

Department of Economics  
and  
Institute for Policy Analysis  
University of Toronto  
150 St. George Street  
Toronto, Ontario M5S 1A1  
Canada

June 18, 1998

WORKING PAPER

NUMBER UT-ECIPA-MUNRO5-98-04

**Textiles as Articles of Consumption in Flemish Towns, 1330 - 1575**

by

John Munro

Copyright 1998 by John Munro  
Department of Economics  
University of Toronto

Author's e-mail: [munro5@chass.utoronto.ca](mailto:munro5@chass.utoronto.ca)  
On-line version: <http://www.chass.utoronto.ca/ecipa/wpa.html>

**Textiles as Articles of Consumption in Flemish Towns, 1330 - 1575**

John Munro  
University of Toronto

\*\*\*\*\*

**ABSTRACT:**

To a very considerable extent, the precocious economic development, extensive urbanisation, and wealth of medieval Flanders, was based upon the production and extensive export of a wide range of essentially wool-based textiles, from relatively cheap mass consumption products, e.g. the coarse and light *says*, *biffes*, etc.) to extremely expensive and also very heavy woollen broadcloths, the most luxurious of which, the kermes-dyed *scarlets*, rivalled the best Italian silks in elegance, quality, and price. During the 11th, 12th, and 13th centuries, and again in the 16th century, the Flemish manufacture and export of cheap, light *says* and other similar products of the *draperies légères* were probably the more important in terms of employment and export revenues; but during the intervening 14th and 15th centuries radical changes in European market structures, transport routes, and distribution networks made it more profitable for the Flemish to concentrate upon exporting very costly luxury woollen broadcloths [for reasons explored in my other publications and working papers]. But how cheap was cheap; and how costly indeed were the luxury woollen broadcloths? I have sought to measure their relative values, i.e. costs to an urban Flemish craftsman consumer, by using various sets of urban wage and commodity price data that I have collected from archival sources in the Low Countries. In particular, for the period 1350-1500, I have constructed a Flemish Basket of Consumables Price Index, modelled on the well known English index of Phelps Brown & Hopkins; and I have spliced this Flemish commodity-price index to a similar index for Brabant, constructed by Herman Van der Wee, for the 16th century. I am thus able to compute how many days' wages a master mason or carpenter would require to buy one of these broadcloths from the 1330s to the 1560s; similarly to buy *says* in the 16th century; and I have also computed the value of each broadcloth or *say* in terms of the value of these commodity baskets (i.e. how many baskets equalled in value one cloth). The data show, a marked rise in the relative value of luxury broadcloths from the 1360s and again from the 1430s, as measured both in terms of wages (purchasing power) and of the commodity baskets, for reasons explored in other publications.

**JEL Classification:**

N3, N6, N7, L1, J3

### Textiles as Articles of Consumption in Flemish Towns, 1330 - 1575

\*\*\*\*\*

The textiles of the medieval Low Countries, and most especially the very fine woollens of the Flemish, Brabantine, and Dutch towns, are renowned as this region's principal industrial export over many centuries, the veritable engine of urban growth according to many historians. Perhaps because economic historians tend to be more supply- than demand-oriented, and possibly because the historical data on textiles are more oriented towards production and export-trades, we tend to neglect their important role as articles of both common and luxurious consumption within the towns of this very region itself. During the entire medieval and most of the early modern era, the southern Low Countries constituted the wealthiest, most highly urbanized, and most fully commercialized region anywhere in northern Europe, so that they served as one of the leading markets for these textiles.

Finding usable evidence about the consumption of these textiles and the changing modes of dress and fashion, over several centuries, is difficult but not impossible. By far the best known evidence comes of course from various paintings of the fifteenth and sixteenth centuries, especially those of Jan Van Eyk, Robert Campin, Rogier Van der Weyden, Hans Memlinc, Dirk Bouts, Hugo Van der Goes, Hieronymus Bosch, etc., though one might cavil that they reflect an imaginary ideal rather than reality.<sup>1</sup> Yet the essence of these artistic representations is in no way contradicted by the meticulous details on the composition of the luxury woollens to be found in various guild and civic ordinances, all the more so when we compare those details with the particulars for the far cheaper worsted and worsted-woollen cloths found in the same sources. The following Table 1 compares the composition of the Ghent woollen broadcloth with that of the Hondschoote double *say*, a hybrid cloth with woollen wefts woven through worsted warps, and of the purely worsted Sint-Winnoksbergen single *say*, as manufactured in Flanders during the fifteenth and sixteenth centuries.

---

<sup>1</sup> See J. Huizinga, *The Waning of the Middle Ages: A Study of the Forms of Life, Thought, and Art in France and the Netherlands in the Fourteenth and Fifteenth Centuries* (London, 1924), 244-321.

