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The Unmaking of the Mediterranean Trade Hegemony: International Trade Rivalry and the Commercial Revolution

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## *The Unmaking of the Mediterranean Trade Hegemony: International Trade Rivalry and the Commercial Revolution*

THE shift in the locus of European trade from the markets of the Mediterranean to the North Atlantic overthrew a centuries-old pattern of commerce and established the basis for the predominant role of North Atlantic Europe in the era of industrialization. While the expression "commercial revolution" no longer has quite the currency that it once enjoyed, students of the early modern economy have not been negligent about trying to understand the causes of the commercial shift. The impact of entrepreneurship and *Weltanschauung*, capital accumulation, technical innovation in shipping and industry, and the economic and political organization of nation-states have all received attention from students of the age.<sup>1</sup>

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<sup>1</sup> For a skillful synthesis of these researches see Immanuel Wallerstein, *The Modern World-System; Capitalist Agriculture and the Origins of the European World-Economy in the Sixteenth Century* (New York, 1974), chs. iv and v. The most recent interesting hypothesis concerning seventeenth century European trade patterns is Clyde G. Reed, "Transactions Costs and Differential Growth in Seventeenth Century Western Europe," *JOURNAL OF ECONOMIC HISTORY*, XXXIII (March, 1973) 177-190, restated in a broader context in Douglass C. North and Robert Paul Thomas, *The Rise of the Western World; A New Economic History* (New York, 1973), pp. 93-94, 134-138. These authors argue that productivity increases in the transactions sectors of the Dutch and English economies experienced sudden improvement, making those nations the most efficient markets of the age. In both statements of

Underlying this attention, however, is a basic, often unstated assumption about the principal cause of the North Atlantic hegemony: that the change in the axis of Europe's internal and intercontinental trade was a result of geographical discoveries that opened up new horizons and opportunities for trade which were most accessible to the coastal nations of northern Europe and became the source of their economic growth.<sup>2</sup> In contrast to Europe's monumental discovery of the rest of creation in the late fifteenth and sixteenth centuries,<sup>3</sup> all of the internal factors—technology, organization, and so forth—assume a distinctly secondary role in our understanding of the northward and westward shift in the European trade pattern, and ultimately, in our understanding of economic development. Those factors explain how certain regions or nations capitalized on newly-found advantages while others let the new opportunities pass them by, but always within the context of the “natural” advantage of favorable situation in the new routes of oceangoing commerce.

The rise of Antwerp, Amsterdam, and London, and the contemporaneous decline of the Mediterranean both follow hard on the heels of the great explorations and the creation of early colonial empires. This lends chronological buttressing to the causal bridge between the Age of Discovery and the commercial and industrial burgeoning of northern Europe. However clear and evident the sequence of events may seem, a second look at this durable interpretation should not be unwelcome.

This article begins to explore the possibility that aggressive competition in old markets, not natural proximity to new markets, is the true explanation for the rise of the North Atlantic community

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the hypothesis the authors acknowledge, but never fully come to terms with the fact that there was precious little novelty in the commercial practices of the North Atlantic traders in the 1600's that would have been unfamiliar to Mediterranean businessmen in the fifteenth century; see Charles Wilson, “Trade, Society, and the State,” *Cambridge Economic History of Europe* (New York, 1967), IV, 490.

<sup>2</sup> For example, Violet Barbour wrote, “Geographically, early modern capitalism extended its radius, especially in the penetration of northern and eastern Europe, and in beginning the exploitation of other continents to which the age of discovery had opened seaways. In western Europe trade was slowly shifting from its ancient seats commanding the Mediterranean highway to northern and western ports facing the North Sea or the Atlantic Ocean.” (*Capitalism in Amsterdam in the 17th Century* [Ann Arbor, Michigan, 1963 reprint], p. 11.)

<sup>3</sup> Are we now less impressed by the oceanic discoveries than was Adam Smith, who wrote: “The discovery of America, and that of a passage to the East Indies by the Cape of Good Hope, are the two greatest and most important events recorded in the history of mankind?” (*The Wealth of Nations*, Cannan edition, [New York, 1937 reprint], p. 590.)

and the decline of the Mediterranean. Economic growth in Amsterdam and London indeed resulted from gains in trade. But, I propose, the Dutch and English succeeded not through their creative exploitation of newly favorable maritime routes, nor merely by efficiencies in transaction and transportation services, but by the prosecution of competitive advantages in industrial production against Venice and other Mediterranean commercial and manufacturing communities at a time when the transatlantic trade was too insignificant to cause a commercial revolution. In fact, the rise of the colonial trade with the New World is best interpreted as the outcome of the growth of North Atlantic preeminence inside the internal European market context. It was the invasion of the Mediterranean, not the exploitation of the Atlantic, that produced the Golden Ages of Amsterdam and London. Correspondingly, relative economic decline was *imposed* upon the older generation of southern trade centers, not in the trivial sense that the growth of one region, unmatched, implies the relative decline of the other, but in the sense that successful entry into the Mediterranean meant the active destruction of existing market hegemony. These hypotheses deserve a far fuller examination than can be provided here. As a first exploratory step I shall focus on the limited case of Anglo-Venetian rivalry in the textile trade.

In what may be called the "Mediterranean view" of the commercial revolution, Venice serves as the prime example because it was Europe's foremost entrepôt in its time, and its day did not see the twilight until the early seventeenth century. Venice was the most important angle of the north Italian industrial quadrilateral<sup>4</sup> and unlike the rest of that region, its fortunes were independent of the problems of the Hapsburg Empire in the sixteenth century. In the second half of that century, following the temporary diversion of spices away from Levantine routes by the Portuguese, there was a great revival of trade in the eastern Mediterranean.<sup>5</sup> This coincided

<sup>4</sup> The term is that of Fernand Braudel, *Le Méditerranée et le monde méditerranéen à l'époque de Philippe II*, (2d ed., Paris, 1966), I, 354. The quadrilateral is defined by Venice, Milan, Genoa, and Florence.

<sup>5</sup> Frederic C. Lane, "The Mediterranean Spice Trade: Further Evidence of its Revival in the Sixteenth Century," *American Historical Review*, XLV (1940), 581-590, reprinted in Brian Pullan, ed., *Crisis and Change in the Venetian Economy in the Sixteenth and Seventeenth Centuries* (London, 1968), pp. 47-58. Also see the useful discussion in Wallerstein, *The Modern World-System*, pp. 215-216. Wallerstein's conclusion that the Mediterranean revival could only be temporary because of basic weaknesses in Italian agriculture and industry is, to my mind, far from conclusive.

with the moment in time when Venice was the most advanced industrial city in Europe. It was a world leader in those few crafts that could be called "industrial" at that time—naval construction, textiles, glassmaking, and some chemical and metallurgical industries. It was also Europe's chief technical repository; early modern mercantilist powers were all technological predators on Venice's erstwhile exclusive methods.<sup>6</sup> In the middle years of the 1500's, Venice and Antwerp were *both* enjoying great commercial success. This is an important juncture for it marks a moment when the North Atlantic trade routes and centers were developing, but not to the detriment of the old market areas. The seventeenth century, especially the years 1620-1660, saw the establishment of the Atlantic hegemony. Although the victory was to the North, the theater of economic war was the Mediterranean market.

Direct evidence which can be said to establish firmly the primary importance of the Mediterranean market for north European producers is not easily found. For England, Ralph Davis' analysis of the London port books shows that by the mid-1600's the Mediterranean had become the single largest destination for London's exported goods (Table 1). In terms of value, woolen textiles bulked large

TABLE I  
EXPORTS FROM LONDON IN THE 1660's  
Average of Years 1663 and 1669  
(In Thousands, Sterling)

Category	DESTINATION			Total Exports
	<i>The Mediterranean, including Spain &amp; Portugal</i>	<i>All other Europe including British Isles</i>	<i>North America, E. &amp; W. Indies</i>	
Woolen Cloths	854 (57%)	569 (37%)	89 (6%)	1,512
All other manufactures	64 (29%)	72 (32%)	86 (39%)	222
Total manufactures	918 (53%)	641 (37%)	175 (10%)	1,734
Total Exports (Manufactures, food, & re-exports)	974 (48%)	872 (43%)	193 (9%)	2,039

Source: Ralph Davis, "England's Foreign Trade, 1660-1700," in E. M. Carus-Wilson, ed., *Essays in Economic History* (New York, 1966), II, derived from appendix, pp. 270-271.

