

Table 1.

**Prices of Northern Woollens and Says
Sold in Florence by the Del Bene Firm in 1318 - 1323**

Town	Type/ Colour	Average Price in £ affiorini	Average Price in gold florins	Length in braccia	soldi per braccio	Percent of Woollens Mean
COLOURED WOOLLENS						
Douai	dyed	62	42.759	40	31.00	137.03%
Ypres	dyed	51	35.172	42	24.29	107.35%
Chalons	green	52	35.862	43	24.19	106.91%
Chalons	blue	44	30.345	43	20.47	90.46%
Ghent	white	40	27.586	44	18.18	80.37%
Lille	blue	37	25.517	42	17.62	77.88%
Mean					22.62	100.00%
RAYS AND SAYS						
Ghent	ray	38	26.207	47	16.17	71.48%
Caen	say blue	44	30.345	62	14.19	62.74%
Orchies	blue	29	20.000	44	13.18	58.27%
Ypres	ray	14	9.655	24	11.67	51.57%
Paris	blue/green	32	22.069	56	11.43	50.52%
Poperinghe	ray	24	16.552	47	10.21	45.14%
Arras	dyed stanfort (?)	31	21.379	61	10.16	44.93%
Ghistelles	say white	13	8.966	36	7.22	31.92%
St Denis	white (?)	17	11.724	56	6.07	26.84%
Caen	say white	19	13.103	71	5.35	23.66%
Mean					10.57	46.71%

* 1 braccio = 0.583 metre; 4 braccia= 1 canna = 0.233 metre

Source:

Chorley, Patrick, 'The Cloth Exports of Flanders and Northern France During the Thirteenth Century: A Luxury Trade?' *Economic History Review*, 2nd ser. 40:3 (August 1987): adapted from Table 3, p. 355.

Table 2. Prices of Textiles from Northern France and the Low Countries Sold in Florence by the Del Bene Company in 1318 - 1323

Prices in gold florins: per canna of Florence = 4 braccia = 2.333 metres

Cloth Type and Textile Town	Minimum: florins	Maximum: florins	Mean: florins	Percent of Woollens mean	Percent of Douai mean	Percent of Ypres mean
WOOLLENS						
Douai	5.59	6.62	6.10	120.07%	100.00%	142.17%
Mechelen	5.24	5.45	5.34	105.14%	87.57%	124.50%
Brussels	4.24	6.38	5.31	104.47%	87.01%	123.69%
Châlons	4.24	5.62	4.93	97.00%	80.79%	114.86%
Ghent	3.69	5.34	4.52	88.86%	74.01%	105.22%
Ypres	3.66	4.93	4.29	84.45%	70.34%	100.00%
Mean value	4.44	5.72	5.08	100.00%	83.29%	118.41%
SAYS and other lighter cloths						
Lille	2.03	3.07	2.55	50.20%	41.81%	59.44%
Caen	1.34	2.62	1.98	39.01%	32.49%	46.18%
Orchies	1.83	2.34	2.09	41.04%	34.18%	48.59%
Hondschoote	1.41	2.17	1.79	35.27%	29.38%	41.77%
Arras	1.69	1.72	1.71	33.58%	27.97%	39.76%
Paris	1.55	1.72	1.64	32.22%	26.84%	38.15%
Poperinghe	1.31	1.62	1.47	28.83%	24.01%	34.14%
Saint-Denis	1.00	1.00	1.00	19.67%	16.38%	23.29%
Ghistelles	0.72	0.83	0.78	15.26%	12.71%	18.07%
Mean value	1.43	1.90	1.67	32.79%	27.31%	38.82%

Source: Hidetoshi Hoshino, 'The Rise of the Florentine Woollen Industry in the Fourteenth Century,' in N.B. Harte and K.G. Ponting, eds., *Cloth and Clothing in Medieval Europe*, Pasold Studies in Textile History, no. 2 (London, 1983), Table 11.2, p. 190.

The prices were given in *soldi affiorini*; and, for this table, they have been converted into florins (*fiorini doro*) at the fixed rate of 29s = 1 florin (fixed rate from 1279). See Peter Spufford, *Handbook of Medieval Exchange* (London: Royal Historical Society, 1986), pp. 34, 39.

Table 3.**Prices of Woollens Manufactured in Italy and sold in Italian and Foreign Markets****with Prices for Competitors' Woollens: sold by the piece****(whole cloth of 21 - 30 metres), 1380-1435**

Place Country and Town	Textile	Rank Order	Value in Florentine Florins	Value in £ sterling 36d/florin	Value in £ groot Flemish 34d/florin
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A. Prices of Italian, Catalan, French, Flemish Woollens sold in Naples and Sicily, 1380 - 1410:**priced by the whole cloth****Italy**

Florence	San Martino woollens	lowest	58.540	8.781	8.293
Florence	San Martino woollens	mean	60.740	9.111	8.605
Florence	San Martino woollens	highest	62.930	9.440	8.915
Milan, Como	dyed woollen broadcloths	lowest	40.000	6.000	5.667
Milan, Como	dyed woollen broadcloths	mean	43.360	6.504	6.143
Milan, Como	dyed woollen broadcloths	highest	45.000	6.750	6.375
Prato, Pisa, Siena	dyed woollen broadcloths	lowest	21.680	3.252	3.071
Prato, Pisa, Siena	dyed woollen broadcloths	mean	26.020	3.903	3.686
Prato, Pisa, Siena	dyed woollen broadcloths	highest	30.350	4.553	4.300

Catalonia

Perpignano	dyed woollen broadcloths	mean	17.000	2.550	2.408
Villefranca	dyed woollen broadcloths	mean	9.370	1.406	1.327

France

Languedoc	dyed woollen broadcloths	mean	16.000	2.400	2.267
Gignac, Beziers	dyed woollen broadcloths	mean	17.500	2.625	2.479
Carcassonne	dyed woollen broadcloths	mean	19.000	2.850	2.692

Flanders

Wervik	dyed woollen broadcloths		26.000	3.900	3.683
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B. Prices of Italian, Flemish, Brabantine, French, Spanish, and English Woollens in Spain**(Barcelona, Valencia, Majorca): Sales by the Datini Firm, 1394 - 1410**

Place Country and Town	Textile	Rank Order	Value in Florentine Florins	Value in £ sterling 36d/florin	Value in £ groot Flemish 34d/florin
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Place/Town	Textile	Rank	Value in Florentine Florins	Value in £ sterling 36d/florin	Value in £ groot Flemish 34d/florin
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Italy

Florence	dyed woollen broadcloths	mean	64.430	9.665	9.128
Prato, Genoa	dyed woollen broadcloths	mean	62.630	9.395	8.873

Flanders

Wervik, Kortrijk	dyed woollen broadcloths	mean	27.900	4.185	3.953
Comines, Menin	dyed woollen broadcloths	mean	27.900	4.185	3.953
Bruges	dyed woollen broadcloths	mean	44.010	6.602	6.235