For the Ghent *dickedinnen*, one of the most famous of all Flemish woollens, these two official industrial *keuren* indicate no changes in its composition between 1456 and 1546; nor indeed is there any evidence to indicate that its composition had changed at all from about the 1330s. From that era, the Flemish and Brabantine draperies, facing severe difficulties and rising costs in reaching Mediterranean markets, were forsaking their cheaper, coarser lighter fabrics -- especially their *sayes*-- to concentrate their export-oriented production much more fully on very expensive luxury woollen broadcloths, whose commerce could thus much better sustain the now higher transport and transaction costs in war-torn European markets.<sup>2</sup> In producing such broadcloths, by far the most costly element and thus the chief determinant of their luxury quality (apart from the unique case of scarlet dyes), were their English wools; and more specifically the very finest curly, thin, short-stapled wools from the Welsh Marches of Herefordshire and Shropshire, the Cotswolds (Gloucestershire, Worcestershire, Oxfordshire, and adjacent Berkshire), and Lincolnshire (Kesteven and Lindsay). Unfortunately for the Low Countries' draperies, the English crown, from the eve of the Hundred Years' War in 1336, had been exploiting their growing and indeed excessive dependence on fine English wools by subjecting the wool trade to ever more onerous export-duties and other fiscal and bullionist exactions, which reached their destructive peak in the Calais Staple Bullion Ordinances of 1429-73, with disastrous consequences for the Low Countries' urban draperies. By that time, these excessively taxed wools were accounting for over 70% of the manufacturing costs for the urban draperies producing such luxury broadcloths.<sup>3</sup>

The very heavy weight of their broadcloths, a weight greater than that for a modern man's woollen

---

<sup>2</sup> J. Munro, "Industrial Transformations in the North-West European Textile Trades, c. 1290 - c. 1340: Economic Progress or Economic Crisis?" in B. Campbell (ed.), *Before the Black Death: Studies in the 'Crisis' of the Early Fourteenth Century* (Manchester, 1991), 110 - 48; J. Munro, "The Origins of the English 'New Draperies': The Resurrection of an Old Flemish Industry, 1270 - 1570," in N. Harte (ed.), *The New Draperies in the Low Countries and England, 1300 - 1800* (Oxford, 1997), 35 - 127.

<sup>3</sup> See the various studies in J. Munro, *Textiles, Towns, and Trade: Essays in the Economic History of Late-Medieval England and the Low Countries* (London, 1994); J. Munro, *Wool, Cloth and Gold: The Struggle for Bullion in Anglo-Burgundian Trade, ca. 1340-1478* (Brussels, 1973).

overcoat, was fundamentally the result of very extensive fulling, to force these extremely fine and curly wool fibres, in the woven warp and weft yarns, to intermesh and lock together, i.e. to mat and felt, thus condensing the surface area by more than 50%. The term '*dickedinnen*' itself literally means 'thick and thin'; and possibly it may be derived from the alternating 2/1 or 1/2 twilled weaving pattern [one weft over and under two warps] imparted by a three-treadle triple-shed broadloom, as opposed to the more standard 1/1 tabby weave, a pattern totally obscured by this very extensive fulling and shearing.

The Ghent *dickedinnen* broadcloths have been chosen specifically for this study because we possess a virtually unparalleled two-century run of their purchase prices, chiefly on the Ghent cloth market itself: cloths that were purchased, not only as occasional gifts for aristocratic guests and dignitaries, but also annually as ceremonial dress for the civic *schepenen* (aldermen-magistrates), in emulation of their aristocratic 'betters'.<sup>4</sup> The town accounts (*stadsrekeningen*) that record these purchases generally specify the drapers who effected the market transactions; and further confirmation that these are market and not fictitious prices can be found in the town accounts of both neighbouring Aalst and Bruges, which quite frequently record the purchases of similar Ghent broadcloths, along with purchases from many of the smaller town or village 'nouvelles draperies' (*nieuwe draperien*).<sup>5</sup> Indeed the town accounts of not only Bruges and Ghent but also those of Ieper (Ypres), Dendermonde, Mechelen, Leuven, and Leiden provide very good and virtually continuous series of cloth purchase-prices within these towns. But none provide such a long run of prices; nor do the others so clearly specify the cloth type as do the Ghent accounts, which, furthermore, certainly for the fourteenth and much of the fifteenth century, also record the purchase prices of much cheaper, non-luxury woollens.

But, over these two centuries, how much did an urban consumer really have to pay in purchasing these

---

<sup>4</sup> All of the Ghent price data have been derived from: Stadsarchief Gent, Stadsrekeningen 1314/5 - 1569/70, Reeks 400:nos. 1-77.