<sup>6</sup> See below, p. 505. On Venetian industry in detail see, Domenico Sella, *Commerci e industrie a Venezia nel secolo XVII* (Venice, 1961), and Richard T. Rapp, *Industry and Economic Decline in Seventeenth Century Venice* (Cambridge, Mass., forthcoming).

enough to be the key commodity. The non-European trade, which one would think to be so important a factor in the rise of the North Atlantic trading community, accounted for a mere tenth of exports from London and probably not much more from the outports. As late as the second decade of the eighteenth century the value of English exports to the American colonies averaged about £400,000-500,000—about half the value of Mediterranean-bound exports in the 1660's.<sup>7</sup> While Davis' figures for exports to the Mediterranean do include Spain and Portugal, there is little reason to suppose that many northern exports were destined for shipment to the Americas via Spain. Before about 1650 the overseas colonies were not really tied to the western economy,<sup>8</sup> and commercial intercourse between England and Spain, even after the termination of outright hostilities in 1604, was a small and difficult business.<sup>9</sup> Only by mid-century does it appear that some realignment toward Spain took place. So even if the 1663-1669 export statistics to southern Europe do include a component of English goods destined ultimately for Spanish America, we can be certain that the trade was fairly new, growing only after the decisive years when England actively sought and won a commercial victory in the Mediterranean.<sup>10</sup> F. J. Fisher has shown that as early as 1612 and throughout the first half of the seventeenth century the bulk of London's exports other than broadcloths were headed for southern Europe, and we may assume that they were not then going to the New World.<sup>11</sup> At this time English sales to the Americas trade at Seville were known to be discouragingly small.<sup>12</sup>

<sup>7</sup> See Merrill Jensen, ed., *English Historical Documents*, (New York, 1955), IX, 391.

<sup>8</sup> Sigismund Pach, "Favorable and Unfavorable Conditions for Capitalist Growth: The Shift of International Trade Routes in the 15th to 17th Centuries," in *Fourth International Conference of Economic History, Bloomington, Indiana, 1968*, *École Pratique des Hautes Etudes*, 6<sup>ème</sup> section, Congrès et Colloques, XIV (Paris, 1973), p. 59.

<sup>9</sup> Harland I. Taylor, "English Merchants and Spanish Prices about 1600," in Herman Kellenbenz, ed., *Fremde Kaufleute auf der Iberischen Halbinsel*, *Kölnen Kolloquien zur internationalen Sozial- und Wirtschaftsgeschichte*, I (Cologne, 1970), 252-255.

<sup>10</sup> Ralph Davis, "Influences de l'Angleterre sur le declin de Venise au XVII<sup>ème</sup> siècle," in *Aspetti e cause della decadenza economica veneziana nel secolo XVII: Atti del convegno 27 giugno—2 luglio 1957* (Venice—Rome, 1961), p. 187.

<sup>11</sup> F. J. Fisher, "London's Export Trade in the Early Seventeenth Century," *Economic History Review*, 2d ser., III (1950), 154. I refer to Fisher's table of all exports save "shortcloths," that is, broadcloths measured in notional shortcloths which went mostly to Russian, Baltic, and North Sea ports during this period.

<sup>12</sup> Taylor, "English Merchants," p. 253.

Can shipping statistics help us to isolate the major markets of the seventeenth century? I fear not. One problem is the scarcity of available statistics; another is the unreliability of those which we possess. For example, there is a well-known "calculation" of 1634 which shows the annual traffic of the Dutch fleet by destination: it indicates shipments to the Mediterranean of 160,000 *Last*, which was 12 percent of total trade volume and more than twice the volume of the East India trade.<sup>13</sup> In 1915, however, Walther Vogel dismissed the complete "calculation" as a fiction.<sup>14</sup> Vogel sought instead to estimate the total carrying capacity of the Dutch merchant fleet which he found to be on the order of 300,000 *Last* or 600,000 English tons. He estimated that the Mediterranean fleet was equal to about 13 percent of total Dutch tonnage, second only in size to the Baltic fleet.<sup>15</sup> According to Vogel the Atlantic fleet had half the number of ships and two-thirds the carrying capacity of the Mediterranean fleet. His figures, however, compounded of equal measures of inference and guesswork, cannot be held in very high regard.

Other problems stand in the way of deriving much useful information from shipping records. The early seventeenth century was an age of transition marked by rapid increases in the efficiency of ocean transport relative to overland carriage. Still, a significant portion of the intracontinental traffic took inland routes, and comparing shipping statistics alone would omit this traffic. Moreover, when shipping is measured by tonnage, the importance of routes in which cheap and bulky commodities predominate is overvalued, and comparisons based upon tonnages thus bear little relation to the value of trade. Ralph Davis has shown that at the end of the 1600's only 18 percent of English ships were engaged in the trade with southern Europe, far less than the Americas trade which accounted for a massive 80,000 tons or 38 percent of English foreign shipping. But in terms of the value of trade, the exports to southern Europe were 46 percent greater than those to the Western Hemisphere.<sup>16</sup> The point of Davis' demonstration is that statistics of trade values are

<sup>13</sup> See Ludwig Beutin, "La décadence économique de Venise considérée du point de vue Nord-Européen," in *Aspetti e Cause*, p. 92, n. 2.

<sup>14</sup> Walther Vogel, "Zur Größe der Europäischen Handelsflotten im 15., 16. und 17. Jahrhundert," *Forschungen und Versuche zur Geschichte des Mittelalters und der Neuzeit* (Jena, 1915), p. 319.

<sup>15</sup> *Ibid.*, pp. 316, 319.

<sup>16</sup> Ralph Davis, "Merchant Shipping in the Economy of the late Seventeenth Century," *Economic History Review*, 2d ser., IX (1956), 70.

no measure of the relative importance of various trades to the shipping industry. The reverse is also true: shipping statistics are not very helpful for assessing the relative importance of northern Europe's various commercial relations. The behavior of industrial enterprises, I think, offers a better hope.

#### THE PATTERN OF INCURSION

The first stage of the Northern incursion in the Mediterranean began at the height of Venetian industrial fortunes in the latter sixteenth century, as craftsmen, lured by fabulous offers of instant wealth as payment for teaching their techniques, began to leave the *Serenissima* for foreign parts. The problem was not new to Venice, which had always been faced with such threats; but only in the early 1600's did the emigration of technical experts take on massive proportions. All the basic industries of the Venetian export sector were forced to share their exclusive techniques with nascent foreign industries, as master craftsmen were lured away. Of these episodes, none is more indicative than that of the Murano glass workers who were more isolated by lagoon and language from the world at large than most Venetian workers; suddenly in the early seventeenth century they issued from their smoky factories to be installed in every corner of western Europe and even the New World.<sup>17</sup> Their exploits became a matter of international diplomatic concern as the Republic sought to thwart the renegades while foreign interests, public and private, protected their presence abroad. One erstwhile Murano master, under contract to the English chartered glass monopoly, was reported to be earning as much in a day as an average Venetian master-builder made in a week.<sup>18</sup> Such were the compensations for risk that made technological diffusion possible in northern Europe. The technique of cloth-of-gold weaving was brought to Lyons in a similar fashion, and the advanced methods of mirror-making which Venice had pioneered, leaked out

<sup>17</sup> Astone Gasparetto, *Il vetro di Murano dalle origini ad oggi* (Venice, 1958), pp. 101-113.