Brabant

Brussels	dyed woollen broadcloths	mean	44.180	6.627	6.259
Mechelen	dyed woollen broadcloths	mean	44.180	6.627	6.259

France

Montivilliers	dyed woollen broadcloths	mean	31.480	4.722	4.460
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Spain

Perpignano	dyed woollen broadcloths	lowest	10.670	1.601	1.512
Perpignano	dyed woollen broadcloths	mean	13.620	2.043	1.930
Perpignano	dyed woollen broadcloths	highest	18.670	2.801	2.645
Puigcerda	dyed woollen broadcloths	mean	10.670	1.601	1.512
Villefranca	dyed woollen broadcloths	mean	8.800	1.320	1.247
Villefranca	dyed woollen broadcloths	mean	8.400	1.260	1.190
Barcelona	dyed woollen broadcloths	mean	11.860	1.779	1.680

England

Essex	straits (dozens)	mean	6.120	0.918	0.867
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C. Prices of Italian, Catalan, French, Flemish Woollens sold in Naples and Sicily, 1380 - 1410:

Place/Town	Textile	Rank	Value in	Value in	Value in
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Place Country and Town	Textile	Rank Order	Value in Florentine Florins	Value in £ sterling 36d/florin	Value in £ groot Flemish 34d/florin
			Florentine Florins	£ sterling 36d/florin	£ groot Flemish 34d/florin
Italy					
Florence	San Martino woollens	lowest	58.540	8.781	8.293
Florence	San Martino woollens	mean	60.740	9.111	8.605
Florence	San Martino woollens	highest	62.930	9.440	8.915
Milan, Como	dyed woollen broadcloths	lowest	40.000	6.000	5.667
Milan, Como	dyed woollen broadcloths	mean	43.360	6.504	6.143
Milan, Como	dyed woollen broadcloths	highest	45.000	6.750	6.375
Prato, Pisa, Siena	dyed woollen broadcloths	lowest	21.680	3.252	3.071
Prato, Pisa, Siena	dyed woollen broadcloths	mean	26.020	3.903	3.686
Prato, Pisa, Siena	dyed woollen broadcloths	highest	30.350	4.553	4.300
Catalonia					
Perpignano	dyed woollen broadcloths	mean	17.000	2.550	2.408
Villefranca	dyed woollen broadcloths	mean	9.370	1.406	1.327
France					
Languedoc	dyed woollen broadcloths	mean	16.000	2.400	2.267
Gignac, Beziers	dyed woollen broadcloths	mean	17.500	2.625	2.479
Carcassonne	dyed woollen broadcloths	mean	19.000	2.850	2.692
Flanders					
Wervik	dyed woollen broadcloths		26.000	3.900	3.683

**D. Prices for Italian, Catalan, French, Flemish, Brabantine, and English Textiles in the Levant
(Alexandria, Damascus, and Constantinople), c.1390 - 1435**

Place/Town	Textile	Place of Sale and date	Value in Florentine Florins	Value in £ sterling 36d/florin	Value in £ groot Flemish 34d/florin 40d/florin
Italy					

Place Country and Town	Textile	Rank Order	Value in Florentine Florins	Value in £ sterling 36d/florin	Value in £ groot Flemish 34d/florin
Florence	grade 1 woollens	D: 1390	35.000	5.250	4.958
Florence	grade 2 woollens	D: 1390	46.000	6.900	6.517
Florence	grade 3 woollens	D: 1390	54.000	8.100	7.650
Florence	panni di fontego	D: 1390	27.000	4.050	3.825
Florence	grade 1 woollens	D: 1398	30.000	4.500	4.250
Florence	grade 2 woollens	D: 1398	43.300	6.495	6.134
Florence	grade 2 woollens	D: 1398	45.000	6.750	6.375
Florence	grade 1 woollens	A: 1400	30.000	4.500	4.250
Florence	grade 1 woollens	A: 1402	37.500	5.625	5.313
Catalonia					
Villefranca	dyed woollen broadcloths	D: 1390	16.500	2.475	2.338
Villefranca	dyed woollen broadcloths	D: 1395	14.500	2.175	2.054
Barcelona	dyed woollen broadcloths	D: 1390	15.500	2.325	2.196
Barcelona	dyed woollen broadcloths	D: 1395	12.000	1.800	1.700
Puigcerda	dyed woollen broadcloths	D: 1395	12.500	1.875	1.771
Perpignano	woollen 'simples'	D: 1395	14.500	2.175	2.054
Perpignano	panni alla francesca	D: 1395	17.300	2.595	2.451
France					
Louviers	dyed woollen broadcloths	A:1390	25.500	3.825	3.613
Narbonne	dyed woollen broadcloths	A: 1396	10.500	1.575	1.488
Narbonne	dyed woollen broadcloths	D: 1396	10.500	1.575	1.488
Narbonne	dyed woollen broadcloths	A: 1399	19.440	2.916	2.754
Flanders					
Wervik	dyed woollen broadcloths	D: 1395	19.200	2.880	2.720
Wervik	dyed woollen broadcloths	C: 1436	28.300	4.717	5.896
Wervik	dyed woollen broadcloths	C: 1436	22.000	3.667	4.583
Brabant					
Mechelen	dyed woollen broadcloths	D: 1395	38.500	5.775	5.454
England					
Worcestershire	Cotswolds	D: 1405	35.000	5.250	4.958
	Cotswolds	D: 1410	14.700	2.205	2.083
	Panni Bastardi	D: 1414	25.000	4.167	3.542
	Panni Bastardi	D: 1414	28.000	4.667	3.967
	Panni Bastardi	D: 1416	20.000	3.333	2.833
Salisbury	Wiltshires	D: 1416	20.000	3.333	2.833

Place Country and Town	Textile	Rank Order	Value in Florentine Florins	Value in £ sterling 36d/florin	Value in £ groot Flemish 34d/florin
Essex	straits (dozens)	D: 1416	6.000	1.000	0.850
Norfolk or Ireland?	Saia d'Irlanda	D: 1394	4.500	0.675	0.638
Norfolk or Ireland?	Saia d'Irlanda	D: 1395	5.300	0.795	0.751
Norfolk or Ireland?	Saia d'Irlanda	D: 1397	6.000	0.900	0.850
Norfolk or Ireland?	Saia d'Irlanda	D: 1398	3.550	0.533	0.503