<sup>5</sup> Stadsarchief Brugge, Stadsrekeningen 1302-1500; Algemeen Rijksarchief (Brussel), Rekenkamer, reg. nos. 31.412-485 (Aalst).

woollens and says? Even if we are certain that the price pertains to the same specific woollen purchased for the same class or rank of consumer each year, textile prices by themselves are rather useless, unless they can be compared with other prices: in particular, the prices for various other textiles; the total price of a fixed basket of a standard commodities that can serve as a consumer price-index; and the price of labour, e.g. the daily wage of a master mason or carpenter. The Flemish consumer commodity basket chosen for this comparison, based on market prices at Ghent and Bruges for selected foodstuffs and textiles, is given in Table 2, along with Herman Van der Wee's comparable basket of consumables for the Antwerp region, with a common base period of 1450-74.<sup>6</sup>

With such data, we can then measure the purchasing power of a craftsman's annual wage income in terms of both the textiles and the 'basket of consumables', whose price-index in turn will reflect fluctuations in domestic currency values, i.e. in the Flemish pond *groot*, over these two centuries, as the result of both coinage alterations (debasements and reinforcements) and changes in the stocks and flows of precious metals. Fortunately, much of this necessary information can be supplied, beginning with just a very select sample for the 1360s presented in the following Table 3, to demonstrate the range of textiles that the Ghent civic government was purchasing for its various officials, ranging from the *schepenen* at the top to the 'garsoene' (servants) and musicians at the bottom.<sup>7</sup>

These cloth-price data may be grouped under two major categories: broad (*breedelaken*), for those genuine heavy-weight woollens, largely luxury woollens, woven on the dual-weaver broadloom; and narrow (*smaelelaken*), much cheaper and coarser woollens woven on the simple, narrow, single-weaver loom. There

---

<sup>6</sup> The weights of the Flemish Basket of Consumables index are taken to correspond as closely as possible to those in the well-known Phelps Brown and Hopkins index, in E. Phelps Brown and S. Hopkins, "Seven Centuries of the Prices of Consumables Compared with Builders' Wage-Rates," *Economica* 23 (Nov. 1956), reprinted with additional statistical appendices in E. Phelps Brown and S. Hopkins, *A Perspective of Wages and Prices* (London, 1981) 13-59.

<sup>7</sup> This decade was chosen because of the relative completeness and accuracy of cloth prices, wages, and the value of the Flemish commodity-basket.

also emerge from these data four major cloth types, which can in fact be reduced to three, to be classed under both the broad and narrow categories: the plain (*pleine*) *dickedinne*, the *gemingden* (*gemendge*, *drap mellé*, or medley cloth), and the *strijptelaken* (*drap rayé*, ray or striped cloth). The ‘*gemingde*’ *dickedinnen* were those woven from a variety of variously coloured yarns, some blended in both the warp and weft yarns, while the *strijpte lakenen* were those woollens whose warp yarns were dyed in a colour different from those of the weft background, to provide a striped or rayed effect in the cloth.

An apparent fourth category of woollens was the ‘*scaerlaken*’ -- i.e. *scharlaken*, *scarlaken*, *écarlate*, *scarlet* -- by far the most expensive of all medieval woollens, often rivalling at least the medium-grade silks in price. But they were in fact standard, heavy-weight broadcloths, in the Ghent drapery either *dickedinnen* or *strijptelaken*, and more commonly the former, distinguished uniquely by their key dyestuff: the extremely costly insect-based kermes (*Kermococcus vermilio*), in a quantity whose total cost sometimes exceeded that of the fine woollen itself. Not all of these *scaerlaken* were uniquely scarlet-red in colour; for indeed many were woven from woad-dyed blue yarns, which were then re-dyed ‘in grain in the piece’, i.e. with kermes and other dyestuffs, to give them a perse-blue, or brown, or purple, or sanguine blue-red appearance.<sup>8</sup> In this series, the least-costly but still extremely expensive scarlet was a *brunen strijpten scaerlaken* at £6 15s 8d *groot* or 74 florins, worth 20.18 of our Flemish ‘consumer baskets’ for 1360; and, in that year, to acquire such a scarlet, a master mason would have had to spend his full wages for 271.33 days, or almost 16 months’ income (with about 210 workdays per year). The most costly scarlets were the red and brown (*roeden*, *brune scaerlakenen*), at £14 0s 0d *groot* each and each worth 420 days’ wages or two full year’s income for a master craftsman (28.535 consumer baskets in 1368, and 23.518 baskets in 1369).

