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The 'New Institutional Economics' and the Changing Fortunes of Fairs in Medieval and Early Modern Europe: the Textile Trades, Warfare, and Transaction Costs

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Abstract:

This paper revisits, modifies, and combines elements of three major 'institutional' international-trade models, none of which has yet fully received the attention that it deserves, to provide a new explanation for the growth, decline, and then rebirth of internationally-oriented fairs in the European economy, serving financial as well as commercial functions, from the 12th to late 16th centuries. The three distinguished models that provided the major inspiration for this paper are, in the chronological order of their publication: (1) the Van der Wee thesis (1970) on the macro-economic impact of the major shifts, first, from continental, overland-trade to maritime-based routes, and then back to continental-overland trade routes, over this same four-century era; (2) the North-Milgrom-Weingast 'institutional' model (1990) on the role of law-merchant courts and judges in reducing incentives to cheat or renege on contracts in fair-oriented trade amongst 'unacquainted' participants (i.e. in the Champagne Fairs), and thus in reducing transaction costs in international trade; and (3) the Epstein model (1994) on the various ways in which the later-medieval *regional* fairs further reduced transaction costs in commerce (even if his model implicitly contradicts elements of my own favoured Van der Wee model).

The central theses of this paper are that: (1) the changing intensities, scope, and nature of late-medieval and early modern-warfare played the decisive role in determining the fate of *international* fairs: (a) in that the consequences of such warfare fatally undermined the economic viability of the earlier medieval fairs (English, French), by raising to a prohibitive level the transportation and other transaction costs involved in overland-continental trade, and more particularly in the mass-market trade in cheap, light textiles, on which these fairs had fundamentally depended; and thus conversely (b) that a restoration of relative security combined with other factors that reduced both transportation and transaction costs led (in accordance with the Van der Wee model) to a revival of continental, overland-trade, to a revival and even more dramatic growth in international trade in cheap textiles, and to a rebirth and renewed pre-eminence of international fairs in early modern European commerce; and (2) that the financial role of fairs was as important as their commercial role; and thus that another major factor in the pre-eminence of early-modern international fairs were financial innovations that led to full negotiability of both private and public forms of credit – especially the *rentes*, innovations developing chiefly out of fair-based law merchant courts (thus leading us back to the North-Milgrom-Weingast model).

The chief criticisms of these models, or parts of them, lie in their inadequate or wrongly formulated explanations for the decline of the Champagne and English fairs, either by adducing incorrect arguments (North-Milgrom-Weingast) and/or by neglecting the very major adverse consequences of the spreading stain of chronic, debilitating, and ever so disruptive European and Mediterranean-wide warfare from the 1290s – and not from the Hundred Years' War era, consequences that also fatally undermined the international trade in, and thus the production of, the cheap light textiles, over the next two centuries. Such analysis is extended to criticize other favoured models to explain the decline and fall of the Champagne Fairs: the De Roover 'commercial revolution' thesis on Italian branch–plant firms with their use of bills-of-exchange; the Bautier-Verlinden model on the 'industrialization of 14th century Italy'; and the most favoured one of all – the establishment of the Italian galley route, the direct sea-route, to NW Europe. One merely has to point out the dramatic impact of the *revival* of overland, continental trade routes and of so many *international*, fairs from the 15th century, to see why these three latter theories lack credibility in explaining a general commercial-financial phenomenon on the supposed 'decline of fairs' in the international economy.

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The 'New Institutional Economics' and the Changing Fortunes of Fairs in Medieval and Early Modern Europe: the Textile Trades, Warfare, and Transaction Costs[1]

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Institutions in the 'Birth of Europe': Long Distance Trade, Fairs, and Transaction Costs

No institutions were more important than fairs in the early commercialisation of the European economy, following what Robert Lopez called 'the Birth of Europe', from the late tenth and eleventh centuries. This was the very era, according to the well-known if now unpopular Pirenne thesis, in which Europe experienced the revival of long-distance trade and the consequent growth of towns, as the chief motors of economic growth.[2] Lopez also viewed the ensuing three centuries as the 'Commercial Revolution' era, during which Europe acquired the veritable foundations of modern capitalism in new commercial and financial institutions. Even those unsympathetic to the Pirenne or Lopez theses might still agree that international fairs based on long-distance trade did play a crucial role in European economic development during these three centuries.[3]

If the study of institutions, and in particular commercial institutions, has long been a commonplace feature in old-fashioned forms of European economic history, the particular and often peculiar dynamics of such institutions did not really receive their proper due in theoretical Economics, until the renowned

[1] I wish to thank Professors Hans Pohl (Bonn), Herman Van der Wee (Leuven), Jean-François Bergier (Zurich), and Martin Osborne (Toronto) for their criticisms, advice, and assistance in writing this article; all remaining errors and omissions remain my responsibility.

