the conversion between the various types of cloth measurements in use at this time<sup>12</sup>. Although

11 Price list dated 14 September 1413.

12 See “braccio” and “picco” in, Edler, *Glossary*; “Firenze” and “Damascio” in Martini, *Manuale*; and the following descriptions of the *praticas*.

these rates of conversion were subject to sporadic fluctuations, they may provide an approximate point of reference.

1 piece (panno/pezza) of Florentine cloth = 13 Florentine ells (canne fiorentine) = 52 Florentine yards (braccia fiorentine). 1 Florentine yard (braccio fiorentino), a cloth measure based on the length of the arm. 1 Damascene pic (Levantine yard), a cloth measure also based upon the length of the arm. 1 piece of Florentine cloth = ca. 55 pics of Damascus.

According to Ashtor's interpretation of the previous description, the Florentine cloth should cost 22 ducats per piece. However, he does not provide any reasons for this assertion<sup>13</sup>, so it is necessary to re-examine his assumption. On the other hand, Hoshino construes the description as meaning that 1 pic of cloth was worth 22 dirhems. He believes that this interpretation is correct because, according to information contained within each extant *pratica*, the price of cloth was indicated in dirhems per pic in Damascus. Therefore, the prices must be 14-23 (33 was overlooked) dirhems per pic in the Zane Documents, and subsequently 770-1265 dirhems per piece. If, as a *pratica* suggests, 1 ducat was worth 20 dirhems, then the price of 1 piece should be 39-63 (91 was overlooked) ducats, which was the price of San Martino cloth, or of better quality Garbo. Therefore, Hoshino refutes Ashtor's interpretation that the price of 1 piece of cloth was 14-23 (33 was overlooked) ducats, and insists that Florentine cloth could not have been dumped at this time<sup>14</sup>.

From this discussion, it can be seen that the interpretation of this letter is of great significance. Incidentally, Ashtor regards both "fontego" i.e. *fondaco* cloth (*panni di fontego*) and Gilford cloth (*gilforte*) in the documents as typical Florentine products. However, as the validity of such a priori conjectures seems rather doubtful, they will be excluded from this investigation. Furthermore, it must be said that Table 1 was drawn up not only carelessly but also incorrectly, as will be demonstrated below.

## 2. *Descriptions of the praticas*

Before attempting to analyze Ashtor's data, it is first necessary to examine the descriptions of all published *pratica* that deal with the currency and the cloth measurements used in the market of Damascus in this period.

The following are descriptions of the currencies used in Damascus:

*Pratica I*: "In Domascho si vende ogni chosa a una moneda che si chiama daremo, ed è d'ariento e che ne va per uno ducati[sic] 18 in 24 e piú e meno sechondo il bisogno." (In Damascus, everything is sold in a currency called the dirhem, and it is made of silver, and 18 to 24 dirhems are worth one ducat, and it more or less keeps up with demand.)<sup>15</sup>

*Pratica H*: "[In] Domasco vende a una moneta che si chiama Diremi, che d'essi vanno 30

13 See, Ashtor, *L'exportation*, p. 314.

14 Hoshino, pp. 188 f. (nota 116).

15 *Pratica*, I, p. 73

per ducato, ma ora fanno a Ducati di Vinegia.” (In Damascus, they used to sell goods in a currency called the dirhem, 30 of which are worth one ducat, but now they trade in Venetian ducats.)<sup>16</sup>

*Pratica J*: “E prima ducati d'oro di cecca Vinetiani, ungari, e monede di arieto: cioè mocenighi di cecca fanno per Damasco.” (And formerly gold ducats of Venetian Mint, [gold coins issued in Hungary with the same fineness and weight as a ducat therefore called]<sup>17</sup> Hungarians, and silver money i.e. Mocenigo of the [Venetian] Mint [after the name of doge Mocenigo who issued the money]<sup>18</sup> are exported to Damascus.)<sup>19</sup>

Descriptions of the exchange rate can be found in the following praticas.

*Pratica C*: “E pose contar ogni deremi 7 valer livra 1 a grossi” (And it might be possible to say that 7 dirhems are worth 1 pound a grossi)<sup>20</sup>. According to this description, 1 ducat is worth about 18 1/4 dirhems, because 10 ducats are worth 26 1/9 lire (pounds) a grossi.

*Pratica F*: “Ragionasi che daremi 18 1/4 vagli il ducato ve<ne>ziano.” (It is calculated that 18 1/4 dirhems are worth 1 Venetian ducat.)<sup>21</sup>

These descriptions seem to suggest that, while the dirhem had been used traditionally as the exclusive means of international trade, the ducat had been introduced by at least 1442, and that the exchange rate had fluctuated markedly from 18 to 30 dirhems per 1 ducat.

Descriptions of the cloth measurements used in Damascus can be found in the following praticas.

*Pratica C*: “Draparia se vende in Damasco a peze, como e pano narbonexe, tuti altri simele: quele peze tute a una mexura, ma scarlate e tente in lana milanexe e zascaduna altra sorta se vende a picho.” (Cloth such as Narbonne cloth and all other similar kinds of cloth are sold in Damascus per piece: all these cloths have one measurement, but the scarlet cloth, the Milanese wool-dyed cloth and every other sort [of such a type as this] are sold per pic.)<sup>22</sup> “Pani se vende in Damasco, secondo chomo è, a peza e a picho.” (Cloth is sold in Damascus per piece or per pic, depending on its type.)<sup>23</sup>

*Pratica F*: “Braccia 42 di Vinegia sono in Domasco pichi 50. Se fosse meno, se' a rifare fino a 50, e se fosse più, ai a avere il soprapiù; e questo si vandono i panni fiorentini e melanesi e chatelaneschi.” (In Damascus, 42 yards of Venetian cloth are worth 50 pics. If the cloth's length is less, then you should increase it to 50 pics, and if it is more, you should remove the surplus; in this way, Florentine, Milanese and Catalan cloths are sold.)<sup>24</sup>

16 *Pratica*, H, p. 113.

17 See, Spufford, *Handbook*, p. 285.

18 See, Martinori, *La moneta*, ad vocem “Mocenigo”.

19 *Pratica*, J, c. 73r.

20 *Pratica*, C, p. 63.

21 *Pratica*, F, p. 122.

22 *Pratica*, C, p. 57.

23 *Pratica*, C, p. 64.

24 *Pratica*, F, p. 121.