E. Prices for Italian, English, Flemish, Brabantine, Dutch, French, and Rhenish Textiles in

Poland (Cracow), c. 1400: Prices for Woollens of 35 Flemish Ells

Place/Town	Textile	Value in Florentine Florins	Value in £ sterling 36d/florin	Groszes per ell	Value in £ groot Flemish 34d/florin
Italy					
Florence	dyed woollen broadcloths	29.170	4.376	20	4.132
Florence	dyed woollen broadcloths	32.080	4.812	22	4.545
Flanders					
Bruges	dyed woollen broadcloths	43.750	6.563	30	6.198
Dendermonde	dyed woollen broadcloths	21.870	3.281	15	3.098
Kortrijk	dyed woollen broadcloths	17.500	2.625	12	2.479
Geraardsbergen	dyed woollen broadcloths	17.500	2.625	12	2.479
Brabant					
Brussels	dyed woollen broadcloths	29.170	4.376	20	4.132
Brussels	dyed woollen broadcloths	46.670	7.001	32	6.612
Mechelen	dyed woollen broadcloths	24.790	3.719	17	3.512
Leuven	dyed woollen broadcloths	23.330	3.499	16	3.305
Lier	dyed woollen broadcloths	35.000	5.250	24	4.958
Lier	dyed woollen broadcloths	26.250	3.938	18	3.719
Tienen	dyed woollen broadcloths	20.420	3.063	14	2.893
Tienen	small cloths	13.120	1.968	9	1.859
Herentals	dyed woollen broadcloths	26.250	3.938	18	3.719
Holland					
Leiden ?	Ostrodommensis	21.870	3.281	15	3.098
England					
London	dyed woollen broadcloths	17.500	2.625	12	2.479
London	dyed woollen broadcloths	35.000	5.250	24	4.958
unspecified	dyed woollen broadcloths	20.420	3.063	14	2.893
Artois					
Arras	sayes	4.370	0.656	3	0.619
Enghien	unspecified	11.670	1.751	8	1.653
Rhineland					

Place/Town	Textile	Value in Florentine Florins	Value in £ sterling 36d/florin	Groszes per ell	Value in £ groot Flemish 34d/florin
Aachen	unspecified	11.670	1.751	8	1.653

Sources:

Eliyahu Ashtor, 'L'exportation de textiles occidentaux dans le Proche Orient musulman au bas Moyen Age (1370-1517), in Luigi de Rosa, ed., *Studi in memoria di Federigo Melis*, 5 vols. (Naples: Giannini, 1978), vol. II, pp. 303-77.

Eliyahu Ashtor, *Levant Trade in the Later Middle Ages* (Princeton and Oxford: Princeton University Press, 1983), pp. 151-56, 341-66.

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Federigo Melis, 'Uno sguardo al mercato dei panni di lana a Pisa nella seconda metà del trecento', *Economia e storia*, 6:1 (March 1959), 321-65.

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Federigo Melis, *Aspetti della vita economica medievale: studi nell'archivio Datini di Prato*, Vol. I (Florence, 1962), doc. no. 350 (Aug. 1390), p. 488; and pp. 536-37, 542, and table facing p. 554

Jerzy Wyrozumski, 'The Textile Trade of Poland in the Middle Ages', in Negley B. Harte and Kenneth G. Ponting, eds., *Cloth and Clothing in Medieval Europe: Essays in Memory of Professor E. M. Carus-Wilson*, Pasold Studies in Textile History no. 2 (London: Heinemann Educational Books, 1983), pp. 248 - 57.

John Munro, 'The Origins of the English 'New Draperies': The Resurrection of an Old Flemish Industry, 1270 - 1570', in Negley Harte, ed., *The New Draperies in the Low Countries and England, 1300 - 1800*, Pasold Studies in Textile History no. 10 (Oxford and New York, 1997), Table 3, pp. 42-44.

John Munro, 'Medieval Woollens: The Western European Woollen Industries and their Struggles for International Markets, c.1000 - 1500', in David Jenkins, ed., *The Cambridge History of Western Textiles*, 2 vols. (Cambridge and New York: Cambridge University Press, 2003), Vol. I, Table 5.10, pp. 318-24.

Table 4. The Role of the Italians (Aliens) in the Exports of English Wools (in sacks) in quinquennial means, 1301-05 to 1496-1500

Year from Michaelmas 5 year means	Denizen Wool Exports	Percent Total	Alien Wool Exports	Percent Total	Total Wool sacks
1301-05					32,344.00
1306-10	23,041.60	59.30%	15,974.60	40.70%	39,016.20
1311-15					35,328.60
1316-20					26,084.60
1321-25	14,074.30	55.56%	11,241.73	44.44%	25,315.40
1326-30	17,888.87	70.76%	7,108.73	29.24%	24,997.60
1331-35	24,633.00	72.97%	9,012.60	27.03%	33,645.60
1336-40	13,180.00	69.44%	7,344.80	30.56%	20,524.80
1341-45	10,565.51	58.09%	7,510.07	41.91%	18,075.58
1346-50					27,183.13
1351-55	10,169.40	34.39%	20,581.00	65.61%	30,750.40
1356-60					32,666.40
1361-65	20,899.95	69.03%	9,229.25	30.97%	30,129.20
1366-70	16,345.60	56.81%	10,106.20	43.19%	26,451.80
1371-75	16,712.02	64.39%	9,155.78	35.61%	25,867.80
1376-80	16,898.00	82.67%	3,572.20	17.33%	20,470.20
1381-85	13,886.80	78.97%	3,630.60	21.03%	17,517.40
1386-90	15,574.20	80.07%	3,737.80	19.93%	19,312.00
1391-95	13,593.20	72.00%	4,920.60	28.00%	18,513.80
1396-1400	14,515.80	86.15%	2,373.80	13.85%	16,889.60
1401-05	11,803.40	91.57%	1,100.80	8.43%	12,904.20
1406-10	13,392.80	89.41%	1,575.40	10.59%	14,968.20
1411-15	12,633.20	92.72%	960.00	7.28%	13,593.20
1416-20	13,355.40	92.98%	1,009.60	7.02%	14,365.00
1421-25	13,363.60	93.77%	881.60	6.23%	14,245.20
1426-30	12,429.00	92.60%	929.60	7.40%	13,358.60
1431-35	8,679.40	85.18%	705.20	14.82%	9,384.60
1436-40	4,197.80	41.65%	1,181.00	58.35%	5,378.80
1441-45	6,502.20	69.96%	1,527.20	30.04%	8,029.40
1446-50	9,176.80	88.50%	588.40	11.50%	9,765.20
1451-55	7,654.60	84.61%	1,136.20	15.39%	8,790.80
1456-60	5,246.80	81.17%	1,139.60	18.83%	6,386.40
1461-65	5,902.40	90.94%	483.60	9.06%	6,386.00
1466-70	8,508.80	91.12%	784.80	8.88%	9,293.60
1471-75	7,381.20	86.13%	1,072.20	13.87%	8,453.40
1476-80	7,822.80	81.99%	913.20	18.01%	8,736.00
1481-85	6,669.60	88.46%	951.80	11.54%	7,621.40
1486-90	8,923.60	91.51%	827.40	8.49%	9,751.00
1491-95	5,881.20	83.48%	874.00	16.52%	6,755.20
1496-1500	8,676.80	96.98%	260.40	3.02%	8,937.20

one sack of wool = 364 lb = = 165.108 kg.