<sup>18</sup> His monthly earnings were the equivalent of 80-100 ducats, about 400 *soldi* per day; *Calendar of State Papers and Manuscripts, Relating to English Affairs, existing in the Archives and Collections of Venice, and in other Libraries of Northern Italy*, Rawdon Brown, ed. (London, 1864-1895), XXIV, no. 418, March 26, 1638. In 1630, Venetian master builders received an average daily wage of 68 *soldi*, approximately one-sixth of the renegade's pay. See Brian Pullan, "Wage-Earners and the Venetian Economy, 1550-1630," in Pullan, *Crisis and Change*, p. 158. Note that 20 *soldi* = 1 lira; 124 *soldi* = 1 ducat of account.

in much the same way. Venetian soapworkers went to Genoa and Leghorn rather than to the North, but their merchandise wound up in English cargos nonetheless.<sup>19</sup> The blow of technical out-migration was perhaps most stinging for the Venetian printing industry, which in its heyday furnished a great cultural and economic resource for the city. Early legislation had been aimed at halting the diffusion of Venetian printing techniques, but by the early seventeenth century the situation had gone so out of control that fonts of type were being smuggled out of the city in kegs under the guise of "worked lead."<sup>20</sup> The great technical drain, which was actively promoted by English chartered monopolies as well as French enterprises well before the time of Colbert (with whose name such tactics are often associated), was the first step in the industrial competition. "The makers of French Gobelines, furnishings, laces, ribbons, mirrors, porcelains were the rivals and heirs of the Italian pioneers."<sup>21</sup>

Like all backward economies, northern Europe in the early 1600's enjoyed a cost structure that incorporated cheap labor and new capital relative to the mature Mediterranean region, and lacked only an adequate range of techniques.<sup>22</sup> The information costs associated with borrowing Mediterranean industrial methods were low by any standard, and since Mediterranean consumers were the desired market, the adoption of old methods rather than the creation of new ones was a logical choice.

Two important features of the Venetian economy in the late sixteenth century made it particularly vulnerable to the northern incursion: an emphasis on high quality production, and the long-

<sup>19</sup> Archivio di Stato di Venezia [henceforth A.S.V.], V Savi, b., 56, Jan. 29, 1613 (m.v.). A senatorial decree allowed a three-month amnesty period for expatriate *saponeri* to return to Venice unpunished before being declared *banditi*.

<sup>20</sup> An order of the *Reformatori dello Studio di Padova* forbade the export of all instruments and materials of bookmaking, including "*carattere da stampa sotto il nome di piombo lavorato*"; *Ordine* of March 10, 1603.

<sup>21</sup> Wilson, "Trade, Society, and the State," p. 527. France was Venice's primary competitor in glasswares, mirrors, and other luxury products in the European market, but it exported wool cloths to the Levant as well. As late as 1723 French exporters were subsidized by the crown. At that time French manufacturers produced more than 70,000 light cloths, most of which were made in Carcassonne for sale in Constantinople; A.S.V., V Savi, n.s. b. 125, fasc. 21, pte. 1, Report of Barbon Morosini, July 2, 1723. On French competition in mirrors, A.S.V., *Milizia da Mar.*, b. 554, fasc. *spechieri*, n.d. (probably 1696).

<sup>22</sup> An extremely crude estimate of the difference in labor costs between Venice and England can be attempted by using the series of builders' wages in Brian Pullan, "Wage-Earners and the Venetian Economy, 1550-1630," and E. H. Phelps Brown and Sheila V. Hopkins, "Seven Centuries of Building Wages," in *Essays in Economic History*, E. M. Carus-Wilson, ed. (New York, 1966), II, 168-178. Using current exchange rates between the ducat and the English pound it can be estimated that

established use of the entrepôt trade as a tax base. Both of these features were based upon Venice's almost exclusive control over the central Mediterranean for nearly half a millenium as a port and an industrial site. This exclusive position—the consequence of geographical and technological advantages—gave Venice considerable control over the prices she charged for her goods and services. This state of affairs was reinforced by the city's specialization in luxury goods for which the price elasticity of demand was low. In other words, Venice had considerable monopoly power in the Mediterranean emporium and this permitted her to maximize the quality of her industrial wares, giving little attention to cost, while clearing the market at high prices. Also, monopoly power made it possible for Venice to have foreign consumers bear a major share of the costs of government. It can easily be shown that even as late as 1587 to 1602, when the Mediterranean was already filled with Dutch and French traders and a few experimental English vessels, the yields from duties and taxes on trade and industry in Venice accounted for the largest single share of Venetian revenue sources, about 37 percent of total state revenues (Table 2). Involuntarily, Venice was forced to reduce her reliance on this mode of taxation in favor of

TABLE 2  
THE CHANGING YIELD OF VENETIAN TAX REVENUE SOURCES  
(In Thousands of Ducats)

Year	Duties and taxes on trade	Duties and taxes on consumption	Mainland & empire revenues	Miscellaneous sources	Total Revenues
1587	707 (36) <sup>a</sup>	502 (26)	690 (35)	51 (3)	1,950
1594	773 (37)	537 (26)	729 (35)	48 (2)	2,087
1602	896 (37)	587 (24)	842 (35)	106 (4)	2,431
1621	956 (25)	961 (25)	1584 (41)	323 (9)	3,824
1633	631 (24)	819 (31)	1088 (40)	137 (5)	2,675
1637	207 (11)	598 (31)	984 (51)	123 (7)	1,912
1641	601 (22)	783 (29)	1142 (43)	156 (6)	2,682
1664	— 2215 (59) —	—	— 1520 (41) —	—	3,735
1670	590 (15)	1278 (33)	1799 (46)	205 (6)	3,872

<sup>a</sup> Numbers in parenthesis = percent of total revenues for the year.

Sources: Years 1587-1641 derived from *Bilanci generali della Repubblica di Venezia* Vol. I (Venice, 1912); for 1664, A.S.V., Senato, Deliberazione, Rettori, filza 61, report of Alvise Mocenigo (Nov. 1, 1664) attached to *decreto* of Feb. 6, 1664 (m.v.); for 1670, A.S.V., Secreta, Materia Mista Notabile no. 106.

for the decade 1620-1630, when a Venetian laborer was paid about 41 *soldi* per day, an English building tradesman was paid the equivalent of between 17 and 31 Venetian *soldi*. English masters received roughly the equivalent of 25 to 37 *soldi* while the Venetian master was paid 66 *soldi*. These comparisons, of course, tell us nothing about comparative purchasing power.

consumption taxes and levies on *terraferma* real estate. By the 1630's taxes on commerce and manufacturing had shrunk to an 11 percent share of state revenues. Nevertheless, high customs duties and excises during the crucial years of competition earlier in the century left Venetian products high and dry when confronted by state-subsidized northern commodities. During the years 1588-1630 an average of 42 percent of the total receipts of the woolen industry of the city of Venice were given over as tax payments (Table 3)! This more than any other institutional or market circumstance—guild conservatism, backwardness in the carrying trade, high insurance rates (that is, the piracy problem)—made Venetian wares uncompetitive during the crucial years of Mediterranean competition.<sup>28</sup>

Despite these problems Venice still had certain advantages. As an industrial power it was the most diversified and most technically advanced city-economy in the sixteenth century. Its reputation for high quality was a strong selling point, and, in the Mediterranean market, locational advantages, and established routes for reaching both supplies of raw materials and selling outlets made it a classic "mature economy."

In the early 1600's northern manufacturers encouraged the transplanting of Venetian craft techniques and began exporting their new products to the south. They practiced all forms of smuggling in order to evade tariffs, and to gain admittance to markets (such as Venice itself) that normally forbade their entry. Also, smuggling enabled counterfeit merchandise to pass undetected into the marketplace. Many thousands of pseudo-Venetian cloths came onto the selling tables from most unlikely places of origin.

The chief stratagem of cloth smugglers was to imitate typical Venetian signs and marks on the head and the selvage of the bolt. These signs were supposed to guarantee the quality and origin of the cloth. Imitation Venetian cloths were hidden inside bales of *panni bassi*, crude country woolens, or, on occasion, they were carried into port as permissible foreign cloths with appropriate mark-

<sup>28</sup> Here we see that before accrediting the Reed/North/Thomas argument, which isolates transaction costs differentials as a source of North Atlantic economic growth, some measure of the reduced costs of using the market will have to be offered in evidence. It seems clear, at this point, that differences in tax policy alone, stemming from differences in institutional background, go further in explaining the relative non-competitiveness of the Venetians than any differences in transaction costs or market efficiency.