*Pratica H:* “Vendesi a ciento di picchi a misura, che 100 picchi sono in Vinegia brac. 84 [...], e in Firenze brac. 97.” ([The cloth] is sold per 100 pics, and 100 pics are worth 84 yards in Venice, [...] and worth 97 yards in Florence.)<sup>25</sup>

*Pratica I:* “Panni grossi chome i barzellonesi e altri simili panni si vendono in Domascho a peza, e i panni fini chome di Firenze, scharlattini e milanesi si vendono a picchi perchè si misura.” (Gross cloth, such as Barcelona cloth and other similar types, is sold by the piece in Damascus, and fine cloth, such as Florentine cloth, scarlet cloth and Milanese cloth, is sold by the pic because it is measured in this way.)<sup>26</sup>

*Pratica J:* “Come rispondono le misure di panni di lana di Vinetia, e panni di seta, e panni d'oro, e ristagni con il pico Damaschino. E nota: che tutti i soprannominati panni si misurano ad un solo pico in Damascho.” (How do the measurements of Venetian woolen cloth, silk cloth, spun gold cloth and warp threads compare with the Damascene pic? Be aware that all the aforementioned cloths are only measured by the pic in Damascus.)<sup>27</sup> “Di Firenze si tragono per Dimasco, panni fini di San Martino: ...” (Fine San Martino cloth is exported from Florence to Damascus:...) <sup>28</sup> It should be borne in mind that high quality San Martino cloth could be exported to Damascus in the middle of the 16th century.

Descriptions of the methods of conversion between Florentine and Damascene cloth measurements can be found in the following *praticas*.

*Pratica F:* “Braccia 100 di Firenze tornano in Domascho pichi 103.” (100 yards of Florence is equivalent to 103 pics in Damascus.)<sup>29</sup>

*Pratica I:* “Braccia 100 di panno di Firenze fanno in Domascho pichi 103.” (100 yards of Florentine cloth is equivalent to 103 pics in Damascus.)<sup>30</sup>

*Pratica J:* “Braccia cento di panni di lana di Firenza, fanno in Damasco picchi 99 in 100.” (100 yards of Florentine woolen cloth is equivalent to 99-100 pics in Damascus.)<sup>31</sup>

Although Hoshino assumed that cloth was sold by the pic, it was generally sold by 50 and sometimes even 100 pics. Furthermore, these *praticas* seem to indicate that the methods of measurement varied according to the type of cloth, that is, low quality cloth was generally measured and sold by the piece, and high quality cloth was measured and sold by the pic. These commentaries of the *praticas* were not meant for Damascene consumers, but for Italian merchants, who were wholesale traders in cloth. This means that the previously mentioned cloth measurements were used in wholesale trade, and not in retail trade. Thus, when Italian merchants in Damascus wrote to Italy, did they actually report the price of 50 pics, or of one piece?

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25 *Pratica, H*, p. 114.

26 *Pratica, I*, p. 73.

27 *Pratica, J*, c. 146r.

28 *Pratica, J*, c. 159t.

29 *Pratica, F*, p. 122.

30 *Pratica, I*, p. 34.

31 *Pratica, J*, c. 160t.

Alfred Doren states that, beginning in the 1370s and continuing throughout the 15th century, the Florentine Wool Guild regulated the length of all types of Florentine cloth to 58 (temporarily 58 1/4) yards<sup>32</sup>. If the descriptions in the *praticas* are to be believed, then 1 Florentine yard approximated more or less to 1 Damascene pic (yard). This means that 1 piece of Florentine cloth, whose length is 58 yards, would have been a little longer than 50 pics. If, by this time, the length of other types of cloth had also been regularized, then it should not be surprising, as the Datini Documents later suggest, that the price of a single piece of cloth was reported to Italy, because this system was probably more convenient for merchants in Italy.

### 3. *Re-examination of the documents*

Although Hoshino only disagreed with Ashtor on his interpretation of the Zane Documents, it seems prudent to re-examine the other documentary evidence as well. However, this investigation will limit its focus to the prices in Damascus, from which the general price-trend in the Levantine market may be deduced.

#### *The Datini Documents (Nos. 1-5)*

*No. 1:* The price of peppers is recorded at the top of the price list for 1 September 1386<sup>33</sup>, and the monetary unit is clearly specified as being the “diremi” (dirhems), which indicates that the following D should always signify dirhem. In this list, the Florentine cloths were reported as being below. “panni fiorentini, da g[rossi] 18 bra[ccio], D 500 / da [grossi] 20, D 650 / da [grossi] 25, D 850 / da [grossi] 30, D 1000” (Florentine cloths, of 18 grosses per yard, D 500 / of 20 [grosses], D 650 / of 25, D 850 / of 30, D 1000)<sup>34</sup>.

In this list, there is no mention of the cloth measurement but, in the following lists (Nos. 2-5), it is specified as being per piece, and the figures are very similar to those of No. 1, so it may be presumed that the system of measurement recorded in No. 1 is also the piece.

The exchange rate in Damascus is always reported in the price lists. In list No. 1, the exchange rate of ducats to dirhems in Damascus is recorded as being “ducati, D 18 1/2” (ducats, D 18 1/2). If this rate is used, then the above prices can be converted respectively to 27, 35, 46 and 54 ducats (per piece). However, Ashtor only includes 3 out of the 4 original data in Table 1, which means that the first 3 entries do not take account of the final one. He gives no explanation for this omission.

32 Alfred Doren, *Die florentiner Wollentuchindustrie vom vierzehnten bis zum sechzehnten Jahrhundert*, Stuttgart, 1901, S. 85-86.

33 A photograph and transcription are found in Melis, *Documenti*, pp. 318-319. Here, it is worth noting that the interpretation of D in the transcription of another price list (dated 1424 and written in Damascus) found on the same page is not correct. In this case, D must mean ducat. It is possible that this transcription is one of the factors which caused Hoshino to believe that the abbreviation D in the Zane documents (1410s) meant dirhem.

34 Ashtor (*L'exportation*, pp. 311 f.) read “grossi” as a unit of “portata” or “paviola (paiola)” (i.e. the number of threads wound upon each peg of a warp frame- see, Edler, *Glossary*, “portata”). However, Hoshino pointed out that it should instead be read as a monetary unit (Venetian grossi) in his letter addressed to the author.



In the Zane documents, the Florentine cloths were always grouped into 3 categories whereas, in the Datini documents, they were not organized in this way. Therefore, the classification method appears to differ between the two sets of documents. Taking this fact into account, it seems necessary to draw up a second, more precise Table, in which two kinds of prices will be recorded: the price in dirhems, and the price in ducats. Only the prices which were converted from the original, using the exchange rate included in each list, have been underlined.