Source:

Calculated from Eleanora M. Carus-Wilson and Olive Coleman, *England's Export Trade, 1275-1547* (Oxford, 1963), pp. 13-16, 36-74.

Table 5.
Wools Used in the Workshop of Agnolo di Niccolo and
Francesco di Marco Datini, in Prato, in 1396-98

Wools from:	Weight in lb Florentine	Weight in kg 339 g	Per cent of the total wool used
England	1,151.00	390.81	8.84%
Minorca	2,355.50	799.79	18.10%
Majorca	2,418.50	821.18	18.58%
San Matteo	3,792.50	1,287.71	29.14%
Provence	622.50	211.36	4.78%
Barbary Coast	262.00	88.96	2.01%
Romagnola	2,412.00	818.98	18.53%
Total	13,014.00	4,418.80	100.00%

Source:

Francesco Ammannati, 'Francesco di Marco Datini's Wool Workshops', in Giampiero Nigro, ed., *Francesco di Marco Datini: The Man and the Merchant*, Fondazione Istituto Internazionale di Storia Economic "F. Datini" (Florence: Firenze University Press, 2010), adapted from Table 1, p. 500.

Table 6.
Woollen Cloths Produced in the Workshop of
Agnolo di Niccolo and Francesco di Marco Datini , in Prato
in 1396-1398

Source of Wools Used	Percent of Total	Number of Cloths	Average Weight in lb. 339.542 g	Average Weight in kg	Average Length in Braccia 0.583 m	Average Length in metres	Width in braccia	Width in metres	Area on the Loom in square metres	Final Area after Fulling sq. metres	Grams per square metre
England	6.89%	15.32	81.53	27.683	63.00	36.73	4.50	2.62	96.36	45.29	611.26
Minorca	18.62%	41.44	81.29	27.601	59.32	34.58	4.50	2.62	90.73	42.64	647.26
Majorca	13.57%	30.20	80.23	27.241	55.52	32.37	4.50	2.62	84.92	39.91	682.55
San Matteo: Spain	20.75%	46.17	69.76	23.686	54.52	31.79	4.50	2.62	83.39	39.19	604.36
Provence	3.74%	8.33	64.17	21.788	54.00	31.48	4.50	2.62	82.59	38.82	561.29
Mixed wools	19.67%	43.77	75.51	25.639	55.00	32.07	4.50	2.62	84.12	39.54	648.47
Romagnola-Barbary	8.38%	18.64	81.83	27.785	49.00	28.57	4.50	2.62	74.95	35.22	788.79
Romagnola-Barbary (narrow cloths)	8.38%	18.64	81.73	27.751	85.00	49.56	3.00	2.00	99.11	46.58	595.74
Total	100.00%	222.50	77.01	26.15	59.42	34.64	4.31	2.55	87.02	40.90	

Source:

Francesco Ammannati, 'Francesco di Marco Datini's Wool Workshops', in Giampiero Nigro, ed., *Francesco di Marco Datini: The Man and the Merchant*, Fondazione Istituto Internazionale di Storia Economic "F. Datini" (Florence: Firenze University Press, 2010), pp. 489-514, esp. Table 2, p. 505.

**Table 7 a. Cost of Manufacturing Woollen Cloths in the Prato Workshop of
Agnolo di Niccolo and Francesco di Marco Datini
in 1396- 1398
for six pieces of woollen cloths
woven from Majorcan wools**

Item	Percentage of Total Production Costs	Percentage of Direct Manufacturing Costs
Majorcan Wools	37.95	40.21
Wool Preparation	15.83	16.77
Spinning	13.17	13.95
Weaving	8.03	8.51
Finishing	9.82	10.40
Dyeing	9.59	10.16
Total Manufacturing	94.39	100.00
General Costs	5.61	
Total	100.00	

Table 7 b.

**Number of Days required for the production of six woollens from Minorcan wools:
35 metres long, with weight of 27.559 kg**

Item	Days	Percent
wool preparation	51	20.40%
spinning	76	30.40%
warping/weaving	65	26.00%
finishing	58	23.20%
Total days *	250	100.00%

* 138 days in total, if we take into account the overlapping of several of these prices. For the combination of warping and weaving, Ammannati indicates a mean of 48.65 days, with a very wide variance.

source:

Francesco Ammannati, 'Francesco di Marco Datini's Wool Workshops', in Giampiero Nigro, ed., *Francesco di Marco Datini: The Man and the Merchant*, Fondazione Istituto Internazionale di Storia Economic "F. Datini" (Florence: Firenze University Press, 2010), pp. 489-514. Based on Federigo Melis, *Aspetti della vita economica medievale: studi nell'archivio Datini di Prato*, Vol. I (Florence: Leo S. Olschki, 1962), part 5: 'L'industria laniera', pp. 455-729; and Federigo Melis, 'La formazione dei costi nell'industria laniera alla fine del trecento (dalla "tosura," della pecora alla vendita del panno)', *Economia e storia*, 1(1954), 31-60, 150-90; reprinted in: Federigo Melis, *Industria e commercio nella toscana medievale*, ed. by Bruno Dini, Istituto Internazionale di Storia Economica "F. Datini", Prato, Opera sparse di Federigo Melis, vol. 3 (Florence: Le Monnier, 1989), pp. 212-307.

Table 8. Costs of producing Florentine woollens of the Garbo sector, 1484 - 1488

in lira di piccioli and equivalent florins				
Component Costs	Lira (decimal)	in florins £6.250	percentage shares of manufacturing costs	percentage shares total costs
Raw Materials:				
wool (Italian matricina)	46.296	7.407	48.46%	44.36%
Manufacturing Costs				
wool preparation	12.413	1.986	12.99%	11.89%
spinning	12.788	2.046	13.38%	12.25%
weaving	7.667	1.227	8.02%	7.35%
fulling-finishing	3.825	0.612	4.00%	3.67%
dyeing	12.550	2.008	13.14%	12.03%
total manufacturing costs		15.286	100.00%	91.54%
other production costs	8.825	1.412		8.46%
Total costs	104.3625	16.698		100.00%

Source:

Hidetoshi Hoshino, 'Il commercio fiorentino nell'Impero Ottomano: costi e profitti negli anni 1484-1488', in *Aspetti della vita economica medievale: Atti del Convegno di Studi nel X anniversario della morte di Federigo Melis: Firenze-Pisa-Prato, 10 - 14. III. 1984* (Florence: Università degli Studi, 1985)]; republished in Hidetoshi Hoshino, *Industria tessile e commercio internazionale nella Firenze del tardo Medioevo*, ed. by Franco Franceschi and Sergio Tognetti, Biblioteca storica toscana no. 39 (Florence: Leo S. Olschki, 2001), Table 1, p. 120.

Table 9.