In this set of cloth-purchase registers for the 1360s, the other, non-scarlet *dickedinnen*, both plain and

---

<sup>8</sup> J. Munro, “The Medieval Scarlet and the Economics of Sartorial Splendour,” in N. Harte and K. Ponting (eds.), *Cloth and Clothing in Medieval Europe: Essays in Memory of Professor E. M. Carus-Wilson* (London, 1983), 13-70.

medley (*gemingden, gemengde*), ranged in price from £2 1s 0d (= 3.96 consumer baskets in 1360, and 81.83 day's wages), for the lower orders of civic officials, up to £4 6s 4d *groot* (i.e. 11.63 consumer-baskets or 155.6 days' wages), for the governing *schepenen*. From the higher priced luxury broadcloths, with the measurements specified in Table 1, approximately three full sets of men's dress clothing could be tailored; and thus for one suit, these cost estimates should be divided by three.

While some of these were relatively cheap because they were in fact only half-cloths, others were described as '*smaele*', which means narrow, rather than small, i.e. cloths woven on a simple single-weaver loom. They were probably about 1.5 ells wide (1.05 metre), and may have resembled England's very cheap and rather coarse woollen *kerseys* and *straits* (strait, streit = narrow), whose width was only one cloth-yard (37 in. = 1.343 Flemish ell = 0.9398 metre). Such cloths were manufactured for domestic consumption rather than for export, and they were woven from domestic Flemish, Picard-French, Rhenish, or indeed virtually any wools but English (reserved for the luxury-oriented cloth-export trade). Thus the Ghent drapery keure of February 1462, while requiring each draper 'to swear on his oath that his [broad-]cloths do not contain any wools other than English wools,' reiterated as the one permissible exception the 'ordinance concerning the "*smalle lakenen*", which one may make from waste wools, lamb's wool, and those from dead sheep (*plootwulle, lamwulle ende schuerlinc*).<sup>9</sup> The least costly '*smaele*' *dickedinnen* in this Ghent cloth-purchase register for the 1360s was £2 1s 0d *groot*, worth (in 1362) 5.516 commodity baskets and 72.9 days' wages for a master mason; and, if we were to divide that by two (because of the smaller dimensions), we would find that it was

---

<sup>9</sup> M. Boone, "Nieuwe teksten over de Gentse draperie: wolaanvoer, productiewijze en controlepraktijken (ca. 1456 - 1468)," *Bulletin de la commission royale d'histoire/ Handelingen van de koninklijke commissie voor geschiedenis*, 14 (1988), doc. no. 3, p. 42; Stadsarchief Gent, Reeks 93, Reg. KK: article XII. Similar regulations can be found in Bruges' drapery keuren, from at least the mid-fourteenth century. See Rijksarchief West-Vlaanderen te Brugge, Charters Blauwennummers, no. 8321 (17 Nov. 1533), against a dyer-drapeer who had made some woollens from Flemish and Rhenish wools, "contrarie t'inhouden vanden drientseventich [73rd] article vanden keure vanden voors. ambochte dat expresselic verbiet and interdiceert eenighe Brugsche lakene te reedene dan van Inghelsche wulle, uutghedaen smalle lakenen."



still an expensive cloth by our modern standards, and indeed compared as well to the value of the sixteenth-century says discussed below.

The cheapest textiles in this Ghent list, however, were all *strijpte lakenen*. The cheapest sold for £1 8s 0d *groot*, in 1362 (worth 3.77 Flemish consumer-baskets; or, for a master mason, 49.8 day's wages). These Ghent cloths may have been, however, *strijpte halvelaken*, a popular form of this woollen, with only half the length of those in Table 1, i.e. about 15 to 18 ells. Admittedly, if that price were doubled, for a proper comparison, this cloth would still be cheaper than many of the *dickedinnen* in this list.<sup>10</sup> Nevertheless, Flemish *strijptelaken* were far from being coarse and cheap woollens, as some historians have erroneously suggested; and indeed -- apart from the several examples of the very costly *strijpten scaerlakenen*, some standard *strijptelaken* sold for as much as £5 3s 4d *groot* apiece, and thus worth (in 1369) 10.52 consumer baskets or 154.9 days' wages for a master mason; and several others were priced between £4 8s 3d to £4 16s 9d *groot*. Again, even the very cheapest of those *strijpte lakenen*, listed above, which may indeed have also been '*smaele lakenen*' from non-English wools, were hardly inexpensive, and much more costly than Flemish *says*, which had recently been selling (in Bruges) for just 7s 6 a piece.<sup>11</sup>

Thus, as suggested earlier, the says and the Ghent woollens, both *dickedinnen* and *strijpte lakenen*, were to be found on the opposite ends of the highly diverse spectrum of textiles manufactured and consumed in the later-medieval and early modern Low Countries, though not at the extreme polar ends. If the Flemish *says* were not the very cheapest of the manufactured textiles sold in the Low Countries' markets, from the early fourteenth to later sixteenth centuries, they were indeed the cheapest to be found in a remarkable price list of textile sold on the Antwerp market c. 1575: i.e. 'single' *says* of Hondschoote, possibly a pure-worsted fabric

---

<sup>10</sup> Several of the above-mentioned 'alvedickedinnen' sold for prices ranging from £2 3s 0d to £2 6s 8d *groot*.