[2] Robert Lopez, *The Birth of Europe* (New York, 1966), pp. 108-45. See also Robert Lopez, 'The Trade of Medieval Europe: The South,' in M.M. Postan and E.E. Rich, eds., *Cambridge Economic History of Europe*, vol. II: *Trade and Industry in the Middle Ages* (Cambridge, 1952), pp. 257-354; reprinted with very few revisions in the 2nd edn. of 1987 (ed. M.M. Postan), pp. 401-79; Henri Pirenne, *Mahomet et* Charlemagne (Paris, 1937); translated as: *Mohammad and Charlemagne* (London, 1939); Henri Pirenne, *Histoire économique de l'occident médiéval,* ed. Emile Coornaert (Bruges, 1951); Robert LaTouche, *The Birth of the Western Economy: Economic Aspects of the Dark Ages* (London, 1956).

[3] Such emphasis on commercial institutions does not imply, however, any neglect of the more contemporary research that has been done on agrarian and demographic history; but space does not permit an examination of the obviously crucial linkages between agrarian, demographic, and commercial and related institutional factors and forces in European economic growth.

economic historians Douglass North and Robert Fogel won the Nobel Prize for Economics in 1993.[4] North's particular contributions to the so-called 'new institutional economics' are fundamentally based upon the roles that various institutions have played in reducing the burden of transaction costs in European economic development, from medieval to modern times. In one of the best articles to highlight this theme, Clyde Reed, a prominent student of Douglass North, has demonstrated that a given reduction in transaction costs (of, say, 10 percent) had a far more powerful effect in stimulating economic growth, in early-modern Europe, than did a proportional reduction in production costs.[5]

In the fully-developed North model, the concept of 'transaction costs' includes all those directly, indirectly, and ultimately involved in transferring goods from producers to consumers. For North, the most important such costs were those incurred in seeking out and securing market information, and, in particular, 'the costs of specifying and enforcing the contracts that underlie all exchange'; they also include, more broadly, all related costs involved in establishing and defending related property rights.[6] Long before the seminal work of Douglass North, however, Frederic Lane (1900-84) had established his early reputation, during World War II, with several publications devoted to this very same theme of 'protection costs'.[7]

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[4] See Cliometric Society, ed., *Two Pioneers of Cliometrics: Robert W. Fogel and Douglass C. North, Nobel Laureates of 1993* (Oxford, Ohio: Miami University, 1994). His co-winner, furthermore, Robert Fogel, receiving his prize essentially for his work in promoting econometrics or 'cliometrics', arguably formulated his major econometric contributions in terms of institutions as well, those governing transportation networks and slavery in particular.

[5] Clyde G. Reed, 'Transactions Costs and Differential Growth in Seventeenth Century Western Europe', *Journal of Economic History*, 33 (March 1973), 177 - 90, especially pp. 180-86.

[6] Douglass North and Robert Thomas, *The Rise of the Western World: A New Economic History* (Cambridge, 1973), pp. 71-96, 134-38 (quotation on p. 93); Douglass North, *Structure and Change in Economic History* (New York, 1981), chapters 1-5; Douglass North, 'Government and the Cost of Exchange in History', *Journal of Economic History*, 44 (1984), 255-64; Douglass North, 'Transaction Costs in History', *Journal of European Economic History*, 14 (1985), 557-76.

[7] Frederic Lane, 'National Wealth and Protection Costs', in Jesse Clarkson and Thomas C. Cochran, eds., *War as a Social Institution: the Historian's Perspective* (New York, 1941), pp. 32-43, subsequently revised as the following: 'The Economic Meaning of War and Protection', *Journal of Social Philosophy and Jurisprudence*, 7 (1942), 254-70; Lane, 'Force and Enterprise in the Creation of Oceanic Commerce', *Journal of Economic History*, 10 (1950), 19-31, published as the supplement *The Task of Economic History*; and Lane, 'Economic Consequences of Organized Violence', *Journal of Economic History*, 18 (1959), 401-17. All have been republished in his *Venice and History: the Collected Papers of Frederic C. Lane*

One of North's major analytical contributions was to point out that 'the transactions sector, unlike the production of industrial or agricultural goods [in the pre-modern economy], is subject to economies of scale', thus involving very large fixed costs for most components of that sector. In other words, if trade and related commercial-financial transactions were organized on such a large scale that the normally high fixed costs could be spread over a large volume of commercial-financial transactions, especially if they could be concentrated rather than diffused, the unit transaction costs would necessarily fall. Conversely, if such commercial-financial transactions were disrupted, diminished, circumscribed, and reduced in scale or diffused, the unit transaction costs would adversely rise. Once more another eminent medieval economic historian, Michael Postan, had suggested something rather similar in contending that the 'proportion of trading costs to total costs was probably less in the Middle Ages than it is now', but also that they subsequently rose as 'local taxation, war and piracy became more disturbing and more difficult to circumvent as the Middle Ages drew to their close'.[8]

The emphasis that Douglass North's model of the 'transaction sector' has placed on securing and defending market information and privileges (including privileged or asymmetric information), contracts, and property rights does not, however, seem to leave much room for the more mundane elements of distribution, marketing, and transportation costs.[9] Yet surely these are also equally legitimate and important aspects of his

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(Baltimore, 1966), pp. 373-428.