**Wool Purchases for the Medici Woollen Workshops in 1531-34:
Rafaello di Francesco de'Medici and Co.**

Type of Wool	No. of Bales	Net weight in kg.	kg. per bale	Price per kg in florins	English Sack equivalent 165.1076 kg	Value of English Sack Equivalent in florins
Spanish	6.00	580.277	96.713	0.367	3.515	60.552
Spanish	3.00	292.685	97.562	0.345	1.773	57.032
Spanish	3.00	301.853	100.618	0.345	1.828	57.030
Spanish	2.00	193.199	96.600	0.287	1.170	47.345
Spanish	9.00	758.876	84.320	0.314	4.596	51.868
Spanish	8.00	777.551	97.194	0.337	4.709	55.634
Spanish	1.00	80.811	80.811	0.261	0.489	43.110
Spanish	16.00	1,266.831	79.177	0.294	7.673	48.565
Spanish	10.00	819.654	81.965	0.303	4.964	50.083
Spanish	6.00	565.677	94.279	0.279	3.426	46.107
Spanish	4.00	375.873	93.968	0.309	2.277	50.964
Spanish	3.00	229.530	76.510	0.346	1.390	57.133
Spanish	2.00	193.539	96.769	0.309	1.172	51.058
Spanish	3.00	247.526	82.509	0.346	1.499	57.131
Spanish	6.00	542.588	90.431	0.297	3.286	49.021
Spanish	2.00	192.520	96.260	0.320	1.166	52.879
Spanish	8.00	758.537	94.817	0.339	4.594	55.918
Spanish	2.00	189.125	94.562	0.368	1.145	60.783
Spanish	2.00	173.506	86.753	0.368	1.051	60.783
Spanish	2.00	160.943	80.471	0.320	0.975	52.880
Spanish	2.00	168.073	84.037	0.353	1.018	58.254
Spanish	4.00	378.589	94.647	0.338	2.293	55.819
Spanish	3.00	384.701	128.234	0.272	2.330	44.893
Spanish	6.00	560.244	93.374	0.353	3.393	58.352
Spanish	2.00	186.409	93.204	0.324	1.129	53.491
Spanish	2.00	187.088	93.544	0.324	1.133	53.488
Spanish	3.00	298.797	99.599	0.346	1.810	57.136
Spanish	3.00	291.667	97.222	0.351	1.767	57.965
Spanish	3.00	290.648	96.883	0.323	1.760	53.389
Spanish	1.00	158.566	158.566	0.431	0.960	71.183
TOTAL	127.00	11,605.885	91.385	0.324	70.293	53.476
Provençal	2.00	149.059	74.529		0.903	26.639
Provençal	2.00	146.682	73.341		0.888	26.696
Provençal	1.00	77.416	77.416		0.469	25.486
Provençal	2.00	150.078	75.039		0.909	25.478
Provençal	4.00	281.480	70.370		1.705	27.652

Table 10.

**The Woollen Cloth Production Account of
Raffaello di Francesco de' Medici and Co in 1534**

Component Costs	florins: decimal	percentage share
Wool: Spanish	3,899.950	34.56%
Dyeing	1,967.621	17.44%
Dyestuffs	219.608	1.95%
Manufacturing	5,196.738	46.05%
Sundries	0.067	0.00%
Total	11,283.983	100.00%

Source:

Raymond de Roover, 'A Florentine Firm of Cloth Manufacturers: Management of a Sixteenth-Century Business', *Speculum*, 16 (Jan. 1941), 3-33, esp. p. 25; reprinted in his *Business Banking, and Economic Thought in Late Medieval and Early Modern Europe: Selected Studies of Raymond De Roover*, ed. Julius Kirshner (Chicago: University of Chicago Press, 1974), pp. 85-118.

Table 11.

Wool Washing in the Medici Cloth Workshop: 1556-1557**Weight losses from washing wools**

Lot no.	Wool Weight in lb. 339.542g	Wool Weight in kg.	Wool Weight washed in kg	Loss of Weight in kg.	Percent Loss
1	1,660	563.640	458.382	105.258	18.67%
2	1,450	492.336	390.473	101.863	20.69%
3	1,235	419.334	342.937	76.397	18.22%
4	1,485	504.220	390.473	113.747	22.56%
5	945	320.867	261.447	59.420	18.52%
6	1,456	494.373	407.450	86.923	17.58%
Total	8,231	2,794.770	2,251.163	543.607	19.45%
Average for 71 cloths	115.930	39.363	31.707	7.656	19.45%

Source:

Raymond de Roover, 'A Florentine Firm of Cloth Manufacturers: Management of a Sixteenth-Century Business', *Speculum*, 16 (Jan. 1941), 3-33; reprinted in his *Business Banking, and Economic Thought in Late Medieval and Early Modern Europe: Selected Studies of Raymond De Roover*, ed. Julius Kirshner (Chicago: University of Chicago Press, 1974), p. 12, n. 2.

Table 12.

Cloth Production Costs in Florence: 1556 - 1558

Firm of Francesco di Giuliano di Raffaello de'Mecici and Co.

For the production of 71 woollen cloths from Spanish wools

Component of Production Costs	florins: decimal	percentage of manufacturing costs	amount per woollen cloth in florins	percent of total costs
Wool Purchases	921.346	33.17%	12.977	29.95%
Manufacturing Expenses				
I. Wool Preparation				
wool washing	19.700	0.71%		
wool beating	56.983	2.05%		
combing (warp yarns)	106.788	3.84%		
carding (weft yarns)	90.429	3.26%		
- subtotal	273.900	9.86%	3.858	8.90%
II. Spinning	650.554	23.42%	9.163	21.14%
III: Weaving				
Warping	22.250	0.80%		
Weaving	365.113	13.15%		
-subtotal	387.363	13.95%	5.456	12.59%
IV: Fulling				
Burling	18.879	0.68%		
Scouring	27.771	1.00%		
Fulling	13.958	0.50%		
Tentering	9.442	0.34%		
- subtotal	70.050	2.52%	0.987	2.28%
V. Finishing				
Shearing	23.300	0.84%		
Mending	1.433	0.05%		
Twisting selvage	5.538	0.20%		
- subtotal	30.271	1.09%	0.426	0.98%
VI. Dyeing				
labour	309.275	11.13%		

Component of Production Costs	florins: decimal	percentage of manufacturing costs	amount per woollen cloth in florins	percent of total costs
oil	53.421	1.92%		
dyestuffs	36.642	1.32%		
soap	33.738	1.21%		
woad washing	10.979	0.40%		
- subtotal	444.054	15.99%	6.254	14.43%
TOTAL Manufacturing	2,777.538	100.00%	39.120	90.28%
Overhead or Management Charges				
tools	12.500			
rent	52.000			
administration	98.292			
staff wages	128.667			
brokerage	7.750			
- subtotal	299.208		4.214	9.72%
TOTAL COSTS	3,076.746		43.334	100.00%

Source:

Raymond de Roover, 'A Florentine Firm of Cloth Manufacturers: Management of a Sixteenth-Century Business', *Speculum*, 16 (1941), 3-33; reprinted in his *Business Banking, and Economic Thought in Late Medieval and Early Modern Europe: Selected Studies of Raymond De Roover*, ed. Julius Kirshner Chicago: University of Chicago Press, 1974), Appendix IV, p. 33 (p. 118).