<sup>11</sup> Stadsarchief Brugge, Stadsrekeningen 1340-41; regrettably very few accounts for this era, and none for the 1360s, record sales of says. See Munro, "Origins of the English 'New Draperies'," 87-93.

like those of Sint-Winnoksbergen in Table 1, at 10d *groot* per ell.<sup>12</sup> As that table shows, these were very light textiles, with about 40% to 50% of the weight of a Ghent *dickedinnen*, made from very cheap low-quality, coarse, longer-stapled, straight-fibred wools of Flanders itself, Artois, the northern Netherlands, and Germany. The wools indeed largely explain their low value, though their manufacturing processes were much simpler than those for broadcloths, requiring very little if any fulling, no napping or shearing, and little more than calendaring and pressing in finishing, with generally very cheap dyes (or simple bleaching).

Unfortunately, this Antwerp price list does not contain any Ghent *dickedinnen* or *strijpte lakenen* (nor for that matter does it contain any Flemish-Brabantine linens or German linen-cotton fustians, which were presumably even cheaper than the Hondschoote *says*) to make a direct comparison with prices for *says*. For the somewhat earlier period of 1535-44, however, we do possess comparable market prices for both Ghent *dickedinnen* woollens and Hondschoote *says*, singles and doubles, which are presented in the accompanying Table 4, along with prices for Mechelen's prized black '*rooslakenen*'. One is immediately struck by the enormous disparity between the values of the two sets of woollens and of the two sets of *says*. In terms of the purchasing power of industrial wages, the values of the *says* are certainly comparable to those modern textiles, i.e. for typical middle-class expenditures on clothing of reasonably good quality. But with what can we compare the prices and values for the two sets of woollen broadcloths, from Ghent and Mechelen? Indeed, how many of today's ultra-rich would spend the equivalent of a year and a half's income (328.66 days' wages, for the 1535 values) for a skilled carpenter or steel-worker on three full dress-suits, or a half year's income (110 days) for just one full suit?

Further to be noted from this Table 4, comparing its data with those in Table 3, is the long-term rise in the relative value of these Ghent *dickedinnen* in the almost two centuries between the 1360s and the 1540s. For in Table 3, the most costly non-scarlet *dickedinnen*, then priced at £4 6s 5d *groot*, was worth 'only' 153.63

---

<sup>12</sup> A. Thijs, "Les textiles au marché anversois au XVI<sup>e</sup> siècle," in E. Aerts and J. Munro (eds.), *Textiles of the Low Countries in European Economic History* (Leuven, 1990), 76-86.

days' wages (in 1362); and the mean value, of £2 16s 10d *groot*, was worth about 112 days' wages. On the other hand, the highest priced *dickedinnen* (1362) was equivalent in value to 11.63 Flemish commodity baskets; and that relative comparison indicates how much the purchasing power of wages in terms of those baskets had risen by the 1540s, if not in terms of high-quality woollen cloth. The accompanying graph comparing the values of standard Ghent *dickedinnen* woollens and of the Flemish-Brabantine commodity baskets from the 1340s to the 1530s, however, presents a more mixed picture: indicating a very sharp increase in the relative value of those *dickedinnen*, as measured in terms of these commodity baskets, from the 1430s -- i.e. from the era of the Calais Staple Bullion laws -- to the late 1490s, and then a fall into the 1530s, for reasons far too complex to explain here. Perhaps the excessive cost of such woollens was a factor in the more general shift of fashion and consumption to the much cheaper and also lighter textiles that once again became so prominent in the industrial economy of the southern Low Countries during the sixteenth century.<sup>13</sup>