[8] Michael Postan, 'The Trade of Medieval Europe: the North', in M.M. Postan and Edward Miller, eds., *The Cambridge Economic History of Europe*, vol. II: *Trade and Industry in the Middle Ages*, 2nd edn. (Cambridge, 1987), p. 204 [The chapter in the first edn. of 1952 has been reprinted in: M.M. Postan, *Medieval Trade and Finance* (Cambridge, 1973), pp. 92-231.] But for more modern times, the rest of Postan's quotation would differ markedly from that of Clyde Reed in stating that: '[this] is merely another way of saying that far greater economies have resulted from industrial revolutions of the eighteenth and nineteenth centuries than from corresponding improvements in transport and distribution'.

[9] See North and Thomas, *The Rise of the Western World* (n. 6), pp. 71-96; Reed, 'Transactions Costs' (n. 5), pp. 177-90, but esp. pp. 180-6; North, *Structure and Change* (n. 6), chap. 1-5; North, 'Cost of Exchange in History' (n. 6), pp. 255-64. In his more recent writings, North has given added emphasis to the 'immense resources devoted to promulgating codes of conduct' (ideological attitudes concerning property rights and contracts). Finally see North, 'Transaction Costs in History' (n. 6), p. 558, for a much narrower definition of transaction costs than the one employed here: 'the costs of specifying and enforcing the contracts that underlie all exchange'.

concept of the all-embracing costs involved in transferring goods from producers to consumers, necessarily via the commercial-financial sector. Thus whether or not Douglass North and his disciples would fully approve of their inclusion, this current study will necessarily do so, much as Michael Postan certainly did.

Peace, Warfare, Transportation: and the Van der Wee Model on Long-Distance Trade

Furthermore the central theme of this study focuses as well upon Postan's observations on the role of warfare in the later-medieval economy: in particular, the impact of related fiscal, monetary and commercial policies, of brigandage and piracy, and of various defensive responses, in raising transportation and all other transaction costs in European long-distance trade, and especially in fair-oriented overland trade. The obvious converse deduction to be drawn from that central thesis, therefore, is that long-distance fair-oriented trade flourished most successfully during the preceding and succeeding eras of relative peace, relative security, and thus of relatively lower transaction costs.

To facilitate this task we must recall and reconsider in depth the truly seminal but sadly neglected thesis that Herman Van der Wee published, with Theo Peeters, a full thirty years ago (1970), in *Annales:* 'An economic model of the intersecular growth of world trade from the twelfth to eighteenth centuries'.[10] In basically just sixteen pages of text, followed by another eight pages of rather abstruse mathematics and econometric analyses (and then a brief, summary conclusion), the two authors may not have succeeded, however, in convincing most readers that they had truly unlocked the secrets of European economic growth – all the more so since this article appeared well before Douglass North had published his key, path-breaking studies on institutional economics and transaction costs, chiefly in and from 1973.[11]

Anticipating some elements of the Van der Wee and North theses, both Postan and especially Lopez had propounded the dictum that the 'Birth of Europe' itself and the ensuing 'Commercial Revolution' era had

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[10] Herman Van der Wee and Theo Peeters, 'Un modèle dynamique de croissance interseculaire du commerce mondiale, XII^{e} - XVIII^{e} siècles,' *Annales: économies, sociétés, civilisations*, 15 (1970), 100-28. See also a further elaboration of these views in Herman Van der Wee, 'Structural Changes in European Long-Distance Trade, and Particularly in the Re-export Trade from South to North, 1350-1750,' in James Tracy, ed., *The Rise of Merchant Empires: Long-Distance Trade in the Early Modern World, 1350-1750* (Cambridge, 1990), pp. 14-33.

[11] See above, nn. 4-6, 9.

fundamentally depended upon the ability of post-Carolingian Western Europe to repel its major chronic invaders (Norsemen, Muslims, Magyars) and to establish relative peace and security. If warfare was subsequently never absent from the European scene, chiefly in the form of sporadic, small-scale feudal conflicts, Western Europe also benefited from the ability to export most of its military energies abroad in the Crusades, which, somewhat surprisingly did more to foster than to inhibit the expansion of long-distance maritime trade, especially with the Muslim world, by ensuring a decisive Christian naval supremacy in the Mediterranean basin. Yet, Lopez and Postan implicitly and Van der Wee far more explicitly demonstrated that the chief dynamic elements in the expansion of long-distance trade, and thereby, by backward and forward linkages with other sectors, of the European economy were actually based much more on overland, continental trade routes.