Table 13.

Production Costs of the Brandolini Firm in Florence: for 1580 - 1581**From the records of producing 64 rascie nere from Spanish wools****Production Costs for producing one bolt of rascia nera****one bolt of finished cloth = 61.77 braccia = 15.443 canne = 36.012 metres (at 0.583 m per braccio)**

Manufacturing and Other production costs	Weight in kg	Length braccio 0.583m	Length metres	lira di piccioli per unit decimal	Florins of account	Percentage of Manufact- uring Costs	Percentage of Total Costs and of price
Raw Spanish Wool	36.671			207.980	27.731	46.20%	39.28%
Wool Preparation							
washing wools	36.671			1.080			
alum	36.671			1.620			
capodieci (wool foreman)	29.880			5.867			
warp beating				0.590			
warp combing				9.350			
warping on distaff	11.205			0.550			
weft carding	18.675			9.630			
- subtotal				28.687	3.825	6.37%	5.42%
Spinning							
warp: stamaiuolo	10.526			43.400			
- warping				4.000			
- marking				0.950			
weft: lanino	17.996			31.800			

Manufacturing and Other production costs	Weight in kg	Length braccio	Length metres	lira di piccioli	Florins of account	Percentage of Manufact- uring Costs	Percentage of Total Costs and of price
		0.583m		per unit decimal			
- subtotal				80.150	10.687	17.80%	15.14%
Weaving	28.861	76.000	44.308	65.450	8.727	14.54%	12.36%
Finishing: Fulling	22.749	61.770	36.012				
burling: dizzeccolatura				1.750			
burling: riveditori				2.500			
scouring cloths				4.000			
fulling (mechanical)				1.000			
fulling: Arte della Lana fee				0.480			
- subtotal				9.730	1.297	2.16%	1.84%
Finishing: Shearing							
tentering				1.000			
mending				0.450			
shearing: cimatura di molte				2.000			
shearing: cimatori				2.250			
- subtotal				5.700	0.760	1.27%	1.08%
Dyeing							
- dyeing in woad: guado				37.000			
- fees of Arte Maggiore				15.500			
- subtotal				52.500	7.000	11.66%	9.92%

Manufacturing and Other production costs	Weight in kg	Length braccio	Length metres	lira di piccioli	Florins of account	Percentage of Manufact- uring Costs	Percentage of Total Costs and of price
		0.583m		per unit decimal			
Total Value-Added Costs				242.216			
Total Direct Manufacturing Costs				450.197	60.026	100.00%	85.03%
Other Business Costs							
brokerage fees				3.000			
indirect business costs				12.150			
miscellaneous costs				33.420			
profit:				30.71			
- subtotal				79.280	10.571		14.97%
TOTAL COSTS AND AVERAGE PRICE				529.477	70.597		100.00%

Source:

Richard Goldthwaite, 'The Florentine Wool Industry in the Late Sixteenth Century: a Case Study', *The Journal of European Economic History*, 32:3 (Winter 2003): adapted from Table A1, p. 553

Table 14.

Estimated Outputs of the Florentine Cloth Industry and the Urban Populations of Florence:

cloth outputs: in bolts of about 36 metres in length (width unknown)

Year	Villani	Franceschi	Goldthwaite	Chorley A	ChorleyB/ Ammannati	Ammannati	Romano	Population Estimates
1300	100,000							100,000- 120,000
1338	75,000							90,000
1352								42,250
1355-73		49,000						
1373		30,000	30,000					60,000
1380								54,747
1381-82		19,296	19,000					55,000
1389		16,482						
1390		10,000						
1391		13,162	13,000					
1392		12,690						
1393		14,026						

Estimated Outputs of the Florentine Cloth Industry and the Urban Populations of Florence:

cloth outputs: in bolts of about 36 metres in length (width unknown)

Year	Villani	Franceschi	Goldthwaite	Chorley A	ChorleyB/ Ammannati	Ammannati	Romano	Population Estimates
1394		13,240						
1395		13,672						
1425		9,052						
1427		9,750	11,000					37,144
1430		10,049						
1433		8,333						
1488			17,000					42,000
1526			21,000					70,000
1553				8,820.00	8,148	7,928.00		59,191
1554				9,900.00	9,167	8,919.00		
1558				9,600.00	8,889	8,333.00		
1559				12,000.00	11,112	10,417.00		60,000
1560				18,000.00	16,667	15,625.00		

Estimated Outputs of the Florentine Cloth Industry and the Urban Populations of Florence:

cloth outputs: in bolts of about 36 metres in length (width unknown)

Year	Villani	Franceschi	Goldthwaite	Chorley A	ChorleyB/ Ammannati	Ammannati	Romano	Population Estimates
1561				19,800.00	18,333	16,723.00		60,000
1570				17,095.20	15,829	14,439.00		
1571				19,927.20	18,519	16,892.00		60,000
1591			13,437					65,000
1616							10,783	75,000
1619								
1616-20							9,216	
1621-25							8,720	
1626-30							8,767	
1631-35							5,900	
1636-40							6,217	
1641-45							6,114	

Sources:

- Giovanni Villani, *Nouva Cronica*, ed. Giuseppe Porta, 3 vols. (Parma, 1990-91), Vol. III: *Libri XII - XIII*, libro XII, cap. XCIV, pp. 197-202.
- Franco Franceschi, *Oltre il 'Tumulto': i lavoratori fiorentini dell'Arte della Lana fra Tre e Quattrocento* (Florence: Leo S. Olschki, 1993).
- Goldthwaite, Richard, *The Economy of Renaissance Florence* (Baltimore: The Johns Hopkins University Press, 2009).
- Francesco Ammannati, 'L'Arte della Lana a Firenze nel Cinquecento: Crisis del settore e riposte degli operatori', *Storia economica: Rivista quadrimestrale*, 11:1 (2008), 1-39; Francesco Ammannati, 'Florentine Woolen Manufacture in the Sixteenth Century: Crisis and New Entrepreneurial Strategies', *Business and Economic History On-Line*, 7 (2009), 1-9.
- Patrick Chorley, 'Rascie and the Florentine Cloth Industry during the Sixteenth Century', *The Journal of European Economic History*, 32:3 (Winter 2003), 487-526.
- Patrick Chorley, 'The Volume of Cloth Production in Florence, 1500-1650: An Assessment of the Evidence', in Giovanni Luigi Fontana and Gérard Gayot, eds., *Wool: Products and Markets (13th - 20th Century)* (Padua, 2004), pp. 551-72.
- Ruggiero Romano, 'À Florence au XVIIIe siècle: industries textiles et conjoncture', *Annales: Économies, sociétés, civilisations*, 7:4 (1952), 508-12.
- David Herlihy and Christiane Klapisch-Zuber, *Tuscans and Their Families: A Study of the Florentine Catasto of 1427* (New Haven and London: Yale University Press, 1985).
- John M. Najemy, *A History of Florence, 1200 - 1575* (Malden, MA; Oxford: Blackwell, 2006).