As the data for the Mechelen *rooslakenen* in this table also indicate, the Ghent *dickedinnen* was by no means the most expensive woollen then produced for domestic consumption within the southern Low Countries, even apart from those extremely costly Flemish *scaerlakenen*. Furthermore, the omission of data on such scarlets from this table is no oversight, for such data just do not exist. There were however textiles then sold and consumed within the Low Countries whose value was fully comparable with or even greater than those for the former '*scaerlakenen*'. In the 1575 Antwerp price list, by far the most expensive were the Italian 'cloths of gold and silver', basically silken textiles with interwoven gold and silver threads; and thus an Italian *rizo sopra rizo* cost 840d *groot* Flemish per ell (0.695 metre); and they were exactly 80 times as costly as the Hondschoote *say* in this list (while a Mechelen *rooslaken* of 1543 was 21.7 times more expensive than a Hondschoote single *say*, piece per piece). These Italian gold/silver cloths were followed in price by the more regular silks: as velours (the most costly at 288d per ell), velvets, satins, damasks, chiefly of Italian or

---

<sup>13</sup> See n. 3 above and n. 14 below.

Levantine provenance, though some were at least partially made in the Low Countries.<sup>14</sup>

The disappearance of the ‘*scaerlakenen*’ from the Ghent civic accounts (the last recorded was in 1441) mirrored a striking shift in the colour patterns of the *dickedinnen* broadcloths from the mid fourteenth to mid sixteenth centuries. In the mid to later fourteenth centuries, most of the *dickedinnen* that were purchased for the ceremonial dress of the Ghent *schepenen* and other civic officials were, certainly at the upper levels, in bright and vivid colours, apart from the aforementioned scarlets, often mixed in those *gemingden* (*gemengd*) or medley cloths. But in the course of the early to mid fifteenth centuries those *gemingden* *dickedinnen* (though not the *strijptelakenen*) disappeared from the accounts along with the *scaerlakenen*; and the colours correspondingly shifted from bright and vivid to plain dark and very sombre. Indeed in the sixteenth-century, in Ghent, Mechelen, and other towns, the predominant colours for civic ceremonial dress were now black and very dark blue. Many other scholars, of course, have noticed this colour-shift in more general terms, some attributing it to the Iberian influence upon the Low Countries; but a fuller explanation of all these changes in textile fashions, in both production and consumption, would require another study far longer than this one.<sup>15</sup>

**Table 1. The Composition of Selected Flemish Woollens and Says, 1456 - 1576**

<b>DRAPERY</b>	<b>GHENT</b>	<b>HONDSCHOOTE</b>	<b>SINT WINNOKSBERGEN</b>
<b>Name of Textile</b>	Dickedinnen Five Seals	Small Double Say	Fine Narrow Say
<b>Ordinance Date</b>	1456-62, 1546	1571; 1576	1537

---

<sup>14</sup> A. Thijs, *Van ‘werwinkel’ tot ‘fabriek’: de textielnijverheid te Antwerpen (ende 15de - begin 19de eeuw)* (Brussels, 1987); H. Soly and A. Thijs, “Nijverheid in de zuidelijke Nederlanden,” in J.A. Van Houtte, et al. (eds.), *Algemene geschiedenis der Nederlanden*, 12 vols. (Haarlem, 1979), 6: 27-57.

<sup>15</sup> See nn. 1, 3, and 14 above.

<b>Wools Used</b>	English: Fine March, Cotswolds, Berkshires	Flemish, Scottish, Frisian, Pomeranian, Kempen	Flemish, Artesian
<b>Length on Loom</b>	42.5 ells <sup>a</sup> = 29.75 m	40 ells <sup>a</sup> = 28.0 m	n.s.
<b>Width on Loom</b>	14.5 qtr ells = 2.5375 m	5.75 qtr ells = 1.006 m	n.s.
<b>Weight on Loom</b>	88 lb <sup>b</sup> = 38.179 kg	n.s.	n.s.
<b>Length after Fulling</b>	30 ells = 21.0 m	36.75 ells = 25.725 m	40 ells = 28.0 m
<b>Width after Fulling and/or Tentering</b>	9.5 qtr ells= 1.6625 m	5 qtr ells = 0.875 m	4 qtr ells = 0.700 m
<b>Warps per cm</b>	12.46	20.60	20.0
<b>Final Weight</b>	51.0 lb <sup>b</sup> = 22.126 kg	16.0 lb <sup>d</sup> = 7.257 kg	11 lb. <sup>c</sup> = 5.103 kg
<b>Area in sq. metres</b>	34.913 sq m	22.509 sq m	19.600 sq m
<b>Weight: per sq metre in grams</b>	633.8 g	322.4 g	260.4 g
<b>Percent of Ghent Weight</b>	100.00%	50.89%	41.09%

**Sources:** Marc Boone, “Nieuwe teksten over de Gentse draperie: wolaanvoer, productiewijze en controlepraktijken (ca. 1456 - 1468),” *Bulletin de la commission royale d'histoire/ Handelingen van de koninklijke commissie voor geschiedenis*, 14 (1988): 1 - 62; M.J. Lameere, H. Simont (eds.), *Recueil des ordonnances des Pays-Bas: deuxième série, 1506-1700* (Brussels, 1910), 5:272-83; Henri De Sagher, et al. (eds.), *Recueil de documents relatifs à l'histoire de l'industrie drapière en Flandre, IIe partie: le sud-ouest de la Flandre depuis l'époque bourguignonne*, 3 vols. (Brussels, 1951-66), 1:530-1, no. 163; 538, no. 165; 56-67, nos. 176-7; 2:362-9, no. 290; 378-81, no. 291; 415, no. 299.