TABLE 3  
DISTRIBUTION OF REVENUES FROM WOOL CLOTH MANUFACTURE  
IN VENICE, 1588-1630

Description	Ducats Per Cloth	Percent
To the public coffers, (including import duties on raw materials, manufacturing taxes, taxes on the woolworking guilds, and export duties)	33	42
To the principal woolworkers, (beaters, washers, combers, weavers, and shearers)	16	20
To other groups of workers and other manufacturing costs (spinning, fulling, finishing, dyeing)	18	23
To the wool merchants	12	15
Average Price	<u>79</u>	<u>100</u>

Source: Biblioteca Nazionale Marciana, Ital. VII, Cod. MDCCXLI (9638). The original document reads as follows:

CALCOLO di quanto utile sia stata la Regola[tio]ne: 1588 per la Pannina Venet[ia]na sud[ett]a

Si fa nota, che dall'anno sud[ett]o 1588 fino all' 1630 sono anni 42 si sono costrutte pezze di panno ottocento quaranta mille, sono à rag[gi]o[n] di pezze vinti mille un'anno per l'altro, onde approfittano milioni sessantasei trecento sessanta mille D 66360000

Per il pub[bli]co a D 33 la pezza D 27 720 000

Per li Operarij cioè: Laneri, Tesseri, e Cimadori a D 16 la pezza D 13 440 000

Per le manufatture di tutti li altri sino alla vendita dell'pannine comprese anco la fatture delli tentori a D 18 la pezza D 15 120 000

Per li Mercanti a D 12 la pezza D 10 080 000

Millioni sessanta sei trecento sessanta mille Ducati D 66 360 000

The full document, entitled "Informatione per l'importante negotio del Lanificio di questa città" indicates that "*per il pubblico*" refers to public coffers.

ings. Past customs, colluding craftsmen replaced the heads with ones bearing falsified Venetian brand markings.<sup>24</sup> Another *modus operandi* was for foreign manufacturers to weave Venetian-style woolens of inferior or mixed wools, teasel and shear them in the white, then bring them surreptitiously into the city to be dunked in dye and sold. The result was a cloth that looked well enough on the countertop, but which did not wear well, quickly losing its nap.<sup>25</sup> This particular form of cheat saved the cost of pure, fine wool, high

<sup>24</sup> A.S.V., Consiglio de X, Parti Comuni, filza 182, May 25, 1590. Gaetano Cozzi and Reinhold Mueller kindly brought this important document on smuggling to my attention. The smuggling problem became so intense in the early decades of the seventeenth century that customs agents were armed and ordered to meet contrabanders with force. All work in the private boatyards (*squeri*) on small boats and barges was scrutinized by customs agents to eliminate the "diabolical artifices" used to defraud the port authorities; A.S.V., V Savi, n.s., b. 45, no. 306 "Contrabandi," and A.S.V., Secreta, Materia Mista Notabile, fasc. 133.

<sup>25</sup> ". . . et se beni pare che detti pani riescano fini e vaghi niente di meno sono cattivi . . . et in breve tempo restano senza pello"; A.S.V., Consiglio de X, Parti Comuni, filza 182, May 25, 1590.

Venetian labor costs, and the taxes on production that weighed so heavily on domestic producers. Foreign soapmakers used similar tactics: luxury soap from Genoa and Leghorn with fake Venetian trademarks flooded the Mediterranean.<sup>26</sup> Likewise, glassware, *façon de Venise*, came to replace the genuine article in France and elsewhere.

We learn from reports on smuggling and counterfeit that the Venetian market was under fire during the comfortable years before 1620 when production was at near record highs. Even during these last years of the trade monopoly, it was reasoned that a foreign wool merchant could undersell Venice by about 15 percent with no other advantage than duty-free access to Spanish wool and the lack of restriction against making top-quality cloth with Spanish wool rather than scarce English wool.<sup>27</sup> Also noteworthy during these crucial years is the fact that the smuggling and counterfeit operations often involved the transmission of contraband throughout the Venetian mercantile community. The implied connivance of Venetian tradesmen and wholesalers suggests the pressure for shortcutting domestic production costs, even at risk of great penalty.<sup>28</sup>

The problems of counterfeit cloth, smuggling, and imitative design intensified after the turn of the century when the English trade in the Levant became a "mercantilist's dream."<sup>29</sup> In 1635 the Venetian bailiff at Constantinople observed:

. . . the English devote their attention to depriving our people of the little trade that remains to them in the mart of Constantinople, as they imitate Venetian cloth and make borders after the Venetian manner; they also have plates and wheels sent from their country, and although there is no market for these it shows that they are trying to imitate everything and despoil our merchants of all of the trade they have left.<sup>30</sup>

<sup>26</sup> A.S.V., V Savi, n.s., b. 145, fasc. 49, pte. 2.

<sup>27</sup> A.S.V., Consiglio de X, Parti Comuni, filza 182. This information comes from the testimony of a confessed cloth smuggler who ran fake Venetian fabrics into Venice from the flourishing cloth center around Lake Como, before the full onset of the northern incursions. The smuggler reasoned that, *in toto*, the counterfeit and smuggling in Venice cost the city about 50,000 ducats per year.

<sup>28</sup> In a confrontation before the Venetian Board of Trade the woolworkers' guild directly accused the wool merchants of trying to deal in low grades of cloth and of involving themselves in the traffic of foreign cloths whose commerce in Venice was prohibited; A.S.V., Senato, terra, filza 800, June 18, 1668.

<sup>29</sup> Ralph Davis, "England and the Mediterranean, 1570-1670," in F. J. Fisher, ed. *Essays in the Economic and Social History of Tudor and Stuart England in Honor of R. H. Tawney* (Cambridge, 1961), p. 125.

<sup>30</sup> *Calendar of State Papers, Venice*, Vol. 23, no. 500, June 27, 1635.

And again the following year:

Among the bales of cloth I noticed some which [the English] call "anti-Venetian" which means in imitation and for the destruction of ours, a prejudice which is increased by many other advantages which the English have in trading in these parts, both from the Capitulation which they have with the Porte and because their trading is done by means of a company . . . They are not only exempt from half the duties which may be remitted to them, but they have a thousand chances of smuggling, which assuredly they do not miss.<sup>31</sup>

These are examples of commercial reporting which, after the Venetian fashion, were quite accurate in tone and content. They should not be mistaken for mere grousing or excuse-making. "Anti-Venetian cloth" was exactly that.<sup>32</sup> Neither was the remark about "what little trade remains to Venice" an exaggeration—by this time northern competition had reduced the Venetian share of the market to about 25 percent of the total Levantine trade, roughly the same share as the French maintained, and a poor second to England's 40 percent.<sup>33</sup>

A principal English export during these years was the so-called "new draperies." These were light half-worsted made of a combination of combed and carded yarn. Typically they were not full, napped, and sheared like broadcloths. In England, as the manufacture of bays, says, perpetuanas, and the many other varieties of new textiles flourished, the old trade in white cloths (high quality semifinished broadcloths) to Holland and Germany diminished greatly. In between the old woolens and the new stuffs there was

<sup>31</sup> Ibid, Vol. 23, no. 665, May 27, 1636.

<sup>32</sup> From the earliest days of the trade rivalry to its culmination, the English delighted in the overthrow of Venice in the Levantine cloth trade: ". . . much wooll is employed in newe draperies, which occasioneth the making of lesse quantity of broade cloth. But the English in Turkey by the cheepenes of theire clothes work out the Venetian and all other" (Sir Julius Caesar's Notes from Privy Council Meeting of January 14, 1615 [1616], published in Astrid Friis, *Alderman Cockayne's Project and the Cloth Trade; The Commercial Policy of England in its Main Aspects, 1603-1625* [Copenhagen, 1927], p. 465.) "[English clothiers] say that a mixture of fine English and fine Spanish [wool] makes a Cloth so much cheaper and more serviceable than of all fine Spanish, that it must needs beat out any Forreign Manufacture . . . and therefore have the English and Dutch near subverted the Venetian Cloth-Trade in Turkey" (*Brittania Linguens*, London, 1680) reproduced in J. R. McCulloch, ed. *Early English Tracts on Commerce* [Cambridge, 1954 reprints], p. 322.)