Table 15. Estimates of Florentine Cloth Production in the Sixteenth Century

Year	Arte della Lana Guild Reports		Estimates by Patrick Chorley (amended by Francesco Ammananti)				
	Total Value in iscudi (florins)*	Unit Price in scudi (florins)	No. of Cloths in Notional Panni Corsivi	panni corsivi	panni ricchi	Total no. of cloths Chorley	Total no. of cloths Ammananti
1553	441,000	30	14,700	2,940.00	5,880.00	8,820.00	8,148
1554	495,000	30	16,500	3,300.00	6,600.00	9,900.00	9,167
1558	480,000	30	16,000	3,200.00	6,400.00	9,600.00	8,889
1559	600,000	30	20,000	4,000.00	8,000.00	12,000.00	11,112
1560	900,000	30	30,000	6,000.00	12,000.00	18,000.00	16,667
1561	990,000	30	33,000	6,600.00	13,200.00	19,800.00	18,333
1570	854,760	30	28,492	5,698.40	11,396.80	17,095.20	15,829
1571	996,360	30	33,212	6,642.40	13,284.80	19,927.20	18,519

Chorley's Assumptions:

- (1) The average price of the cheaper panni corsivi is 30 scudi (or florins); and the average price of the panni ricchi is double: 60 scudi
- (2) the cheaper panni corsivi accounted for 20 percent of total cloth production and the more expensive panni ricchi accounted for the other 80 percent:

* The gold *scudo* (shield: replacing the gold florin in 1533) had a fixed value of £7 12s 0d in the *lira di piccioli* money of account from 1556 through the rest of the sixteenth century. The florin of account had a fixed value of £7 10s 0d.

Sources:

Patrick Chorley, 'Rascie and the Florentine Cloth Industry during the Sixteenth Century', *The Journal of European Economic History*, 32:3 (Winter 2003), 487-526

Patrick Chorley, 'The Volume of Cloth Production in Florence, 1500-1650: An Assessment of the Evidence', in Giovanni Luigi Fontana and Gérard Gayot, eds., *Wool: Products and Markets (13th - 20th Century)* (Padua, 2004), pp. 551-72.

Francesco Ammannati, 'Florentine Woolen Manufacture in the Sixteenth Century: Crisis and New Entrepreneurial Strategies', *Business and Economic History On-Line*, 7 (2009), 1-9.

**Table16. Florentine Cloth Production in the Sixteenth Century (1553 - 1571)
According to Francesco Ammannati**

Year	panni corsivi	panni ricchi	percent corsivi	percent ricchi	total no. of cloths
1553	1,982	5,946	25.00%	75.00%	7,928
1554	2,230	6,689	25.00%	75.00%	8,919
1558	1,667	6,666	20.00%	80.00%	8,333
1559	2,083	8,334	20.00%	80.00%	10,417
1560	3,125	12,500	20.00%	80.00%	15,625
1561	2,508	14,215	15.00%	85.00%	16,723
1570	2,166	12,273	15.00%	85.00%	14,439
1571	2,534	14,358	15.00%	85.00%	16,892

Source:

Francesco Ammannati, 'Florentine Woolen Manufacture in the Sixteenth Century: Crisis and New Entrepreneurial Strategies', *Business and Economic History On-Line*, 7 (2009), 1-9; Francesco Ammannati,, 'L'Arte della Lana a Firenze nel Cinquecento: Crisis del settore e riposte degli operatori', *Storia economica: Rivista quadrimestrale*, 11:1 (2008), 1-39.

**Table 17. Outputs of the Florentine Cloth Industry
1616-1645**

Year	Panni Saie	Rascie	Perpignani	Stametti	Pannetti	Total	Percent in Rascie	Percent in Perpi- gnani
1616	1,540	1,670	7,390	150	33	10,783	15.49%	68.53%
1617	926	1,222	5,038	57	37	7,280	16.79%	69.20%
1618	1,246	1,839	5,861	110	7	9,063	20.29%	64.67%
1619	1,290	1,605	5,152	311	9	8,367	19.18%	61.58%
1620	1,221	1,891	7,288	124	65	10,589	17.86%	68.83%
1621	1,903	2,467	7,951	79	63	12,463	19.79%	63.80%
1622	1,374	1,642	6,017	153		9,186	17.88%	65.50%
1623	1,162	1,132	4,280	79	34	6,687	16.93%	64.00%
1624	1,287	605	6,467	43	42	8,444	7.16%	76.59%
1625	1,149	492	5,092	39	47	6,819	7.22%	74.67%
1626	1,183	683	6,265	42	40	8,213	8.32%	76.28%
1627	1,074	1,068	5,029	24	35	7,230	14.77%	69.56%
1628	1,362	1,270	7,428	52	63	10,175	12.48%	73.00%
1629	1,227	1,003	7,862	24	78	10,194	9.84%	77.12%
1630	1,091	785	6,094		55	8,025	9.78%	75.94%
1631	1,033	788	3,505	41	31	5,398	14.60%	64.93%
1632	1,199	931	3,342	111	56	5,639	16.51%	59.27%
1633	1,514	895	2,842	57	178	5,486	16.31%	51.80%
1634	1,309	858	3,421	104	49	5,741	14.95%	59.59%
1635	800	1,209	4,362	152	711	7,234	16.71%	60.30%
1636	1,687	759	4,414	63		6,923	10.96%	63.76%
1637	1,623	744	4,062	54		6,483	11.48%	62.66%
1638	2,094	589	3,081	28	7	5,799	10.16%	53.13%
1639	1,744	741	3,692	49		6,226	11.90%	59.30%
1640	1,362	569	3,678	47		5,656	10.06%	65.03%
1641	1,772	717	3,498	35	11	6,033	11.88%	57.98%
1642	1,474	521	4,612	44	11	6,662	7.82%	69.23%
1643	1,382	658	3,461	20	3	5,524	11.91%	62.65%
1644	1,647	618	3,325	57		5,647	10.94%	58.88%
1645	1,743	766	3,962	166	66	6,703	11.43%	59.11%

Year	Panni Saie	Rascie	Perpignani	Stametti	Pannetti	Total	Percent in Rascie	Percent in Perpignani
Quinquennial Means								
1616-20	1,245	1,645	6,146	150	30	9,216	17.85%	66.68%
1621-25	1,375	1,268	5,961	79	37	8,720	14.54%	68.37%
1626-30	1,187	962	6,536	36	54	8,767	10.97%	74.54%
1631-35	1,171	936	3,494	93	205	5,900	15.87%	59.23%
1636-40	1,702	680	3,785	48	1	6,217	10.94%	60.88%
1641-45	1,353	859	4,605	59	87	6,961	12.35%	66.15%

Source:

Ruggiero Romano, 'À Florence au XVIIe siècle: industries textiles et conjoncture', *Annales: Économies, sociétés, civilisations*, 7:4 (1952), 508-12.