**Table 2: Composition of the Basket of Consumables Commodity Price-Indices for Flanders and Brabant, with prices in d. groot Flemish: Mean of 1450-74 = 100**

FLANDERS					BRABANT			
Commodity	Quantity	Unit	Value in d gr	Percent	Quantity	Unit	Value in d gr	Percent
Wheat	45.46	litres						
Rye	39.37	litres			126.00	litres		
Barley	18.18	litres						
Peas	24.37	litres						
Malt	163.66	litres			162.00	litres		
Farinaceous	291.04	litres	57.19	44.83	288.00	litres	54.54	35.38
Beef					23.50	kg		
Herrings					40.00	fish		
Butter	13.61	kg			4.80	kg		
Cheese	13.61	kg			4.70	kg		
Meat/Fish/Dairy			44.76	35.08			59.58	38.65
Charcoal					162.00	litres		
Candles					1.35	kg		
Linen					1.80	metre		
Coarse Woollens	1.23	metre			1.13	metre		
Industrial			25.63	20.09			40.02	25.96
<b>TOTAL</b>			127.58	100.00			154.14	100.00

**Sources:** (a) **Flanders:** John Munro, "Mint Outputs, Money, and Prices in Late-Medieval England and the Low Countries," in Eddy Van Cauwenberghe and Franz Irsigler, eds., *Münzprägung, Geldumlauf und Wechselkurse/Minting, Monetary Circulation and Exchange Rates: Akten des 8th International Economic History Congress Budapest 1982* (Trierer Historische Forschungen, Vol. 7, Trier, 1984), pp. 62-71; 104-07; (b) **Brabant (Antwerp region):** Herman Van der Wee, "Prijzen en lonen als ontwikkelingsvariabelen: Een vergelijkend onderzoek tussen Engeland en de Zuidelijke Nederlanden, 1400 - 1700," in *Album offert à Charles*

*Verlinden à l'occasion de ses trente ans de professoriat* (Ghent, 1975), pp. 413-35.



**Table 3. Prices of Selected Ghent Woollens, Purchased to Garb Civic Officials in the 1360s, Compared with the Daily Wages for Master Masons and the Value of the Flemish Consumer-Commodity Basket, in decimal pounds and in pence groot Flemish**

<b>Year of Purchase</b>	<b>Woollen</b>	<b>Price in £ groot Fl.</b>	<b>Price in Florins</b>	<b>Value of Commodity Basket in d groot</b>	<b>Flemish Price Index: 1450-74=100</b>	<b>Units of the Flemish CB per Woollen</b>	<b>Daily Wage of Master Mason in d. groot</b>	<b>No. of Days' Wages to Buy One Woollen</b>
<b>1362</b>	Strijptelaken	1.400	15.273	89.20	69.92	3.767	6.75	49.78
<b>1361</b>	Strijptelaken	1.619	17.667	145.08	113.72	2.679	6.00	64.78
<b>1367</b>	Strijptelaken	2.043	18.156	136.52	107.01	3.591	8.00	61.28
<b>1360</b>	Ghemingden Dickedinnen	2.046	22.318	124.08	97.26	3.957	6.00	81.83
<b>1362</b>	Smaele Dickedinnen	2.050	22.364	89.20	69.92	5.516	6.75	72.89
<b>1366</b>	[H]alvere Dickedinnen	2.150	19.111	124.59	97.66	4.142	8.00	64.50
<b>1361</b>	Ghemingden Dickedinnen	2.350	25.636	145.08	113.72	3.888	6.00	94.00
<b>1366</b>	Smaele Dickedinnen	2.419	21.500	124.59	97.66	4.659	8.00	72.56
<b>1361</b>	Ghemingden Dickedinnen	2.483	27.091	145.08	113.72	4.108	6.00	99.33
<b>1365</b>	Dickedinnen	2.579	22.926	131.57	103.13	4.705	7.50	82.53