*No. 2:* Ashtor cited these prices from Melis<sup>35</sup>, but they were originally found in a price list from the Archivio Datini, No. 710. As Melis originally stated, this list should be dated 23 October, and not 23 August, as Ashtor proposed. The cloth measurement in this list is specified as being “peze” (pieces); the prices refer to “panni fiorentini fini, D 900 / panni fiorentini bassi, D 450 (Florentine cloths, fines, D 900 / Florentine cloths, bases, D 450); the monetary unit is specified as “diremi” (dirhems); and the exchange rate refers to “ducati vineziani, D 20” (Venetian ducats, D 20). Therefore, the converted cloth prices are 45 and 23 (22.5 is rounded off to 23 in Table 2) ducats respectively.

Despite the differences in their classification method, Ashtor insisted that these prices should be included within the method of Zane Documents, a conclusion that this author believes to be rather incautious.

*No. 3:* In the price list for this date, the monetary unit is specified as the dirhem, the cloth measurement is per piece, and the exchange rate is (1 ducat =) 20 3/4 dirhems. The original price is “panni di Firenze, D 900” (Florentine cloth, D 900), so the cloth price should be 43.3 (rounded off to 43) ducats per piece. This means that Ashtor’s classification is unsuitable.

*No. 4:* In the price list dated 24 (not 2) August (the year is omitted), it is clear that the prices are recorded in dirhem per piece, and that 1 ducat is worth 21 dirhems. If the price is “panni di Firenze, D 1,000 / mezani, D 650” (Florentine cloth, D 1,000 / of middle class, D 650), then the prices should be 48 ducats for premium cloth, and 31 ducats for middle quality cloth. Although a more basic type of cloth should exist, they were not recorded. Therefore, it seems necessary to assume that the entries for price and category in Table 1 are incorrect.

*No. 5:* In the Datini Documents No. 1171, a price list for this date is not present, but a copy of a price list dated 15 September [1398] exists in a booklet (No. 1171, fascicolo 3). According to this source, the figures represent dirhems per piece and (1 ducat =) 21 1/2 dirhems. The price is “pani di Firenze, D 950” (cloth of Florence, D 950), so its price should be 44 ducats.

#### *Miscellaneous Documents (Nos. 8, 14, 15)*

*No. 8:* ASV, Giudici di Petizion, Sentenze a Giustizia, n. 25, c. 24 t. “Antonius Bono habuit in sua manu Damasti, di ratione ipsius Andrea Rosso balius tres pannorum florentinorum bonorum et minus bonorum, que pecie fuerunt panni xxiii, quos ipse Antonus Bono inde recipit ... per galeas di 1413... . Et dicet vendidisse per suam computum de dictis sus pannis pannos

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35 Melis, Aspetti, p. 384 (transcription), Tavola XIII between p. 64-p. 65 (photograph of its right side).

octo ad rationem duc[atorum] xx per pecia, qui panni veniit de capitali plus duc[atis] xxx pecia.”

This record could mean that, in or a little after 1413, Bono, acting as an agent of Rosso, sold 8 Florentine cloths in Damascus at 20 ducats per piece, of which the cost prices were more than 30 ducats, (perhaps because of a decrease in demand).

*No. 14:* Da Uzzano, *La pratica della mercatura* (Pratica H), p. 114. “Panni San Mattei di prima ragione ducati 12 / Panni della seconda ducati 13 / Panni della terza ducati 15.” (The first type of San Matteo cloth 12 ducats / The second type of cloth 13 ducats / The third type of cloth 15 ducats.) On the same page of this *pratica*, it is written that the San Matteo cloth is a Florentine product—perhaps made with wool imported from San Mateo in Spain and thus a kind of Garbo cloth—and that “Vendesi a ciento di picchi a misura, che 100 picchi sono in Firenze brac[cia] 97” ([the cloth] is sold per 100 pics, and 100 pics are 97 yards in Florence).

Although Ashtor stated that these prices are per piece, the author of this paper reserves the right to present his own interpretation of the cloth measurements, as an emended edition of this *pratica* does not currently exist.

*No. 15:* ASV, Cancelleria inferiore, Notai, busta 83, Cristofolo del Fiore, n. 5, c.1r. (On the front cover of one of the 7 registers of this notary is written “Cristophorus de Flore not[arius], 1454 cancellarius in Damasco”). “A dì 18 de novenbriò 1453. Ricordo ... vui habete del mio 3 panj fiorentinj, zoè uno morello, uno zialo, uno paonazo, i qual panj ve priego, ve inzegname dar fine o a danari contanti o a barato... . Fazendo conto il pano zialo mi venisse venduto per danari D 1400, e'l morello serafinj 30, l'ultimo priexio per danari contanti, e'l paonazo D 1400 in 1300, perchè è machiato tuto de rischaldato.”

In short, of 3 Florentine cloths, the yellow one should be sold at D 1400, the blackish one at serafini (ashrafis = ducats) 30, and the purple one at D 1400-1300. There is no doubt that each type was sold by the piece, and that D signifies dirhem. However, Ashtor mentioned only one type sold at 30 serafini (ducats), and seems to have neglected the other two kinds for no apparent reason.

A certain amount of ambiguity surrounds the interpretation of these miscellaneous documents. For example, in No.8, it is impossible to know to which category—“bonus” or “minus bonus”—the price belongs. In No. 15, there is no classification of the cloths. In No. 14, the descriptions are doubtful, and the date cannot be exactly specified. It should therefore be possible to observe the price trend of Florentine cloth by referring only to the data from the Datini and Zane Documents.

#### *The Zane Documents (Nos. 6, 7, 9-13)*

The documents in Fascicolo (File) V of the Zane Documents, that is, Busta (Envelope) 128 A, are composed of more than 130 variously sized manuscripts, of which 51 were supposed to have been drawn up in Damascus. In the papers from Damascus, there are 20 letters, 5 accounts (bills), 15 price lists (3 of which include lists of purchased goods found in the same papers), and 11 lists of purchased goods. The prices of Florentine cloths are recorded in 8 of the 15 price

lists, but one is merely a copy of another, so the data are actually contained in 7 lists, which are referenced by Ashtor (Nos. 6, 7, 9, 10, 11, 12, 13).

One major difference between the Zane Documents and the Datini Documents is that, in the price lists of the former, there is neither a clue to the interpretation of D, nor a key to the cloth measurement being used. In the lists of purchased goods, there are entries for the types and prices of goods purchased by Venetian merchants, but there are no records of the goods they sold. In these accounts, which are the records of transactions that took place between Zane and his agent in Damascus, there are no descriptions of cloth, because Zane did not send any cloth to his agent. However, it is noteworthy that, in these accounts, the prices are given in ducats. To be precise, the various small expenses, such as packaging costs, are first given in dirhems in the column for expenditures, however, when they are transferred into the column for value amounts, they are converted into ducats. In some letters, there are descriptions of the cloth price as part of a market report. Therefore, these descriptions should be compared with the entries in the price lists for the monetary unit and the cloth measurement.