Under such conditions of relative peace and security, rapid commercial expansion, and economic growth over the next three centuries, European fairs, chiefly based on overland trade, both regional and continental, proliferated and flourished; and they did so the most impressively during the latter half of the Commercial Revolution era, often referred to as the 'long thirteenth century', from c.1180 to c.1320. Most economic historians would now agree that in this period Western Europe experienced its most dramatic and propulsive growth, economic and demographic, accompanied by the stimulus of at first mild and then more severe inflation. For many historians, Michael Postan and his disciples in particular, such rising prices provided good proof for their theorem of the immanent overexpansion of a still technologically inert European economy: one that was unable ultimately to sustain continuous population growth, so that it fell victim to a full-blown Malthusian crisis by the early fourteenth century. Though Europe certainly did experience a severe crisis by the early fourteenth century, the current evidence now indicates that it was due more to warfare and to structural problems in international trade than to any adverse Malthusian demographic factors.[12]

Revisiting the North-Milgrom-Weingast Model: on Medieval Fairs and the Law Merchant

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[12] See in particular Michael Postan, *Essays on Medieval Agriculture and General Problems of the Medieval Economy* (Cambridge, 1973), especially pp. 186 - 213; and also below, pp. 14-19.

Furthermore, not all historians who have focused on the propulsive role of international trade in promoting economic growth during the Commercial Revolution have given the economics, and especially the institutional economics, of fairs their 'fair' due, as it were. The most famous of this era were, of course, the Five Fairs of Flanders, the English Midlands Fairs, and above all the Champagne Fairs, though there were many others of importance, if too numerous to be considered here.[13]

Douglass North did not himself neglect the significance of the Champagne Fairs. For ten years ago, he published an important article on 'The Law Merchant, Private Judges, and the Champagne Fairs', with two colleagues, Paul Milgrom and Barry Weingast.[14] Their fundamental contention is that 'an enduring pattern of trade over a wide geographical area cannot be sustained if it is profitable for merchants to renege on promises or repudiate agreements' -- in short, to cheat; and further that, 'to capture the gains associated with geographic specialization [in long distance trade], a system had to be provided that ...provided for the enforcement of agreements across space and time [and that]...lowered information costs [about such enforcement]'. Indeed, all forms of commerce, for which so many individuals have the short-run temptation to cheat, require mechanisms or institutions to 'promote the trust necessary for efficient exchange'. For simple bilateral exchanges in local trade, involving merchants well known to each other, that mechanism is usually the personal *bond*: in the commonplace sense that 'a man's word is his bond', a bond that develops from continuing personal relationships that produce a strongly positive reputation for integrity. But how can

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[13] See Charles Verlinden, 'Markets and Fairs', in M. M. Postan, E. E. Rich, and Edward Miller, eds., *The Cambridge Economic History of Europe*, vol. III: *Economic Organization and Policies in the Middle Ages* (Cambridge,1963), pp. 119-53, especially pp. 126-37. Between 1066 and 1127 the counts of Flanders had chartered monthly 'free fairs' at Lille, Ypres, Messines, and Torhout (but only subsequently at Bruges). For the English fairs, see Ellen Wedemeyer Moore, *The Fairs of Medieval England: An Introductory Study*, Studies and Texts no. 72, Pontifical Institute of Mediaeval Studies (Toronto, 1985). For the Champagne Fairs, see in particular Robert-Henri Bautier, 'Les foires de Champagne: recherches sur une evolution historique,' *Recueils de la Société Jean Bodin pour l'histoire comparative des institutions*, 5: *La foire* (Brussels, 1953), pp. 97-145; in English trans. as 'The Fairs of Champagne,' in Rondo Cameron, ed., *Essays in French Economic History* (Homewood, Ill., 1970), pp. 42-63; for the Flemish and early Brabantine fairs, see J. A. Van Houtte, 'Les foires dans la Belqique ancienne', *Recueils de la Société Jean Bodin*, 5: *La foire*, pp. 175-207.

[14] Paul R. Milgrom, Douglass C. North, and Barry R. Weingast, 'The Role of Institutions in the Revival of Trade: The Law Merchant, Private Judges, and the Champagne Fairs', *Economic & Politics*, 2:1 (March 1990), 1-23.

such a 'reputation system' of personal bonds be transferred and transmitted to large-scale, long-distance, multi-lateral trades with so many participants, few of whom would have known each other?

In the North-Milgrom-Weingast model, for the Commercial Revolution era itself, the most efficient commercial institution, with the lowest transaction costs, was the evolving international Law Merchant, and more specifically the law-merchant courts to be found in the international fairs. The function of such courts was by no means merely the adjudication of disputes but more importantly the low-cost communication of vital information to the entire international community of merchants trading there. Such information was derived from suits held before such courts, on both the good and bad behaviour of merchants, and then transmitted via their own national mercantile guilds and consulates elsewhere, to those who would never have the opportunity of previously encountering such miscreant, untrustworthy merchants in person. Hence 'transferable reputations for honesty can serve as an adequate bond for honest behaviour *if members of the trading community can be kept informed about each other's past behaviour*.' Certain transaction costs were necessarily involved in this transmission: (1) in inculcating the proper response of all members of the community to behave honestly, lest they themselves lose customers, clients, and contracts; but more important (2) in ensuring that they be kept properly informed about the decisions of law merchant courts, to honour and respect those decisions concerning the behaviour of their colleagues, and thus to boycott or ostracise those found guilty of cheating and of otherwise reneging on contracts or informal promises. Thus, in the absence of formal state-authorized sanctions, they were required to punish the miscreants by excluding them from all commerce.