<sup>33</sup> A financial obligation in Constantinople brought together the European ambassadors to apportion the common expense according to the amount of trade (in terms of "capital") each of the nations conducted at that port for three years. The resolution was: England 40 percent, France 26 percent, Venice 26 percent, Flanders 8 percent. (*Calendar of State Papers, Venice*, Vol. 23, nos. 310, 320, June 23 and July 15, 1634.)

an important middle range of fabrics, and the distinction between "old" and "new" draperies must often have been clearer to the eye of the English customs agent than to consumers in foreign parts. West-country clothiers shifted from making the old unfinished white broadcloths to colored broadcloths whose weight and density of weave were much flimsier than that of the old whites.<sup>84</sup> On the other hand, bays, stammets, and minikins, technically not "woolens" but new draperies, were sometimes fullled, teaseled, and sheared to resemble broadcloths.<sup>85</sup> Often these fabrics, which were sold under the exotic new drapery nomenclature, were no more than lightweight versions of old types of woolen cloth, freshly labelled for foreign consumption. Although the new draperies poured into the southern marketplaces, they were not, strictly speaking, the "anti-Venetian cloths" mentioned above. With their visible weave, worsteds were entirely distinguishable from sheared broadcloth of any sort, Venetian included. It was the intermediate varieties like the fullled bays and stammets and the newer-style light broadcloths that resembled Venetian cloths. These were not, however, prized in the Mediterranean because of the comfort of lightweight cloth in sultry climates. They looked like fine heavy woolens but they were less close of weave because, in early modern textiles, "lightweight" equaled "cheap." And their cheapness was not readily apparent because the nap of a fully-finished broadcloth, however flimsy, hid the weave from view.

The English began to make low-grade woolens because of a sort of revolution in marketing. It was discovered that, ". . . except for men living beyond their time, there had to develop a new attitude to the marketing of cloth, a new way of thinking about competition and prices. And whereas in the sixteenth century, partly under the stimulus of a sellers market, unanimity had reigned as to the necessity of maintaining the price of English cloth, of 'selling dear,' now a new feeling arose: that textiles should be sold as cheaply as possible. This keener perception of the competitive environment was, from one point of view, a fundamental departure in economic thought. . . ."<sup>86</sup>

<sup>84</sup> Kenneth G. Ponting, *The Woollen Industry of South-West England* (Bath, 1971), pp. 31-32.

<sup>85</sup> Peter J. Bowden, *The Wool Trade in Tudor and Stuart England* (London, 1962), pp. 43, 56. Bowden gives evidence that this was common practice in the Dutch industry as well.

<sup>86</sup> Barry Supple, *Commercial Crisis and Change in England, 1600-1642* (Cambridge, 1964), p. 147.

The result of this new attitude toward competition was a five-fold expansion in the production of new draperies between 1600 and 1640.<sup>37</sup> Further, even as the sale of fine white cloths all but expired, the export of finished cheap broadcloths grew to such a degree that throughout the second half of the century 20,000 dyed and dressed cloths on average were sent annually to the Mediterranean, which soon surpassed Holland and Germany as a market for English cloth.<sup>38</sup> It was this English explosion of inexpensive and imitative woolens that destroyed the Venetian woolen cloth industry. Corresponding to the failure of production so well analysed by Domenico Sella<sup>39</sup> was a collapse of employment in the woolworkers guilds from a total of about 3,300 guildsmen in 1595 (about 10 percent of the total city work force) to fewer than 800 in 1690 (Table 4). In Venice, the collapse experienced by the woolen industry befell most other export manufactures during the early seventeenth century. In addition, other regional industrial centers met a similar fate.<sup>40</sup>

#### THE NATURE OF THE COMPETITION

European competitors in the seventeenth century faced market circumstances that were similar to those faced by other competitors

TABLE 4  
MEMBERSHIP IN VENETIAN WOOLEN INDUSTRY GUILDS, 1595-1690

<i>Guilds</i>	1595	1603	1660	1672	1690
Preliminary workers: (beaters, carders, combers)	1222	1036	699	707	222
Wool cloth weavers	856	703	518	443	224
Workers in the Wool Office	19	13	10	11	11
Combmakers for looms	13	12	13	14	11
Tenterers	52	66	17	23	22
Cloth-Shearers	323	255	174	170	90
Teaslers and finishers	801	655	429	329	162
Pressers	35	63	19	19	28
<b>Total</b>	<b>3321</b>	<b>2803</b>	<b>1879</b>	<b>1716</b>	<b>770</b>

Sources: A. S. V., *Milizia da Mar*, b. 538-557; Museo Civico Correr, Cod. Donà, b. 228, pp. 227-231. Figures for 1603 are projected from guild draft quotas.

<sup>37</sup> *Ibid.*, p. 153.

<sup>38</sup> E. Lipson, *The Economic History of England* (London, 1931), II, 344, and J. de L. Mann, *The Cloth Industry in the West of England from 1640 to 1880* (Oxford, 1971), p. 18. Despite the great expansion in the quantity of new draperies exported in the first half of the seventeenth century, the total value of broadcloths exported was still far greater than the total value of new draperies, and the proportion of broadcloths headed for southern markets increased in this period.

<sup>39</sup> Domenico Sella, "The Rise and Fall of the Venetian Woollen Industry," in Pullan, *Crisis and Change*, pp. 106-126.

<sup>40</sup> See Carlo Cipolla, "The Economic Decline of Italy," in Pullan, *Crisis and Change*, pp. 127-145 and Wallerstein, *The Modern World-System*, p. 221.

in cases of trade rivalry from the earliest times to the modern period.<sup>41</sup> Modern international trade theory, however, is not very helpful as an analytic framework for dealing with trade rivalry. The theory of the firm, with its emphasis on sellers' competition, holds greater promise for understanding commercial behavior, even on an international level. International commerce, particularly when there is competition among sellers, involves antagonistic relations. This is an idea that had much currency in the seventeenth century, and, although it has fallen out of favor with economists since the time of Smith and Ricardo, it is a notion which the business world has never really abandoned. Making the jump from the firm as the unit of competition to the nation as the unit of competition is therefore not a difficult proposition, at least for the case at hand.

Both in Europe's old and new industrial centers, products for international trade were manufactured by many small firms. Only in a few cases, either because of patent or chartered monopoly privileges or because of the need for large-scale physical plant, did the production of commercial staples become very concentrated. Freedom to act independently in the market, however, did not often accompany even the most fractionalized industry. The regulations imposed by guilds, and more often, by governments, enforced great uniformity upon producers within an administrative region, whether city or nation-state. The effect of specific duties or subsidies, together with state regulation of wages and piece-rates, greatly reduced the prospect of price competition between firms of the same state engaged in producing goods for international trade. Equally important were the state and guild regulations of quality, which defined in great measure the physical characteristics of output, from the cheapest to the most opulent of commodities. Non-price competition thus was severely circumscribed, if not altogether impossible between firms. The implication is clear: the state, not the individual

<sup>41</sup> In the first century A.D., for example, export industries (principally pottery-making in the Italian peninsula) confronted sudden and overpowering competition from peripheral centers of regional industry in the Roman provinces; see M. Rostovtzeff, *The Social and Economic History of the Roman Empire* (2d ed.; Oxford, 1957), I, 173, and Felix Oswald and T. D. Price, *An Introduction to the Study of Terra Sigillata* (London, 1920). The trade rivalry which is, I suspect, most familiar to economic historians is the challenge to Great Britain's dominion over world trade in the last third of the nineteenth century, on which the literature is notably abundant. Both of these episodes share with our present case study of the early modern era the elements of theft of method, counterfeit of brand-markings and design, cutthroat pricing, the use of quality as a cost variable, and other lesser leitmotifs.

firm, was the relevant unit of competition in early modern international trade. The historian's terminology of national types—"English cloth," "French woollens," "Venetian glass"—is not merely a convenience, it is a fact.