*No. 10:* The price list dated 14 September 1413 is accompanied by a letter and a list of purchased goods for the same date, and there is also an account which was drawn up after 22 August. These 4 documents should have been dispatched together as one set.

In the letter is found the description quoted below: “Pany Lovesti niente d’afar conto, rasta fo vendudi duch[ati] 12 la peza o zercha, Gilforti duch[ati] 19 i[n] 20 c[iento] di pi[cchi], Bastardj 25 i[n] 28... . E de alltre cosse, tutto per el chorso vedere che per le gallie mejo vene avixero.” (The Alost cloths are not being transacted, but the rest were sold at 12 ducats per piece, or at around that price. The Gilford cloths were sold at 19 to 20 ducats per 100 pics, and the Bastard cloths at 25 to 28. ... For other kinds, see the price list which I will tell you about in greater detail by means of the galleys.) In this letter, the monetary unit is always the ducat, but there are two kinds of cloth measurement, namely, per piece and per 100 pics.

The description in the price list is quoted below: “pany Fio[renza], p[rima] s[orta], D 22 / segunda sort[a], D 18 / terza sort[a], D 16 / pany Bastardj, D 25 i[n] 28 / Lovesty, D 12 / Gillofort[e], D 20.” (Florentine cloth, first sort, D 22 / second sort, D 18 / third sort, D 16 / the Bastard cloth, D 25 to 28 / Alost [cloth], D 12 / Gilford [cloth], D 20.”

It seems reasonable to assume that D signifies ducat without exception and that, in the case of the Alost cloth, the measurement is in pieces but, in the case of the Gilford cloth, it is in 100 pics.

If this is the case, then what is the system of measurement for the Florentine cloth? It should certainly not be per each individual pic, nor per 100 pics. A description that supports this belief can be found in the letter dated 23 March 1413: “j Loest[i] fo ve[n]dudy duc[hati] 11 in 12, Gilforte d[uchati] 20 el ciento di pichy, de Fontego d[uchati] 12.” (The Alost [cloths] were sold at 11 to 12 ducats, the Gilford [cloths] at 20 ducats per 100 pics, the Fontego [cloths] at 12 ducats.) Only in the case of Gilford cloth is the measure specified as being per 100 pics, which means that it should be different for the other types. Therefore, is it per piece, as in the case of the Alost cloth, or per 50 pics, as suggested by *pratica F*?

For the purposes of this discussion, it will be assumed that it is per piece because, as seen above, in *pratica F* (compiled in 1396 at the time of the Datini documents), the measure of Florentine cloth should have been per 50 pics, but in the price lists of the Datini Documents, it was actually per piece. Moreover, in the Zane Documents, cloth without an account of measurements i.e. *Alost cloth*, was sold by the piece, and the price of individual pieces was reported to Italy. There is no reason to presume that the system of measurement for Florentine cloth changed between the Datini period and the Zane period.

*No. 6*: Only in the price list for 26 March 1411 do all prices show a substantial increase: “Pa[ni] Fiorenza, p[rima] sorta, D 550 / se[gonda], D 750 / t[erza], D 1000.” (Florentine cloth, first sort, D 550 / second, D 750 / third, D 1000.)

This list also contains these two descriptions: “Pip[er] val[e] D 4,000” (pepper values D 4,000), and “duc[hato] d[iremi] 42 1/2” (ducat, 42 1/2 dirhems).

And in a letter written on the same day, there are two corresponding descriptions: “i priexij esta pip[er] duc[hati] 75 in 80” (the prices, pepper is 75 to 80 ducats), and “Sta moneda è cativa, val[e] el duc[hato] d[iremi] 42 1/2” (This money [dirhem] is bad, the ducat values 42 1/2 dirhems).

Therefore, it seems reasonable to suppose that D in this price list signifies dirhem. If this reported exchange rate is used, then the prices of Florentine cloth must be converted in the following manner: The first sort 13 ducats, the second sort 18, and the third sort 24. However, Ashtor did not use this rate, but adopted another, namely, 1 ducat = 30 dirhems, which is to be found in *pratica H*, or in price lists Nos. 10, 11 and 13. Ashtor did not systematically cross-reference the price lists with the letters of the same date, and he neglected the exchange rate in the list itself.

*Nos. 7, 9, 11, 12 and 13*: As for the remaining 5 price lists, the correspondingly dated letters do not contain more detailed descriptions which could serve as clues to the monetary unit and the cloth measurement. Nevertheless, from the evidence of these figures, it should be noted that the monetary unit is always the ducat, and the cloth measurement is per piece.

Although this may seem to vindicate Ashtor's assumptions about the monetary unit and the cloth measurement, it is clear that his data contains many errors, so it seems advisable to reexamine the question of “dumping” with reference to the revised data.

## *II. Did “dumping” take place or not?*

### *1. Dirhem price and ducat price*

In Table 2, which contains revised price data, the classification of Florentine cloths is dependent upon each document. The classification system that was uniformly adopted by Ashtor is recorded only in the Zane Documents, so it seems unwise to apply it to cloths from other documents.

Let us compare the price range of cloth from the Datini Documents with that found in the Zane Documents. Table 3 (compiled from Table 2) shows the ducat price range, giving an index

marker of 10 to the lowest cloth price in each document. As the figures in Table 3 show, the price range in the Datini Documents is wide, with 20 being the highest index, while that of the Zane documents is comparatively narrow, with 18-12 being the highest index. As for the dirhem price range, the basic tendency is the same. Should the narrower price range be positioned within the lower price zone, or within the higher price zone?

It is possible that it is converging within the lower price zone, because the difference between the lowest cloth prices is smaller than that between the highest cloth prices in dirhems with which, in Damascus, the resale price should be set up. In other words, the higher cloth prices were gradually disappearing during the time of the Zane Documents.

Meanwhile, what had happened to the cloth market in Damascus in this period? In 1400-01, it is widely known that Timur had not only sacked and destroyed the city, but had also forced its artisans to relocate to Samarkand, thus causing a decline in the Damascene market. It may therefore be assumed that the disappearance of the better types of cloth in Damascus is directly attributable to this tragic situation.