**Table 18. Woollen Cloth Production in Venice (urban jurisdiction only)
from 1516 to 1723
in quinquennial means**

Years 5 - yr means	Woollen Cloths	Years 5 - yr means	Woollen Cloths
1516-20	2,416.60	1621-25	15,659.40
1521-25	3,647.80	1626-30	16,818.40
1526-30	4,593.80	1631-35	12,340.20
1531-35	5,492.20	1636-40	12,393.40
1536-40	5,078.40	1641-45	12,780.40
1541-45	7,891.40	1646-50	9,810.00
1546-50	10,151.60	1651-55	10,696.00
1551-55	11,547.80	1656-60	8,567.20
1556-60	16,131.60	1661-65	7,966.40
1561-65	16,075.80	1666-70	6,464.00
1566-70	18,513.20	1671-75	6,493.20
1571-75	17,512.20	1676-80	4,069.40
1576-80	17,986.00	1681-85	3,673.80
1581-85	19,709.40	1686-90	2,058.20
1586-90	19,093.20	1691-95	2,863.00
1591-95	23,393.00	1696-00	2,426.40
1596-00	21,567.20	1701-05	2,453.80
1601-05	23,572.80	1706-10	2,132.20
1606-10	18,535.40	1711-15	2,019.00
1611-15	17,917.40	1716-20	2,141.00
1616-20	19,682.80	1721-23	1,822.33

Sources:

Walter Panciera, *L'Arte matrice: I lanifici della Repubblica di Venezia nei secoli XVII e XVIII*, Studi veneti, no. 5 (Treviso: Fondazione Benetton Studi Ricerche and Canova Editrice, 1996), Table 2, pp. 42-

43, which also extends the series from 1713 to 1723. I wish to offer my sincere thanks to Professor Panciera, who sent me a photo-copy of the document from the Venetian archives (ASCW, *Cinque savi* b. 476) containing the original data. His table corrects many errors that had been reproduced in the much better known series of statistics on Venetian woollen cloth production, in Domenico Sella, 'Rise and Fall of the Venetian Woollen Industry', in Brian Pullan, ed., *Crisis and Change in the Venetian Economy in the Sixteenth and Seventeenth Centuries* (London, 1968), pp. 106-26; translated by the author, in a revised and expanded form, from 'Les mouvements longs de l'industrie lainière à Venise', *Annales: Économies, sociétés, civilisations*, 12 (1957), 29 - 45. Unfortunately, I found it necessary to correct his statistics, from the original archival document, for the following four years: 1521, 1618, 1639, 1662.

Table 19a.

Textiles and Other Western Merchandise entering

Symrna (Izmir), Turkey, in 1686 - 87

Merchandise	Value in Piastres	percent woollens by value	percent total textiles by value	percent total merchandise by value	sq metres of cloth
Woollens					
-Mahouts	67,500	4.28%	4.04%	3.18%	25,251
- Nims	150,000	9.51%	8.97%	7.06%	71,543
- Londrins	555,000	35.20%	33.20%	26.13%	318,729
- 'London'	796,950	50.55%	47.68%	37.52%	741,606
- other	7,160	0.45%	0.43%	0.34%	11,880
subtotal	1,576,610	100.00%	94.32%	74.22%	1,169,009
Silk Fabrics					
Brocards	24,000		1.44%	1.13%	2,535
Damask	16,800		1.01%	0.79%	6,025
Satins	32,000		1.91%	1.51%	10,876
Tabis	1,800		0.11%	0.08%	1,307
sub-total	74,600		4.46%	3.51%	20,743
Bonnets	20,266		1.21%	0.95%	
Total Textiles	1,671,476		100.00%	78.68%	1,189,752
Industrial Products					
lead	20,000			0.94%	
tin	60,600			2.85%	
mercury	12,000			0.56%	
iron/steel	21,000			0.99%	
metalwork	41,100			1.93%	
glasswares	19,450			0.92%	
paper products	5,180			0.24%	
dyestuffs	5,725			0.27%	
sub-total industrial	185,055			8.71%	
Raw materials					

Merchandise	Value in Piastres	percent woollens by value	percent total textiles by value	percent total merchandise by value	sq metres of cloth
dried fruit	4,740			0.22%	
coral	6,000			0.28%	
subtotal raw materials	10,740			0.51%	
Colonial Products					
indigo	8,950			0.42%	
cochenille	40,500			1.91%	
logwood, brazilwood	9,900			0.47%	
sugar - white & brown	3,320			0.16%	
pepper	152,250			7.17%	
cinammon, cloves	42,150			1.98%	
subtotal colonial	257,070			12.10%	
Total Merchandise	2,124,341			100.00%	
Coin and Bullion	1,057,000				
Total Value of Trade	3,181,341				

Table 19b.

**Textiles entering Smyrna (Izmir), Turkey, by value
in 1686 - 87**

Merchandise	FRANCE	per- cent	ENGLAND	per- cent	HOLLAND	per- cent	VENICE	per- cent	LIVORNO	percent	Totals
	values in piastres	woollens	values in piastres	woollens	values in piastres	woollens	values in piastres	woollens	values in piastres	woollens	Values in piastres
Woollens											
-Mahouts			67,500	4.28%							67,500
- Nims			150,000	9.51%							150,000
- Londrins	15,000	0.95%			525,000	33.30%			15,000	0.95%	555,000
- 'London'	9,750	0.62%	780,000	49.47%					7,200	0.46%	796,950
- other	7,160	0.45%									7,160
subtotal	31,910	2.02%	997,500	63.27%	525,000	33.30%	0.00%		22,200	1.41%	1,576,610
Silk Fabrics											
Brocards							18,000		6,000		24,000
Damask							16,000		800		16,800
Satins									32,000		32,000
Tabis									1,800		1,800
sub-total							34,000		40,600		74,600
Bonnets	20,266										20,266
Total Textiles	52,176		997,500		525,000		34,000		62,800		1,671,476

Sources:

Michel Fontenay, 'Le commerce des Occidentaux dans les échelles du Levant au XVIIe siècle', in in Simonetta Cavaciocchi, ed., *Relazioni economiche tra Europa e mondo islamico, secoli XIII - XVIII/ Europe's Economic Relations with the Islamic World, 13th - 18th Centuries*, Fondazione Istituto Internazionale di Storia Economica 'Francesco Datini', Atti delle 'Settimana di Studi' e altri convegni, no. 38 (Florence: Le Monnier, 2007), pp. 519-49; Michel Fontenay, 'Le commerce des Occidentaux dans les échelles du Levant en 1686-1687', in Bartolomé Bennassar and Robert Sauzet, eds., *Chrétiens et musulmans à la Renaissance: Actes du 37e Colloque International du Centre d'Études Supérieures de la Renaissance (1994)* (Paris: H. Champion, 1988), pp. 337-70.