The commercial environment of the Mediterranean during the crucial years was one of few competitive units. In the 1630's the western trade in Constantinople was effectively divided among England, France, Venice, and the Low Countries. Each competing nation carried to the market a wide variety of goods, but for simplicity we can restrict ourselves to a consideration of the principal article of early modern manufacture, wool cloth. When one speaks of textiles in the pre-modern period, it is as if to speak of steel or automobiles today: the fate of the industry is of major consequence in and of itself; there are widespread linkages to other industries which share its fate, and it is a model for the fate of even unrelated enterprises. There were myriad varieties of woollen cloth ranging from heavy luxurious broadcloths to light utilitarian mixed cloths, but within each type the quality of the product, both in terms of its outward characteristics and wearability, varied from country to country. The products of various national origins were differentiated by brand name, state cachet, and characteristics of design and dye.<sup>42</sup>

In general terms, we may distinguish between two types of competitors: the mature economy—the established seller such as Venice in the early 1600's—and the developing economy, the challenger (England, for example). The key characteristics of the mature competitor were: industrial and commercial leadership marked by a large share of the market and a substantial ability to set the prices of exported goods and services; high labor costs (relative to newer entrants); the presence of rigidities fostered by guilds, government, or merely by the opportunities for inefficiency that monopoly power can encourage; and high levels of quality and price. By contrast, developing nations enjoy relatively low factor costs and high efficiency (an absence of rigidities), but lack consumer familiarity or

<sup>42</sup> For example, Venetian woollens were grouped under official grades of quality. For each grade of cloth, producers were limited to a stipulated type of wool, a specific density of weave, and a few specific dyestuffs. The purpose was to prevent a mix of cheap and costly characteristics in a single fabric, which might confuse or deceive consumers. Cloth that failed to meet these regulations could not be sold as Venetian cloth and manufacturers who sought to contravene the regulations were liable to prosecution. Other nations were less rigorous about quality control, particularly when their commercial interests were best served by selling cheaper goods.

confidence in their products. In order to penetrate the market and compete with well-known products of high quality, the tactics employed by newcomers are entirely familiar: they borrow the pre-existing techniques, and produce cheaper versions of products to be sold in the old market.

To return to the analogy of the firm, the circumstance we are dealing with is monopolistic competition—defined here as competition among several individual competitive units purveying non-homogeneous products.<sup>43</sup> Commercial concourse among nations (as among firms in most industries) almost always involves a limited group of competitive units, differentiated products, and some degree of individual power over the market price. International trade rivalries are characteristically akin to what has been called “warfare with differentiated products.”<sup>44</sup> This describes the pricing behavior of a competitive unit designed to drive the demand curve of a close competitor below the latter’s average cost curve at every point. If competitor *A* can sustain production under these conditions and survive financially by dint of lower average costs, greater financial resources, or an inherently cheaper product, *B* will be partly or completely removed from the market. In order to overcome the resistance of consumers to an unknown product, the new competitor (*A*) must sell at a price drastically lower than that of the established competitor (*B*). To oust the mature seller completely from the marketplace it is necessary for the newcomer, with his lower average costs, to dictate a price that will drive down the demand for the old product below all points of the average cost curve of the mature

<sup>43</sup> This is the take-off point of all imperfect competition theory. Its analytical consequence is that the product for a given industry ceases to be a datum and becomes an economic variable whose characteristics are part of the competitive *spiel*. In international trade rivalry, however, a variation will often happen. Products are differentiated, but the intention of entrants is to minimize the subjective differences between their products and the wares of older manufacturers. Differentiation, in other words, is not entirely by choice. If it were possible for an entrant to be entirely successful in a campaign of disguise (so that subjectively the new and old products were indistinguishable to consumers), then both producers would face a single demand curve. The challenger (*A*), operating under lower cost conditions, might drive a rival (*B*) entirely from the market without incurring losses by dictating a price below the minimum point of *B*’s average cost curve. Failing the desideratum of homogeneous goods, *A* may achieve a partially equivalent result under conditions of product heterogeneity. The determinants of *A*’s ability to control *B*’s market share are the absolute differences in cost structure between the two competitive units and the cross-elasticity of demand for the two products, the latter being a function of *A*’s abilities at counterfeit.

<sup>44</sup> Sidney Weintraub, *Intermediate Price Theory* (Philadelphia, 1964), pp. 214-218, 229.

seller. This is what distinguishes "economic warfare" from mere price competition. At the outset, the more favorable cost structure of the entrant gives that nation a pricing advantage, but experience shows that this is not enough to vanquish the established producer. In order to reach a large enough price advantage the quality of the product is reduced. It is no accident that the goods of new entrants are always cheap and shoddy by comparison to the former standards of the market. This is due neither to lack of skill nor to inattention; treating quality as a cost variable is a necessary device for success in trade rivalry. As Alexander Gerschenkron has pointed out, developing nations are invariably accused of slavish imitation in technique and design,<sup>45</sup> and it is equally true that new competitors are always accused of making junk. Aggressors in international trade have discovered and rediscovered the fact that by manufacturing articles of the poorest materials and the minimum necessary workmanship, a gulf in prices between old and new competitors can be attained to the great detriment of the former. It is not axiomatic that when challenged in this fashion, the mature economy will fail to respond in kind. But it does seem that the longer the old competitor held sway alone the less likely such a reaction becomes. In the 1600's Venice could not hastily abandon four centuries of successful trading in manufactured goods produced under the highest quality standards. Whereas individual Venetian merchants and craftsmen were often willing to cut corners to stay alive in the market, the government, which was the supreme arbiter of production methods for export-directed commodities, tolerated no compromise with quality control. The effect of these stiff scruples about quality disallowed virtually any prospect of cost and price-cutting by Venetian manufacturers.

For example, soon after the English successfully reduced the cost of dyeing their cloths by use of "bow dyeing" (to dye cloth a scarlet color made from cochineal mordantized with pewter in nitric acid), Venetian dyers were experimenting with orchil, an inexpensive vegetable dyestuff to replace costly crimson for coloring silk. But

<sup>45</sup> Alexander Gerschenkron, "Economic Backwardness in Historical Perspective," in the collection of the same name (New York, Praeger, 1965), p. 8. On the general question of quality reduction it is worth noting that in most cases economists, unlike business decisionmakers, are inclined to treat low quality as an effect of deteriorated efficiency rather than as a controllable variable cost; for example, Albert O. Hirschman, *Exit, Voice, and Loyalty; Responses to Decline in Firms, Organizations, and States* (Cambridge, Mass., 1970).

even though the appearance of the cloth was good the government (not the silk-dyers' guild!) rejected this process, which might have reduced dyeing costs by two-thirds. Venice never abandoned the old, expensive dyeing methods, even when, by 1660, fine Gobelin woolens were being made with the newer, cheaper methods.<sup>46</sup>

The best indication that the analysis of trade rivalries is basically the stuff of monopolistic competition at the international level is that differentiation of product by appearance and trade-marks plays a large role in struggles for commercial supremacy. As Chamberlin insisted, patents and trade-marks have both monopolistic and competitive aspects. "Each makes a product unique in certain respects; this is its monopolistic aspect. Each leaves room for other commodities almost but not quite like it; this is its competitive aspect."<sup>47</sup> Before the advent of market incursions by new competitors, the distinctive markings or appearance of established products furnishes an opportunity for monopoly pricing. The lion of St. Mark, Venice's "trademark," appeared in an official seal on every bolt of Venetian cloth as an assurance of quality; this permitted a higher price, and in turn, the dominance of Venice in the cloth market enabled it to specialize in heavy, costly woolens. When the upstart competitors entered the market with vastly cheaper versions of the traditional products it became necessary for them to counterfeit the style and

<sup>46</sup> The Provveditori di Comun, official overseers of the Venetian silk industry, rejected orchil dyeing after experimental cloths failed to survive proof in a bath of alum, a test of the long-range durability of the color. The episode is entirely typical of dozens of other attempts at cost-cutting which were rejected by government surveillance; A.S.V., V Savi, b. 477, tomo II no. 15; *Ibid.*, b. 99 and 100, fasc. 59. Stuart England also had quality control regulations, but the new mentality of selling cheap undercut their application, and most serious attempts at enforcement were abandoned by the Interregnum. See W. Cunningham, *The Growth of English Industry and Commerce in Modern Times* (Cambridge, 1903), II, 203-204, and Herbert Heaton, *The Yorkshire Woollen and Worsted Industries from Earliest Times up to the Industrial Revolution*, 2d ed. (Oxford, 1965), pp. 177-184, 216. Although Sir Josiah Child's observations on the subject of quality (in *A New Discourse on Trade*, first edition, London, 1690) come a bit late for our purposes, they are nevertheless instructive:

All our laws that oblige our people to the making of strong, substantial (and as we call it, *loyal*) cloth, of a certain length, breadth, and weight, if they were duly put in execution, would in my opinion do more hurt than good, because the humours and fashions of the world change, and at some times in some places (as now in most) slight, cheap, light cloth will sell more plentifully and better than that which is heavier, stronger, and truer wrought; and if we intend to have the trade of the world, we must imitate the Dutch, who make the worst as well as the best of all manufactures, that we may be in a capacity of serving all markets and all humours.