Using Table 2 to compare data from the two sets of documents, it can be seen that, although the lowest ducat price certainly fell, the lowest dirhem price remained constant, hovering around 500 dirhems, except for a sudden rise in October 1411. This may have been because the dirhem

Table 3 Range of Prices in Ducats of Florentine Cloth in Damascus

No.	Date	Lowest Price	Range of the ducat prices				Rate
1	1386, Sep. 1	27/500	10	13	17	20	18 1/2
2	1394, Oct. 23	23/450	10			20	20
3	1395, May 30						20 3/4
4	1395, Aug. 24	... / ...	[10]	[13]		[20]	20 3/4
5	1398, Sep. 15						21 1/2
6	1411, Mar. 26	13/550	10	14	18		42 1/2
7	1411, Oct. 8	17/867	10 11	14			51
8	1413, ...						
12	without date (1413?)	15/435	10 11	15			29
9	1413, Mar. 22	16/464	10 11	13			29
10	1413, Sep. 14	16/480	10 11	14			30
11	1413, Oct. 19	18/540	10 11 12				30
13	1417, Apr. 14	14/420	10	12	14		30
14	before 1442	12/360	10 11	13			30
15	1453, Nov. 18						

Notes: 1. The lowest prices are shown: prices in ducat / prices in dirhem.

2. As for No. 4, it could be deduced that there was a cheaper type of cloth than that of 650 dirhems. So, the price range is managed as above referring nos. 1 and 2.

rate fell so precipitately that, in this year, prices were recorded in ducats, rather than in the traditional dirhem.

If the price trend is to be analyzed, then which of the two currencies should be used as an indicator? In order to answer this question, it is necessary to examine briefly the monetary situation in Syria at this time<sup>36</sup>.

In the Bahri Mameluke period (1250-1382), production of the gold dinar was being decreased, and the silver dirhem was gradually assuming its role as a standard monetary unit. After the middle of the 14th century, both the amount and quality of dirhems declined, and a lot of Italian money was imported, including ducats. This trend had become pronounced between the latter portion of the 14th century and the early 15th century, that is, the early Burji Mameluke period (1282-1517). In other words, a serious monetary crisis had arisen in this period, and the shortage of silver dirhems prompted the emergence of the dirhem as accounting money. In 1415, a silver coin known as a muayyadhi was issued which had half the weight of the traditional dirhem. And, in 1425, a gold coin known as an ashrafi (serafino / sarafo) was issued, which had the same weight as a ducat (3.25g), but not the traditional weight of a dinar (4.25g). This issue of the ashrafi means that the ducat had already assumed the role of a standard monetary unit. However, they were always in short supply. This inevitably meant that, besides local copper money, foreign coins made of precious metals, especially Italian ones, rapidly entered circulation as well.

From the Datini period (1380s-90s) to the Zane period (1410s), the exchange rate fluctuated greatly, as can be seen from the rate column in Table 4, which will be examined later. From the early Datini period, the dirhem exchange rate began to decline, but its devaluation had become precipitate by the early Zane period. Between the second half of 1411 and the first half of the following year, it suffered a further slump but, by June 1413, it had recovered and gained a degree of stability, although its level was much lower (ca. 2/3) than that of the Datini period.

The above evidence raises the question of which money was recorded in the accounts in Damascus. In his book "Histoire des prix et salaires dans l'Orient medieval", Ashtor has collected many examples of price data. It may therefore be possible to analyze the Syrian situation with reference to these figures.

The data concerning staple foods were collected from various Arabic sources, in which the monetary unit was the local currency. Usually, it was the dirhem but, during the period of that currency's suspension, it was replaced by copper money and even the ashrafi, after it became more widely available. In contrast, records of the goods imported or exported by European merchants were collected from Italian documents and, in 1411, their monetary unit was changed uniformly from the dirhem to the ducat. The first instance of a price list in which prices were

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36 Cf., Hiroshi Kato, *Monetary History of Egypt in the Middle Ages* (written in Japanese and presented at Hitotsubashi University as a Master Course graduation thesis), 1976; idem, *Monetary Policy of Medieval Egypt* (written in Japanese), in *The Hitotsubashi Review*, 76-6, 1976; idem, *Late Medieval Egyptian Society seen through its Monetary History* (written in Japanese), in *Shakai-Keizai-Shigaku*, 43-1, 1977; Ashtor, *Histoire des prix et des salaires*, pp. 388 ff; idem, *Les metaux precieux*; Spufford, *Handbook*, pp. 300 ff; Watson, *Back to Gold*; Grierson, *La moneta veneziana*.

recorded in ducats (although data for the price of Florentine cloth were not present) is to be found in the Zane Documents, and is dated 24 July 1411<sup>37</sup>. The sudden fall of the price figures in this series of price lists may have induced Ashtor to surmise that the following D meant ducat, without attempting to ascertain whether the cloth measurement had undergone any changes. Accordingly, Ashtor did not convert the original prices, which were probably recorded in dirhems, into ducat prices. Therefore, it may be presumed that, in Damascus, trade in such necessities as staple foods was consistently conducted in dirhems but, after the slump in the dirhem exchange rate in 1411, the prices of all imports and exports were based on their value in ducats. In other words, the monetary unit favored in transactions between European and Levantine merchants, when trading in European cloth, was also transferred from the dirhem to the ducat.

According to Table 2, the price trend in ducats of the lowest quality cloth fell, but the dirhem price did not fall, and even rose in 1411. How should this phenomenon be interpreted? Could it indicate “dumping”? In order to provide an answer to this question, let us examine the characteristics of the price trend of such cloth, in comparison with that of other goods.

Table 4 shows data that was collected from the price lists of the Datini Documents for the late 14th century, and from the Zane Documents for the early 15th century. The exchange rate found in Table 4 can be divided into 3 phases. The first phase is the Datini period, during which the exchange rate of the dirhem stood at (1 ducat =) about 20 dirhems. The second is roughly the first year of the Zane period, in which the rate fell to 42-90 dirhems. And the third phase encompasses the rest of the Zane period, when the dirhem rate recovered and became stable at 30 dirhems.

Let us compare the price trend of the Florentine lowest quality cloth with that of other goods. Amber and tin were chosen as examples of import goods from Europe. In spite of their importance, neither silver nor copper were selected, because their prices might reflect an atypical movement in the monetary crisis due to their status as monetary materials. Other types of goods were not selected, either because they lack the ability to be classified, or because clear price data records are unavailable for them.

Conversely, sugar and ginger were chosen as examples of export goods from Damascus. Pepper and raw silk were not selected, because their prices might have been affected by any number of factors in their place of origin, or during their journey to the Damascene market. In Table 4 both prices are shown, that is, the one that was recorded in the documents, and the other, underlined one that has been converted according to the exchange rate recorded in the document itself.

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<sup>37</sup> Until the time of a price list dated 30 April 1411, prices were recorded in dirhems, except for a few prices in ducats found in a price list for the date 24 July 1411. From a price list dated 8 October 1411 onwards, all prices were recorded in ducats. Therefore, 24 July was probably the date after which prices ceased to be recorded in dirhems.