<b>1360</b>	Ghemingden Dickedinnen	2.583	28.182	124.08	97.26	4.997	6.00	103.33
<b>1368</b>	Dickedinnen	2.796	24.852	142.87	111.99	4.697	8.00	83.88
<b>1360</b>	Strijptelaken	2.800	30.545	124.08	97.26	5.416	6.00	112.00
<b>1368</b>	Dickedinnen	3.063	27.222	142.87	111.99	5.145	8.00	91.88
<b>1365</b>	Strijptelaken	3.117	27.704	131.57	103.13	5.685	7.50	99.73
<b>1369</b>	Dickedinnen	3.333	29.630	117.75	92.30	6.794	8.00	100.00
<b>1365</b>	Gheleiden Laken	4.038	35.889	131.57	103.13	7.365	7.50	129.20
<b>1362</b>	Dickedinnen	4.321	47.136	89.20	69.92	11.626	6.75	153.63
<b>1368</b>	Strijptelaken	4.517	40.148	142.87	111.99	7.587	8.00	135.50
<b>1369</b>	Strijptelaken	5.163	45.889	117.75	92.30	10.552	8.00	154.88
<b>1360</b>	Brune Scaerlaken Strijpte	6.783	74.000	124.08	97.26	13.121	6.00	271.33
<b>1361</b>	Persen Scaerlaken	10.000	109.091	145.08	113.72	16.543	6.00	400.00
<b>1368</b>	Roeden Strijpten Scaerlaken	13.900	123.556	142.87	111.99	23.350	8.00	417.00
<b>1368</b>	Brune Scaerlaken	14.000	124.444	142.87	111.99	23.518	8.00	420.00
<b>1369</b>	Roeden Scaerlaken	14.000	124.444	117.75	92.30	28.535	8.00	420.00

**Sources:** Stadsarchief Gent, Stadsrekeningen 1359/60 - 1369/70, Reeks 400:9-10;  
Stadsarchief Brugge, Stadsrekeningen 1359/60-1369-70 (for wages); Table 2.

**Table 4: Prices of Ghent Dickedinnen Woollens, Mechelen Rooslaken Woollens, and Hondshoote Says, and the Daily Wages for an Antwerp Mason, 1535 - 1544: in pence and pounds groot Flemish**

Year	Ghent Dickedinnen in £ groot	Mechelen Black Rooslaken in £ groot	Hondshoote Single Says in £ groot	Hondshoote Double Says in £ groot	No. Days of Mason's Wages to buy one Ghent Dickedinnen	No. Days of a Mason's Wages to buy one Hondshoote Single Say	Antwerp Master Mason's Daily Wage in d groot	Value of Ghent Dickedinnen in Antwerp consumer-baskets	Value of Hondshoote Single Says in Antwerp consumer-baskets	Value of Antwerp Basket of Consumables in d. groot Flemish
1535	14.150	16.000			328.66		10.333	12.637		268.73
1536	14.250	16.000			310.91		11.000	11.497		297.47
1537	14.500	17.000			298.28		11.667	13.683		254.33
1538	14.500	17.000	0.967	2.278	274.73	18.32	12.667	11.775	0.785	295.53
1539	15.000	17.000	0.945	2.184	284.20	17.90	12.667	11.984	0.755	300.40
1540	15.000	17.000	0.835	1.961	284.20	15.82	12.667	12.365	0.688	291.13
1541	15.500	17.000	0.879	2.015	293.68	16.65	12.667	13.381	0.759	278.00
1542	14.500	17.000	0.838	2.005	274.73	15.88	12.667	11.853	0.685	293.60
1543	14.000	17.000	0.783	1.775	240.00	13.42	14.000	10.364	0.580	324.20
1544	14.000	17.000	0.908	1.942	240.00	15.57	14.000	9.571	0.621	351.07

**Sources:** Stadsarchief Gent, Stadsrekeningen 1534/5-1544/5, Reeks 400: nos.46-52; Stadsarchief Mechelen, Stadsrekeningen 1534/5-1544/5, nos.209-19; Herman Van der Wee, *Growth of the Antwerp Market and the European Economy, 14th to 16th Centuries*, 3 vols. (The Hague, 1963), 1:457-68 (Appendix 39); sources cited in Tables 1 and 2.

**Notes:**

- a. Converted from Brabant groten: 1.5d Brabant groot = 1.0d Flemish gros (groot)
- b. Ghent woollens (dickedinnen): 30 ells by 9.5 quarter ells (made from English March and Cotswolds wools).
- c. Mechelen woollens (Rooslaken): 30 ells by 10 quarter ells (March wools).
- d. Hondschoote single says: 18 ells by 5 quarter ells: Hondschoote price.
- e. Hondschoote double says: 36.75 ells by 5 quarter ells: Antwerp price.