<sup>47</sup> Edward H. Chamberlin, *The Theory of Monopolistic Competition*, 7th ed. (Cambridge, Mass., 1956), p. 62.

markings of Venetian cloth, which they did with vengeance.<sup>48</sup> For Venice this was frustrating to the point of outrage, for the maintenance of the city's reputation of excellence in manufacturing was one of its foremost concerns. Not only were Venetian wares being undercut in price, but cheap imitations were being passed off as being of Venetian origin, damaging the city's reputation. If ever there was a leitmotif in the history of trade rivalry, this is surely one. The circumstances faced by Venetian craftsmen vis à vis northern competition in the 1600's was in every way identical to the rather more famous case of the Sheffield cutlers in the 1880's when confronted by the upstarts of Solingen. "[The Germans] produce a low priced and inferior article, wretchedly bad, upon which they unscrupulously impress the trade marks of the most celebrated Sheffield and other English makers," complained the English in the nineteenth century, ironically parroting Venetian anger of two centuries before.<sup>49</sup>

Was the flood of northern textiles and other inexpensive products from Atlantic manufacturers an early example of mass marketing or a response to a change in southern fashion?<sup>50</sup> The new draperies were an inferior good, "slight and vain commodities, wherein the common people delight," although less recognizably so than the light "bottom of the line" broadcloths manufactured for years in the Mediterranean clothmaking centers. The increased availability of very inexpensive fabrics may indeed have tapped the demand of persons hitherto unable to buy any but crude homespun wools. To this extent there must have been some opening up of the consumption of international trade commodities. But the very fact that at the same time as the serges and bays there appeared a plethora of inexpensive colored broadcloths which were closely imitative of old southern styles bespeaks an intent to capture the market from the Italian clothmakers and not merely to open marketing frontiers

<sup>48</sup> Even cakes of Venetian soap bore a state seal of quality, and indeed, these too were falsified by foreign competitors: "In più luoghi esteri bollano i loro saponi con bolli di veneti savoneri e li fano credere savoni veneti." A.S.V., V Savi, n.s., b. 145, fasc. 1.

<sup>49</sup> R. J. S. Hoffman, *Great Britain and the German Trade Rivalry, 1875-1914* (New York, 1964 reprint), p. 45.

<sup>50</sup> On the background of these questions, see: Fisher, "London's Export Trade," pp. 151-161; Davis, "England and the Mediterranean," pp. 117-137; Supple, *Commercial Crisis and Change*, pp. 152-156; C. H. Wilson, "Cloth Production and International Competition in the Seventeenth Century," *Economic History Review*, 2d series, XIII (1960), 209-221; and D. C. Coleman, "An Innovation and its Diffusion: The 'New Draperies,'" *Ibid.*, 2d series, XXII (1969), 417-429.

among marginal consumers. Kerseys, which were lightweight, short-staple, cheap cloths, whose appearance in long-distance trade Coleman calls the commercialization of a peasant technique,<sup>51</sup> might have been a product for mass marketing in the Mediterranean. Kerseys arrived in quantity in the Mediterranean as early as a century before the new draperies and colored broadcloths, and they were sold by the Flemish and English throughout the sixteenth century. But these cloths which were both light and cheap were not "anti-Venetian cloths," and their presence wrought little or no damage to the Venetian woolen industry which grew and prospered during these years. Although the Mediterranean was flooded with English kerseys at the beginning of the seventeenth century, we learn from Sella that the kerseys were worn by the poor and did not compete with Venetian cloth.<sup>52</sup> Kerseys then disappeared from the Levant, and, as Sella recounts, the new fabrics competed directly with Venetian cloth; whatever sales the English garnered were won at the direct expense of the Venetians.<sup>53</sup> The same applies to the other new industrial exports such as glassware, mirrors, soap, silks—hardly intended to tap the demand of customers who could not otherwise afford these products.

We must also reject the possibility that a change in fashion to lighter-weight fabrics accounted for the popularity of English cloths in the 1600's. So far as the new draperies are concerned, it must be remembered that the technique most basic to their manufacture, the use of long-staple worsted yarns in the warp, came from southern Europe. It was not as if a delightfully airy type of textile, hitherto unknown, popped up on Mediterranean sales counters. New drapery techniques made their way from Italy to the Low Countries and eventually to England.<sup>54</sup> Both the new draperies and the finished broadcloths that England shipped south were low-quality merchandise. Their lightness, a characteristic that obtained from the use of fewer warp threads per measure of fabric width, was not a response to a changed demand for a tropical weave. Both light and heavy broadcloths coexisted in the south: heavy cloth for luxurious apparel, lightweights for poorer grade clothing. Later in the 1600's the English

<sup>51</sup> Coleman, "An Innovation and its Diffusion," p. 422. On the appearance of kerseys in the Mediterranean, see Braudel, *Méditerranée*, pp. 555, 560, 562.

<sup>52</sup> Sella, "Rise and Fall," p. 119.

<sup>53</sup> *Ibid.*, p. 119.

<sup>54</sup> Coleman, "An Innovation and its Diffusion," p. 420.

new draperies sold well in chilly climates as well.<sup>55</sup> Neither did a taste for disposable garments suddenly develop. New draperies were sold under such names as “perpetuanas” or “durances,” but the cloths were actually very shortlived. The sale-names were intended to deceive.<sup>56</sup> Speaking of an autonomous change in fashion to light-weight cloths in the early modern period is like speaking of a change in taste from butter to margarine.

To summarize: all the competitive characteristics of the industrial exports brought to the Levantine market by the North Atlantic producers (led by England) in the first half of the seventeenth century were designed, in keeping with the best mercantilist practice, to supplant the preexisting southern merchandise. To overcome the Italian industrial hegemony a consistent policy of cutthroat pricing was employed. This was made possible by the lower cost of labor in the developing North, by an absence of ingrained, restrictive practices, and by state support (rather than heavy taxation) of exports. Further, a “new retailing” emerged. The new competitors recognized the virtues of selling cheap and to accomplish this old ideas about high quality went by the boards. The result was a range of vastly cheaper products for sale in the South. In order to insure that these goods would compete fully with southern manufactures northern producers faithfully imitated the style and brand markings of goods that were well-established in the marketplace, to the extent that this could be done without added cost. Counterfeit and smuggling went hand in hand with these practices. This combination of tactics bears strong resemblance to other historical instances of trade rivalry and is best described in terms of an imperfect competition model.

What is the importance of this approach for understanding the commercial rivalry of the seventeenth century? Simply that the explanation of north European economic growth is more clearly related to competitive success in established markets, not merely to changing trade routes. Both economic logic and historical evidence suggests that the competitive success of the North Atlantic was founded on the abilities of producers to reduce costs in three ways: by capitalizing on factor-cost advantages; by using product variation to reduce the quality-related costs of manufactures; and (undeniably) by innovation in shipping to reduce transport costs. The last of these

<sup>55</sup> *Ibid.*, p. 425.