While most medieval fairs might have claimed to offer similar risk-averting and cost-saving measures for conducting commerce, the Champagne Fairs, in their view, enjoyed the greatest advantages of them all: in providing better organized and better trained law-merchants courts; in offering more efficient mechanisms for excluding miscreants and enforcing contracts; by attracting such a large and varied international community of merchants with their institutions (guilds, consulates, etc) for the international transmission of crucial information; and above all, by supplying those requisite 'economies of scope and scale that smaller fairs could not offer', at such low unit transaction costs. Such considerations, obviously, are more important

than mere considerations of scale-economies in conducting trade and in effecting the associated financial transactions. Much of their intriguing article is devoted to a game-theoretic analysis of a repeated 'Prisoner's Dilemma' game to prove their points that, in almost all circumstances, it paid merchants to be honest while trading at fairs equipped with law-merchant courts that supervised such commercial activities.[15]

North and his two co-authors, in writing a very succinct game-theoretical article, evidently did not wish to bother their readers with trivial historical details about the ways in which the Champagne and other Fairs actually functioned in medieval Europe. Nevertheless, the fruits of research from more mundane narrative historians may be cited to substantiate key components of their model: in particular, those offered by Robert-Henri Bautier, one of the most renowned and best informed historians of the Champagne Fairs and of their international trade in textiles.[16] He has effectively demonstrated that these Fairs's great success did not rest so much on their location -- for other potential fair towns lay on the same or even better overland routes between the northwestern textile-producing towns and their key Mediterranean markets. Instead, their prosperity depended on the ability of the counts of Champagne to provide and guarantee all merchants, and their mercantile organisations, personal security and security of their property rights, not only in their commerce at the Fairs but also, with full royal support (from 1209), in travelling to and from Champagne.[17] In particular, the counts sought to ensure that all commercial contracts signed at the Fairs were judicially valid throughout western Christendom. They empowered the Fair Wardens to 'outlaw' defaulting merchants, and even their fellow citizens, when judicial institutions in their own towns failed to compel them to honour

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[15] The problems of cheating and shirking seem to be central to modern game theory. They also refer the reader to the following excellent article, to illustrate some of their key points, in a very different place and time, Muslim North Africa during the 11th century: Avner Greif, 'Reputation and Coalitions in Medieval Trade: Evidence on the Maghribi Traders', *Journal of Economic History*, 49:4 (December 1989), 857-82.

[16] Bautier, 'Foires de Champagne' (n. 13), pp. 97-145; Bautier 'Fairs of Champagne' (n. 13), pp. 42-63.

[17] *Ibid.:* on several occasions (specifically in 1227 and 1262) the counts even intervened to ensure the presence at the fairs of French or Italian merchants who had been subjected to papal interdicts. See also Henri Dubois, 'Les institutions des foires médiévales: protection ou exploitation du commerce', and Pierre Jeannin, 'La diffusion de l'information', both in Simonetta Cavaciocchi, ed., *Fiere e mercati nella integrazione delle economie europee, secc. XIII - XVIII*, Istituto internazionale di Storia Economica "F. Datini", Atti delle Settimane di Studi e altri convegni no. 32 (Florence, 2001).

debts contracted at the Fairs. The enforcement of mercantile security and mercantile contracts does not seem to have suffered any impairment from Champagne's absorption into the royal domain in 1273, on the death of Count Henry III without a male heir.[18] Indeed, one may well contend that the continued success of the Fairs depended much more broadly upon the general peace and security of this ongoing Commercial Revolution era.

The 'Decline of the Champagne Fairs': Institutional and Financial Models

In an ever changing and developing world, however, few such institutional advantages could possibly survive into the early-modern era -- or so most historians have contended. In the conclusion of their article, North-Milgrom-Weingast contend that the Champagne Fairs, and by implication, the fair-system itself, were eventually bound to be replaced by a system of state enforcement, i.e. with the emerging centralized and more powerful monarchical or state governments, 'typically in the late middle ages'. In their view, such state enforcement of commercial contracts and codes of conduct became more efficient, with lower transaction costs, because the state 'could seize the property of individuals who resisted paying judgements, or put them in jail'; and thus, 'if judgements could be enforced in this way, then, in principle, the costs of keeping merchants informed about another's past behaviour could be saved.'[19]

Over the past century, many historians have propounded similar views to the effect that the Champagne Fairs were doomed to disappear, with the inexorable progress of European economic development, in particular with the concomitant technological and institutional changes that nullified their prior advantages. Thus if the Fairs's chief prior advantage, in a more primitive era of economic development, had been to canalize and coalesce otherwise small and scattered trickles of long-distance trade, especially in overland continental trade, into a few large and fasting flowing Fair-oriented rivers, then surely the growth of much bigger and better organized, more commercialized towns and cities would offer even greater

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[18] On seizing Champagne, Philip III also arranged the marriage of the heiress Joan with his own son, the future Philip IV the Fair (1285-1314), who subsequently did damage the Fairs, with both the warfare and especially the post-1295 coinage debasements, discussed below. See Edouard Fournial, *Histoire monétaire de l'occident médiéval* (Paris, 1970), pp. 112-39.