Table 4 Price Trend of Imports and Exports in Damascus

Date Year Month Day	Florentine Cloth (Lowest price)	Amber (Fine)	Tin	Sugar (Damascene)	Ginger (Local)	Rate
Unit	Piece	Quintal	Quintal	Quintal	Quintal	1 Ducat =
Ducats: Dirhems	DT : DM	DT : DM	DT : DM	DT : DM	DT : DM	Dirhems
1386, Sep. 1	<u>27</u> : 500 (159 : 58)		<u>39</u> : 720 (87 : 33)	<u>124</u> : 2300 (138 : 50)	<u>92</u> : 1700 (92 : 33)	18 1/2
1394, Oct. 23	<u>23</u> : 450 (135 : 52)		<u>60</u> : 1200 (133 : 52)	<u>110</u> : 2200 (122 : 48)	<u>225</u> : 4500 (225 : 88)	20
1395, May 30				<u>96</u> : 2000 (107 : 44)	<u>253</u> : 5250 (253 : 103)	20 3/4
1395, Sep. 15				<u>79</u> : 1700 (88 : 37)		21 1/2
<b>Average Index</b>	<b>(147 : 55)</b>	<b>(... : ...)</b>	<b>(110 : 43)</b>	<b>(114 : 45)</b>	<b>(190 : 75)</b>	<b>20</b>
1411, Mar. 26	<u>13</u> : 550 (76 : 63)	<u>3.5</u> : 150 (117 : 98)	<u>45</u> : 1900 (100 : 83)	<u>94</u> : 4000 (104 : 87)	<u>94</u> : 4000 (94 : 78)	42 1/2
1411, Apr. 30		<u>3.0</u> : 130 (100 : 85)	<u>47</u> : 2000 (104 : 87)	<u>100</u> : 4300 (111 : 94)	<u>91</u> : 3900 (91 : 76)	43
1411, Jul. 24		<u>3.2</u> : 150 (107 : 98)	<u>42</u> : 2000 (93 : 87)	<u>90</u> : 4275 (100 : 93)	<u>95</u> : 4513 (95 : 88)	47 1/2
1411, Oct. 8 (Index 100)	<u>17</u> : 867 (100 : 100)	3.0 : <u>153</u> (100 : 100)	45 : <u>2295</u> (100 : 100)	90 : <u>4590</u> (100 : 100)	100 : <u>5100</u> (100 : 100)	51
1412, Mar. 14		3.0 : <u>270</u> (100 : 176)	42 : <u>3780</u> (93 : 165)	100 : <u>9000</u> (111 : 196)	65 : <u>5850</u> (65 : 115)	90
<b>Average Index</b>	<b>(88 : 82)</b>	<b>(105 : 112)</b>	<b>(98 : 104)</b>	<b>(105 : 114)</b>	<b>(89 : 91)</b>	<b>55</b>
	16 : <u>464</u> (94 : 56)	2 3/4 : <u>80</u> (92 : 52)	38 : <u>1102</u> (84 : 48)	115 : <u>3335</u> (128 : 73)	85 : <u>2465</u> (85 : 48)	29
1413, Mar. 22		3.0 : <u>90</u> (100 : 59)	36 : <u>1080</u> (80 : 47)	130 : <u>3900</u> (144 : 85)	110 : <u>3300</u> (110 : 65)	30
1413, Jun. 8		3.0 : <u>90</u> (100 : 59)	36 : <u>1080</u> (80 : 47)	110 : <u>3300</u> (122 : 72)	100 : <u>3000</u> (100 : 59)	30
1413, Aug. 16	16 : <u>480</u> (94 : 55)	3.0 : <u>90</u> (100 : 59)	36 : <u>1080</u> (80 : 47)	110 : <u>3300</u> (122 : 72)	110 : <u>3300</u> (110 : 65)	30
1413, Sep. 14	18 : <u>540</u> (106 : 62)	3.0 : <u>90</u> (100 : 59)	36 : <u>1080</u> (80 : 47)	120 : <u>3600</u> (133 : 78)	110 : <u>3300</u> (110 : 65)	30
1413, Oct. 19	17 : <u>420</u> (100 : 48)	3.0 : <u>90</u> (100 : 59)	48 : <u>1440</u> (73 : 63)	120 : <u>3600</u> (133 : 78)	165 : <u>4950</u> (165 : 97)	30
1417, Apr. 14						
<b>Average Index</b>	<b>(99 : 55)</b>	<b>(99 : 58)</b>	<b>(80 : 50)</b>	<b>(130 : 76)</b>	<b>(113 : 67)</b>	<b>30</b>

Note: Underlined prices are converted from the original price.



Let us begin by assigning an index number of 100 to the price recorded in the Zane Documents for 8 October 1411, and examine each of the subsequent price indexes in parentheses. As was previously mentioned, the price was registered in ducats from this list onwards.

Now, let us observe the fluctuation in price of the lowest quality Florentine cloth. It seems reasonable to assume, for the purposes of this examination, that the demand for the most basic type of cloth did not fluctuate so largely, while that for the more luxurious types experienced fluctuations, according to prevalent market conditions. While the dirhem price of this type of fabric rose in the second phase, and returned to its original level in the third phase, such a fluctuation cannot be seen in the ducat price, which fell drastically in the second phase, and recovered only partially in the third phase.

The dirhem price of tin shows a more or less similar fluctuation to that of cloth, in that it rose steadily throughout the second phase, and had returned—but not exactly to its original level—in the third phase. Conversely, its ducat price fell over time, and did not exhibit such a marked tendency towards fluctuation.

The dirhem price of amber does not show a different trend from that of cloth or tin, but data for the first phase is lacking. Its ducat price, however, remains almost stable through the second and third phases.

Can similar trends be observed in the data for export goods? The dirhem price of sugar (produced around Damascus) rose sharply in the second phase, but fell in the third. However, the third phase level is still higher than the original price in the first phase, which corresponds almost to the decline of the exchange rate from (1 ducat =) 20 to 30 dirhems. This clearly differs from the cloth trend, whose price returned to its initial level. As with cloth, its ducat price decreased but, in the third phase, its level is higher than in the first phase, indicating that it behaved differently from cloth.

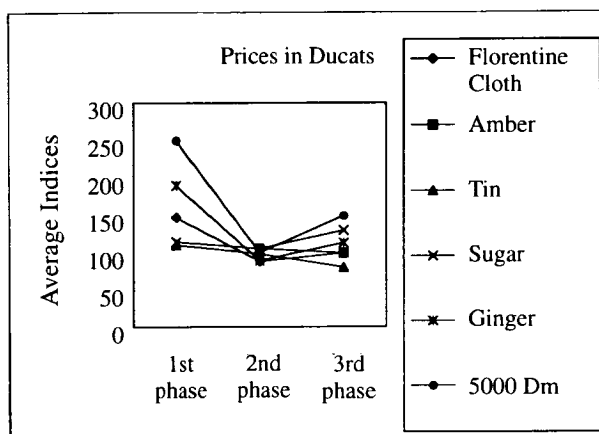
The dirhem price of ginger (also produced around Damascus) rose in the second phase, then fell and stabilized at a lower level than its first phase price. Its ducat price fell drastically before experiencing a slight rise, but it was unable to attain its former level.