<sup>56</sup> *Ibid.*, p. 425.

is universally recognized as important, but cannot by itself fully explain the success of the northerners in the southern market.<sup>57</sup> Since for both the Dutch and the English, Levantine hegemony was a prelude to expanded trade empire, it seems clear that something more than *fluits*, routes, and seamanship was involved in both the prelude and the main act.

#### THE CONSEQUENCES

The transformation of the English commercial mentality from the ethic of "selling dear" to a keener, more combative sort of competitive posture appropriately conveys the new nature of trade, not only in textiles, but in all export industries, and not only for England, but for all of the rising powers of the seventeenth century. Although the Dutch were tied to less distant trades in the North and Baltic Seas to a greater degree than the English, it was their lead that the English often followed in the exploitation of distant markets, until Holland in its turn was deprived of its maritime supremacy. Although more systematic study will surely be necessary to confirm our tentative conclusion, such evidence as we now have strongly suggests that the rise of England as an industrial and commercial center in the seventeenth century rested upon the conquest of the

<sup>57</sup> The distance from London to Constantinople was about 2 1/3 times farther than from Venice to Constantinople, and the maritime innovations of the 1600's put no great premium on speed. While an English ship of the 1580's was able to make the voyage from London to Messina in a month's time, the Flanders galleys of Venice could do as well in the early part of the century; see Alberto Tenenti, *Piracy and the Decline of Venice, 1580-1615*, trans. Janet and Brian Pullan (London, 1967), p. 170, n. 4; and Frederic C. Lane, *Venice, A Maritime Republic* (Baltimore, 1973), p. 351. Of course, the Dutch and the English managed increasingly to convey larger amounts with an increase of security while employing a smaller crew. Still there is no evidence to suggest that the differential in transportation costs between north and south was so great as to allow northerners to underprice southerners in the southern marketplace, *ceteris paribus*. We need to remember also that transportation services were very much in the international public domain, so that advantages owing to the development of new techniques were not easily confined to the exclusive benefit of the innovating nations. In fact, it would seem that little effort was made to restrict the spread of modern ship technology in the 1600's. The Dutch were primarily responsible for productivity-boosting innovations in ship manufacture and they readily sold ships to their rivals, the English. Both the Dutch and English in turn willingly became purveyors to the southern fleets. By the early 1600's, large proportions of the merchant fleets of both Genoa and Venice were foreign-built, mostly in Holland and England. See Lane "Venetian Shipping," p. 42, and *Navires et constructeurs*, ch. xii; and Luciana Gatti, "Compravendita di imbarcazioni mercantili a Genova (1503-1645)," in *Guerra e commercio nell'evoluzione della marina genovese tra XV e XVII secolo* (Genoa, Centro per la storia della tecnica in Italia del Consiglio Nazionale delle Ricerche, 1973), II, 174-179.

southern market, and more precisely, upon the elimination of Mediterranean rivals in industry and trade.

What then was left for Venice? Insofar as commerce and manufacturing are concerned, the answer is: not much. Of her major export industries, only the luxury silk industry remained in any semblance of past condition. Employment in export-related occupations diminished from a peak of about 45 percent of the work force in guilds in 1595 to 33 percent by the end of the 1600's, which was exactly the proportion that prevailed in the 1530's before the great rise of Venetian industry—a retrogression of 170 years in the economic structure of the city.<sup>58</sup> Her carrying trade was blasted and the port was reduced in status from the foremost international emporium to a regional harbor. Venice's commercial presence in foreign markets, both Levantine and North Atlantic, evaporated. Marked reductions occurred in the output of woolens, ships, soap, printed matter, and metal manufactures.<sup>59</sup> The aristocratic government's backward outlook about quality and taxation changed little during the century.

Yet remarkably, Venice had sufficient flexibility to adjust to her new role without experiencing a fall in the real wage or in population. The "Malthusian trap" did not clamp down on Venice. Mid-century population was at pre-1630 plague levels and indications are that the real wage grew slightly over the course of the 1600's. To put it another way, Venice did not decline in absolute terms.<sup>60</sup>

The Venetian adjustment to commercial failure was largely structural. That is to say, the occupational distribution of the city shifted gradually from the export-industrial sector to the domestic service sector without major dislocations in unemployment or aggregate income. Membership in the guilds was greater in 1690 than in 1595 (22,504 in 1595; 24,000 in 1690).<sup>61</sup> The construction industry, retail-

<sup>58</sup> Rapp, *Industry and Economic Decline*, ch. iii.

<sup>59</sup> For wool cloth see Sella, "Rise and Fall," and *Commerci*, pp. 117-118; for shipbuilding, Frederic C. Lane, "Venetian Shipping during the Commercial Revolution," *American Historical Review*, XXXVIII (1933), 219-239, reprinted in Pullan, *Crisis and Change*, pp. 22-46, and *Navires et constructeurs à Venise pendant la Renaissance*, (Paris, 1965), ch. xii; for soap, Sella, *Commerci*, appendix G, p. 132; and A.S.V., V Savi, n.s., b. 145, fasc. 1. The number of active soap cauldrons in the city dropped over the seventeenth century from forty to seven, and output was reduced from about 13 million pounds of soap in 1600 to 2.5 million in 1700.

<sup>60</sup> Rapp, *Industry and Economic Decline*, ch. v.

<sup>61</sup> *Ibid.*, ch. iii. These figures refer to those guilds that were subject to conscription for galley crewmen by the Naval Personnel Administration, representing about

ing, and food services all grew substantially during the years of crisis to compensate for losses in the export sector.<sup>62</sup> During those years a boom in public building and in tourism began. Of secondary importance was Venice's expanded interest in the *terraferma*. The mainland became a larger contributor to the fisc, as indicated above (Table 2), and city-based investment in the country grew tremendously in these years, although the regional income consequences of this are far from clear.

The Venetian economy after 1700 was a changed economy, yet its level of prosperity was no lower than when it was the center of the Western world.<sup>63</sup> In this respect Venice does not accurately represent the Mediterranean at large, whose decline for the most part was real and absolute. Plagues, wars, pirates, backward guilds and governing classes were no strangers to the Mediterranean industrial and commercial scene even before the challenge of the northern competitors, so that they cannot be responsible for the decline. Neither was the decline, whether relative or absolute, self-induced, except in the sense that the traditional rulers of the southern trade had become too habit-ridden to react quickly to the assault on their customary primacy. The new factor that put an end to the Mediterranean hegemony and set Italy into decline was the incursion of the Dutch, French, and English, who assumed control of world trade by conquering the established market with traditional products and combative marketing practices. Although it is true that the creation of regular sea-trade routes between Europe and the rest of the inhabited world was a sixteenth century achievement, the commercial value of this triumph of navigation did not come to be of great consequence until long after the North Atlantic hegemony was a firm fact.<sup>64</sup> The economic growth of Amsterdam and London and their

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two-thirds of the total labor force. A.S.V., *Milizia da Mar*, buste 538-557 is the source of the data.

<sup>62</sup> *Ibid.*

<sup>63</sup> Frederic Lane remarks that while eighteenth-century Venice little resembled her former self of 1600—an industrial city—there was much about her to recall the still more glorious fifteenth century to mind. In fact, in the last decades of the 1700's, when the Northern powers had long left the Mediterranean to contest in other arenas, Venice once again became the leading European trader in Syria; *Venice, A Maritime Republic*, pp. 423-425.

<sup>64</sup> "It was primarily the Mediterranean market that first helped to rescue the English economy from the disastrous consequences of the ruin of Antwerp and the subsequent devastation of Central Europe, for so long the chief outlet for the exports of the kingdom. Not until the eighteenth century was its commercial importance to be exceeded by that of the New World and of the East Indies." G. D. Ramsey, *English Overseas Trade during the Centuries of Emergence* (London, 1957), p. 60.

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surrounding regions, and ultimately the expansion of the colonial trade, were the end products of mercantile victory in the Mediterranean.

The commercial revolution is no less real or important a development in Western economic history for having been largely the result of competitive forces rather than a "natural" consequence of the changed geography of the Age of Discovery. Finally, perhaps a closer look at the trade rivalry of the seventeenth century and its consequences will provide new insights into the unexplored nature of economic decline.

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