[19] Milgrom-North-Weingast, 'Role of Institutions' (n. 14), pp. 18-21.

advantages for conducting international trade. As one of the first scholars to propose such a thesis, the famous Max Weber contended that international fairs, such as the Champagne Fairs, became redundant with the development of the 'consignment system' in the export trades by which 'goods are sent abroad on a speculation... to a third party, the consignor, who must market them according to the directions of the consignor'. Consequently, 'consignor and consignee do not meet as the earlier traders did, at the fair'. No evidence was offered to substantiate such views, delivered in a series of posthumously-published lectures -- not even a hint of details that would allow us to determine when, where, how, and why such a dramatic transition occurred.[20]

Such specific determinants, however, may be found in the publications of Raymond De Roover, by far the most influential modern proponent of these 'inexorable progress' theories. According to his famous 'Commercial Revolution' thesis, the great Italian merchant-banking companies, who had dominated the commerce of the Fairs, effected two major and institutional innovations, both of which, by early fourteenth century, made the commerce and financial transactions of these Fairs redundant. They may be viewed through the currently fashionable lens of the principal-agent model in theoretical Economics.[21]

The first and most monumental change was the shift from itinerant-fair oriented trade to what he called 'sedentary' trade, as these firms established a network of branch offices with permanently stationed local *fattore* agents. Empowered with a much greater stock of more reliable market information, and perhaps with advantages of asymmetrical knowledge, certainly in relation to still itinerant mercantile rivals, they could far more effectively, and with much lower financial costs, transact commerce between the various branch offices and with their home offices in Italy, especially for the export of northern textiles to the Mediterranean

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[20] See Max Weber, *General Economic History*, translated by Frank H. Knight, from the original German edition of 1923 (New York, 1961), pp. 168-69, 218-19. See also Stephan R. Epstein, 'Regional Fairs, Institutional Innovation, and Economic Growth in Late-Medieval Europe', *Economic History Review*, 2nd ser., 47:3 (August 1994), 459-82, especially 459-62 (to which I owe the Weber reference).

[21] For the following, see: Raymond De Roover, 'The Commercial Revolution of the Thirteenth Century', *Bulletin of the Business Historical Society*, 16 (1942), 34-39; reprinted in F.C. Lane and Jelle Riemersma, eds., *Enterprise and Secular Change* (New York, 1953), pp. 80-85; and De Roover, 'The Organization of Trade,' in M.M. Postan and E.E. Rich, eds., *Cambridge Economic History of Europe,* vol. III (n. 13), pp. 42-118. See the next note.

and the import of southern and Asian luxury goods to the north-west Europe.

Second, and as a concomitant part of such principal-agent relationships, these Italian merchant banking houses soon adopted the more 'advanced' bill-of-exchange to displace the old fashioned, cumbersome, and very costly payment mechanism known as the *instrumentum ex causa cambii*.[22] Because this *instrumentum* had been a formal bond of indebtedness, as both a loan or investment contract and a financial- transfer mechanism, it had to be notarized to have a valid standing in law courts. Furthermore, both because it was a fair-oriented three-party document, and because otherwise the legal standing of agents abroad was not secure, its use required the personal presence of the second principal, the debtor (or his authorized, seal-bearing attorney), to effect both the transaction of the fair commerce and the fair transfer-payments. Subsequently, by the late thirteenth-century, the Italians had devised its far simpler successor in the form of the 'letter of payment' or *cambium*, now better known as the bill-of-exchange. Although its use did involve some additional transaction costs, on a net-basis it was still the much cheaper financial instrument. Instead of being a formal notarized and bonded obligation to pay, the *cambium* was instead a simple holograph document commanding payment: in effect a letter by which the principal merchant in city A (the *taker*), having received investment funds or funds for remittance from another principal (the *deliverer*), instructed his resident *payer* agent in city B abroad to make payment on his behalf to the *payee* agent of that

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[22] Such bills were also known as *cambium*, *lettera di cambio* or *di pagamento, lettre de change, Wechselbrief, wisselbrief*. See Raymond De Roover, 'Money, Banking, and Credit in Medieval Bruges,' *Journal of Economic History*, 2 (1942), *Supplement,* 52-65; De Roover, 'Le contrat de change depuis la fin du treizième siècle jusqu'au début du dix-septième', *Revue belge de philologie et d'histoire*, 25 (1946-47), 111-128; De Roover, *Money, Banking and Credit in Mediaeval Bruges: Italian Merchant-Bankers, Lombards, and Money Changers: A Study in the Origins of Banking* (Cambridge, MA, 1948); De Roover, *L'evolution de la lettre de change, XIVe-XVIIIe siècles* (Paris, 1953); De Roover, 'New Interpretations of the History of Banking', *Journal of World History*, 2 (1954), 38-76; reprinted in Julius Kirshner, ed., *Business, Banking, and Economic Thought in Late Medieval and Early Modern Europe: Selected Studies of Raymond de Roover* (Chicago, 1974), pp. 200-238. See also John Munro, 'Bullionism and the Bill of Exchange in England, 1272-1663: A Study in Monetary Management and Popular Prejudice,' in Center for Medieval and Renaissance Studies of UCLA, ed., *The Dawn of Modern Banking* (New Haven and London, 1979), pp. 169-239; reprinted in John Munro, *Bullion Flows and Monetary Policies in England and the Low Countries, 1350 - 1500,* Variorum Collected Studies CS 355 (Aldershot, 1992); and also 'The Medieval and Early Modern Bill of Exchange': at http://www.economics.utoronto.ca/munro5/