Two graphs (made from Table 4) show clearly the fluctuations of the price indexes seen above.

This information could indicate that the retrograde relationship between the dirhem price and ducat price, governed as it was by fluctuations in the exchange rate, was common to all goods. The average price index in ducats of each product fell uniformly in the second phase (data is lacking for amber in the first phase), but varied according to the product throughout the third phase. The average price of cloth, sugar and ginger increased, while that of amber and tin continued to fall. On the other hand, the dirhem price index rose uniformly in the second phase, but also suffered an identical decline in the next phase. While the amount of the fall in the dirhem price of sugar, ginger and cloth was relatively small between the second and third phases, it can be seen from the ducat price trend that the price of sugar and ginger (exports) and that of cloth (import) rose. Among the goods imported from Europe, only the ducat price of cloth rose. Thus, the demand for sugar and ginger should have been relatively constant in the Damascene

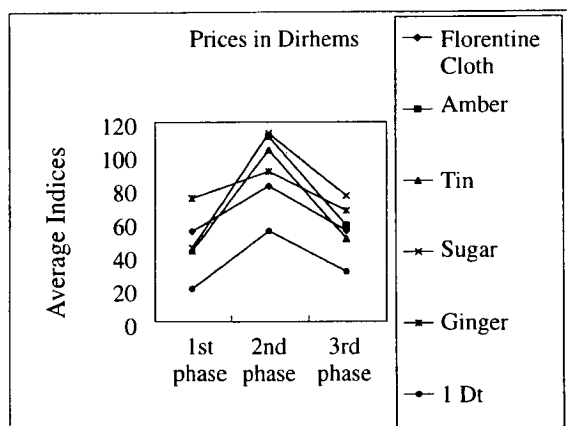
Price in Ducats

	Florentine Cloth	Amber	Tin	Sugar	Ginger	5000 Dm
1st phase	147		110	114	190	250
2nd phase	88	105	98	105	89	100
3rd phase	99	99	80	130	113	150



Price in Dirhems

	Florentine Cloth	Amber	Tin	Sugar	Ginger	1 Dt
1st phase	55		43	45	75	20
2nd phase	82	112	104	114	91	55
3rd phase	55	58	50	76	67	30



market and, as their prices suggest, demand for the most basic type of Florentine cloth should have been more constant than that for amber and tin.

## 2. *What did the fluctuation in the ducat price of Florentine cloth mean?*

In his consideration of whether or not “dumping” occurred, Ashtor included both the decrease in price of the goods and the increase of their imported quantities. He tried to show this price decrease in Table 1, but did not account for the increase in quantity, meaning that he explained dumping only in terms of this price decrease. While the quality of the Florentine cloth that was imported into Damascus in the Zane period was fairly low, this cannot be regarded as an indicator of dumping.

Let us compare the first and third phases (the second phase has been excluded, because of the confusion of the exchange rate). The price in ducats of the lowest quality cloth fell, but its dirhem price recovered. The price in ducats of tin decreased, but rose slightly in dirhems. However, in both currencies, the price of sugar rose, while the price of ginger fell. Therefore, it could be said that, compared with the prices of other goods, the price of cloth fell relatively more than the price of sugar and tin, but rose relatively more than the price of ginger.

The price of Florentine cloth returned to its original level in dirhems, but fell to two thirds of its initial level in ducats, almost in correspondence with the decline of the dirhem exchange rate (to 2/3 of its original level). Thus it became possible to purchase the same amount of cloth with two thirds of the original quantity of gold. However, the cloth maintained its former level in the dirhem price, except for a short time after October 1411, when the price suddenly increased. If its price had not been at such a level as the hovering price in dirhem, the product might not have been accepted by the market. This theory is lent credence by the fact that a certain merchant named Bono sold 8 Florentine cloths in Damascus at 20 ducats per piece in 1413 or shortly afterwards, when their cost price was more than 30 ducats.

What might the reason be for this decline in the ducat price of cloth? It should not be because the quality of Florentine cloth (of the most basic type) deteriorated, as it is difficult to imagine that the quality of ginger could have deteriorated, although its ducat price certainly fell relatively more than that of cloth. In order to investigate this matter, let us examine the price in ducats of cloth in other markets.

Table 5 contains data from various markets, which were collected by Hoshino. The prices were converted by the author into ducats or florins (1 ducat = 1 florin) per piece, for the purposes of this analysis. Hoshino's data set contained a sufficient number of samples to be used as materials for investigation. The price of the Florentine cloth sold in the Eastern Mediterranean (Damascus, Constantinople and “Turchia,” that is, territory under Turkish control) was generally lower than that sold in Italy (Florence, L'Aquila and Palermo).

The selling price in Turchia (Balkans and Anatolia) in the second half of the 15th century closely resembles that in Damascus, but the price in Turchia was a little higher than that in the Damascus of the Zane period. However, it was commonplace in each period for the prices to be

contained within a narrow stratum. Therefore, the price of Florentine cloth was not uniformly low throughout the region, but it was certainly low in Damascus after the invasion of Timur, and in Turchia after the fall of Constantinople. This poses the question of why it was so low in these areas.

Hoshino pointed out that, in the second half of the 15th century, the production of Garbo cloth was expanded in Florence in order to meet the demand from Turchia, and this type, which

Table 5 Prices of Florentine Cloth in Various Markets

Period	Market of Sale	Total in Pieces	Cloth Price (Fn / Dt : 1 piece)			Monetary Unit / Cloth Measurement in Documents	Source, Hoshino [= Hn] Rate, Spufford [= Sp]
			Lowest	Average	Highest		
1355 -56	Florence	ca. 65	26 Fn	47 Fn	124 Fn	s. a fiorini / canna	Hn, p. 220 (1 Fn = 29 s. a fiorini)
1376 -81	ibi	175	28 Fn	68 Fn	103 Fn	s.a fiorini / canna	Hn, p. 221-2 (1 Fn = 29 s. a fiorini)
1386 -98	Damascus	...	23 Dt	39 Dt	54 Dt	Dm / pezza	Table 2
1411 -17	ibi	...	13 Dt	19 Dt	24 Dt	Dt / [pezza]	
1427	L'Aquila	25	51 Dt	65 Dt	82 Dt	Dt / pezza	Hn, p. 223
1436 -40	Constantinople	68	18-24Dt	39-45Dt	61-67Dt	hyperpyron / pezza	Hn, p. 296 Sp, p. 288 / 1 Dt=3 hyperpera 6-8 carats
1455	Palermo	ca. 37	46 Fn	64 Fn	81 Fn	onze. Tari / canna	Hn, p. 294
1462	ibi	26	56 Fn	61 Fn	66 Fn		Sp, p. 65 / 1 Fn = 8 tari
1463	"Turchia"	55	23-24 Dt	25-26 Dt	27-28 Dt	silver aspers / pezza	Hn, p. 295
1488	ibi	368	20-21 Dt	26-27 Dt	33-34 Dt		Sp, p. 290 / 1 Dt=47 silver aspers
1491 -93	ibi	154	24-26 Dt	28-30 Dt	32-33 Dt		1 Dt=52 silver aspers (only in 1570-09)
1507 -09	ibi	100	24-25 Dt	28-29 Dt	31-32 Dt		

Notes: 1. Monetary units: Fn. = Florins, Dt. = Ducats.