merchant from whom he had received the original funds (i.e. the *deliverer*).[23]

In De Roover's view, the spread and final victory of the bill-of-exchange necessarily depended upon the concomitant victory of the 'sedentary-commercial' system, with a well organized network of branch offices run by resident *fattore*, over itinerant, fair-oriented forms of commerce. In fact, however, a closer examination of late-medieval bills of exchange, especially those in the Datini archives, indicates that many such principal-agent bills did not involve, or necessarily involve, such mercantile branch offices. For often the agents for both parties in city B were independent merchant bankers, who maintained deposit accounts on behalf of these and many other clients. Hence, one may argue, as many canon lawyers did, that the *cambium* was not a true loan contract, in the defined sense of the Roman-Law *mutuum*: that it was instead an investment contract by which the *deliverer* was, in effect, purchasing a claim on another merchant's bank account assets in that foreign city B. Consequently, if no loan was involved, no usury was present. In De Roover's view, however, the *cambium* was a loan contract, but one that had the major advantage of 'disguising' the true interest rate within the exchange rate, which was normally 'raised' in favour of the lender-*deliverer*, on both the original outgoing *cambium* (from A to B) and the return or incoming *recambium* (from B back to A, to remit the funds to the original *deliverer*). Those engaged in such bills-of-exchange transactions could still escape formal charges of usury so long as the exchange rate and thus the implicit interest rate on the *recambium* was not predetermined – the crucial test, along with the presence of a genuine

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[23] See example of bills-of-exchange, from the Datini archives in Prato, involving Italian merchants in Bruges and Barcelona, in 1399-1400: in De Roover, *Money, Banking and Credit in Mediaeval Bruges,* pp. 56, 72. Typically, a bill-of-exchange transaction involved four, rather than three, parties: two principals in one city A and their two agents in the other, foreign city B. In city A, the first merchant 'lends', as the *deliverer* (*dattore*), a specified sum to another merchant, known as the *taker* (*prenditor*e or *traente)*, or invests in his foreign trade venture, receiving in return not a bond but a copy of the aforesaid *cambium*, by which the *taker* instructs his agent in B to make payment, on his behalf, to the *deliverer's* agent [technically: he 'draws for payment upon' his agent in city B]. In City B, the *deliverer's* banking agent, serving as the *payee (beneficiario),* receives a copy of the *cambium* and presents it for 'acceptance' (not yet for payment) to the *taker's* agent, the *payer* or *drawee* (*pagatore* or *trattario)*, who writes his 'acceptance', with the date, on the back of the bill (e.g. *Acettata a di 11 di gennaio 1399*), thus signalling his obligation to make the required payment, on the due or maturity date, to the *deliverer's* agent, the said *payee*. See the previous note.

mutuum contract, for evidence of usury.[24]

Whatever one's view of this debate about the true nature of the later-medieval bill-of-exchange, quite clearly De Roover was correct, at least, in implying that the net transaction costs involved in using the bill-of-exchange both for investments in trade (or for providing commercial loans) and for remitting funds between cities were much lower than those for the fair-oriented *instrumentum ex causa cambii.* To be sure, both the *instrumentum ex causa cambii* and then the subsequent *cambium* had provided an enormous savings in commercial-financial transaction costs in greatly reducing, if not eliminating, international payments in transported precious metals: inherently so high cost, because of the risks of both private theft and state confiscations, especially with the increased insecurity and the related flourishing of *bullionist* philosophies from the later thirteenth century.[25]

But the *instrumentum* remained and could not be disguised as anything but a formal loan contract: a *mutuum* in whose exchange rates any competent canon lawyer would detect the presence of *usury* (i.e. pure interest). The once commonplace view that the canonical usury doctrine was not taken seriously by medieval merchants is one that cannot be sustained, especially in view of the considerable research that demonstrates the significant intensification of both the ecclesiastical and secular campaigns against usury from the early