2. The price and measurement of cloth are adopted from Hoshino, *L'arte della lana*.

The exchange rate is adopted from Spufford, *Handbook*.

3. 1 piece (pezza) of Florentine cloth is regarded uniformly as 13.5 canna (ells) for 1355-56, and 14.5 canna for other years. Vgl., Doren, *Die florentiner Wollentuchindustrie*, cit., S. 85-86. Figures are rounded off.

4. The average price of cloth is arrived by a simple average.

was not made from English wool, became the city's main product<sup>38</sup>. If confirmation can be found that lower quality Florentine cloth was being exported to *Turchia*, then the principal cause should be found not in the Florentine cloth industry, but in its market structure. As its price in *Turchia* resembled that in the Damascus of the *Datini* period, the Florentine cloth sold in Damascus after Timur should mainly have been lower class *Garbo*<sup>39</sup>. In other words, *San Martino* cloth was not sufficiently sought after to be reported in the price list. On the other hand, the average price of Florentine cloth in Italy was stable from the middle of the 14th century to the middle of the 15th century, despite the fact that it was nearly double the price of that sold in Damascus and *Turchia*.

It cannot be said that the price or quality of Florentine cloth suffered a general decline, but rather that the price of Florentine products as a whole was generally lower in Damascus than in Italy, with a further fall after Timur. According to Hoshino, it was the production areas of the lower quality *Garbo* cloth that declined in the depression of the 1420s<sup>40</sup>, with an expansion of *Garbo* production only occurring in the second half of the 15th century. In Damascus, the price in ducats of the lowest quality cloth fell to two thirds of its level between the previously mentioned periods, while its price in dirhems remained stable. How should this phenomenon be interpreted?

Hoshino pointed out that a Florentine trading company exported Florentine cloth to *Turchia* in the 1480s, because it wanted to obtain raw silk in exchange. Thus, the cloth was merely one method of acquiring Oriental goods<sup>41</sup>—in this case, raw silk. It may be presumed with a degree of certainty that cloth possessed a similar function in the Damascus of the *Zane* period but, in this case, the Oriental goods in question were such commodities as pepper, ginger and so on. Therefore, it could be said that trade at this time between Syria and Italy was structured according to the following model. Italian merchants imported so-called Oriental goods from Syria, and exported precious metals and products, such as cloth, which occupied a vital position—it is important to realize that precious metals were not imported from Syria. In short, when the value of the European goods exported to Syria fell below the price of the goods that the Italian merchants imported from Syria, they exported precious metals to redress the imbalance.

As trade in Damascus suffered due to the decline of its market, to maintain the demands of cloth, its sale price should not have risen, but rather should have remained unchanged. Therefore, its price in dirhems remained constant, while its price in ducats fell to two thirds of the original level, almost in line with the fluctuations of the exchange rate. In fact, so profoundly were prices effected, that the cloth, which was worth in excess of 30 ducats at its cost price, had to be sold at a loss at 20 ducats. Thus, in order to maintain a purchase price based on the dirhem, the sale price, which was based on the ducat, had to be reduced to accommodate the falling exchange rate of the dirhem.

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38 Hoshino, *L'arte della lana*, pp. 240 ff.

39 Cf., *ibid.*, p. 188.

40 *Ibid.*, pp. 204 ff., 231 ff.

41 Hoshino, *Il commercio fiorentino*, p. 8.

Despite the devaluation of their cloth in ducat price, if Italians could obtain the same amount of Oriental goods, then this price decrease should not have had any appreciable effect upon trade. After all, the Italians could still make a profit through the resale of Oriental goods in their home markets.

The prices of various goods in Damascus showed a more or less similar trend, both in dirhems and in ducats. Therefore, if the price of cloth in ducats fell, then Italians could acquire the same quantity of Oriental goods, so long as there was a concurrent fall in their price as well. However, the movement of each price was not completely the same, as there were always relatively minor increases and decreases. This meant that the amount of goods obtainable by the sale of the same cloth was *subject to constant fluctuations*.

If the term “dumping” is taken to mean that the price of any one product suffers a decrease, and if that decrease occurs outside a general price decrease caused by exchange rate instabilities, then it can be said that, in this sense, dumping of cloth did not take place. On the other hand, according to data collected by Hoshino, there was neither a general decrease in the price of Florentine cloth in Florence, nor in Italy as a whole during this period. Therefore, on the strength of this information, it seems reasonable to assert that there could have been no instances of cloth dumping at this time, as Hoshino insists.

### *Conclusion*

In conclusion, this investigation seems to indicate that “D” stands for ducat (the cloth measurement is in pieces), and that there was no singular instance of “dumping”. Although this analysis has dealt only with Florentine cloth, it may yet possess some significance. This is because Ashtor regards cloth as a typical example of European exports, and maintains that the price data of Florentine cloth is representative of the cloth industry as a whole.

This investigation seems to raise further questions, namely, to what extent did the price of local fabrics, such as woolen, silk and linen cloth fluctuate, and why did Europeans not use ducats instead of European cloth when purchasing Oriental goods?

As for the first question, it might be possible that the dirhem price of the local fabrics rose relatively more than that of European cloth. In other words, the price of the former could not fall as much as that of the latter, which was only a means to acquire Oriental goods. But, if this problem is to be examined thoroughly, it would first be necessary to collect detailed price data for local fabrics from local Arabic sources. Unfortunately, however, such a task is beyond the scope of this article.

As for the second question, perhaps the following reason is worth consideration. If the Venetians freely exported ducats instead of cloth to the Levant during the famine of precious metals prevalent there at this time, then the balance between gold and silver in Venice itself could have become destabilized, and its money market might subsequently have collapsed. Whatever the reason might ultimately be, a more rigorous investigation is certainly necessary.

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