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[24] In a *mutuum* contract the borrower obliged himself by a true bond to repay the exact sum of the principal lent to him, and the lender was forbidden to exact more than the principal sum, for in such a contract the ownership of the capital sum so lent passed from the lender to the borrower; and the lender thus could not exact any of the fruits of that ownership, as an investor in a partnership or in a *commenda* contract would be entitled to do, by virtue of purchasing an *equity* or ownership share in the venture or enterprise. If, in a set of bill of exchanges, the exchange rate on the *recambium* was determined at the same time as the rate on the original *cambium*, then, in the eyes of the Church, it became a *mutuum* loan contract, and such predetermined exchange rates were indeed deemed to include *usury* or *interesse*. See in particular, James A. Brundage, 'Usury,' in Joseph R. Strayer, et al, eds., *Dictionary of the Middle Ages*, 13 vols. (New York, 1982-89), Vol. 12 (1989), pp. 335-39; John T. Noonan, *The Scholastic Analysis of Usury* (Cambridge, Mass., 1957), Part One: chapters I-III, and V, pp. 11-81, 100-33; T.P. McLaughlin, 'The Teaching of the Canonists on Usury (XII, XIII and XIV Centuries),' *Medieval Studies*, 1 (1939), 81-147; 2 (1940), 1-22.

[25] See John Munro, 'English "Backwardness" and Financial Innovations in Commerce with the Low Countries, 14th to 16th centuries,' in Peter Stabel, Bruno Blondé, and Anke Greve, eds., *International Trade in the Low Countries (14th - 16th Centuries): Merchants, Organisation, Infrastructure*, Studies in Urban, Social, Economic, and Political History of the Medieval and Early Modern Low Countries no. 10 (Leuven-Apeldoorn, 2000), pp. 105-67; Munro, 'Bullionism and the Bill of Exchange in England' (n. 22), pp. 169-239.

thirteenth century, the era of the Fairs, and culminating in the later Middle Ages. We should also not forget the fundamentally religious character of the fairs themselves, especially in that all of the words for fairs refer to holy days (holidays), religious festivals, celebrations, or masses: *feria(e), fiere, ferias, foires, Messen, kermis-se*.[26] While the usury doctrine did not prevent the use of loan contracts in financing trade and industry, their use certainly did involve significant impediments and thus much higher transaction costs than did licit investment contracts, because of the inherent risks that a 'usurious' merchant would encounter: certainly in some degree of moral ostracism; or worse, in punishments inflicted by both ecclesiastical and secular courts; or at least the renunciation of usurious contracts that could not be upheld in courts of law.[27]

Conversely, however, and for this very same reason, the simple holograph bill-of-exchange, and similar, if more loan-oriented, commercial contracts, such as the *letter obligatory* (which later came to be known as the *promissory note*) had no standing in any courts of law, including law-merchant courts, in this era, certainly not in the late thirteenth, early-fourteenth centuries. What courts did require as unassailable evidence of an obligation to make payment, or repayments, was the *bond,* and in particular formally notarized bonds, such as the *instrumentum ex causa cambii*, or its much longer-lasting English counterpart, the

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[26] Cf. Peter Hartmann, 'Les privilèges, droit de marché, règlements des foires et marchés à l'époque moderne', in Simonetta Cavaciocchi, ed., *Fiere e mercati nella integrazione delle economie europee* (n. 17), citing *Encyclopédie methodique* (Paris, 1786): 'le mot foire vient de *forum*, place publique, a été dans son origine synonime de celui de marché...'. But this quite valid citation does not contradict the religious significance that was attached to European fairs and the words for them. See *fere, feriae, festus*: in Charlton Lewis and Charles Short, *A Latin Dictionary* (Oxford, 1996: 1st edn. 1879); R. E. Latham, *Revised Medieval Latin Word-List from British and Irish Sources* (Oxford, 1965), pp. 188-99.

[27] See in particular Raymond De Roover, 'The Scholastics, Usury, and Foreign Exchange,' *Business History Review*, 41 (1967), 257-71; De Roover, 'The Scholastic Attitude toward Trade and Entrepreneurship,' *Explorations in Entrepreneurial History*, 2nd ser. 1 (1963), 76-87; and Julius Kirshner, 'Raymond de Roover on Scholastic Economic Thought,' reprinted in: Julius Kirshner, ed., *Business, Banking, and Economic Thought in Late Medieval and Early Modern Europe: Selected Studies of Raymond de Roover* (Chicago, 1974); John F. McGovern, 'The Rise of New Economic Attitudes in Canon and Civil Law, A.D. 1200-1550,' *The Jurist*, 32 (1972), 39-50; Jacques Le Goff, 'The Usurer and Purgatory,' in Center for Medieval and Renaissance Studies, UCLA, ed., *The Dawn of Modern Banking* (New Haven, 1979), pp. 25-52; Jacques Le Goff, *Your Money or Your Life: Economy and Religion in the Middle Ages*, trans. by Patricia Ranum (New York, 1988); Francesco L. Galassi, 'Buying a Passport to Heaven: Usury, Restitution, and the Merchants of Medieval Genoa,' *Religion*, 22 (October 1992), 313-26; Lawrin Armstrong, 'The Politics of Usury in Trecento Florence: the *Questio de Monte* of Francesco da Empoli', *Mediaeval Studies*, 61 (1999), 1-44; and Hans-Jörg Gilomen, 'Wucher und Wirtschaft im Mittelalter', *Historische Zeitschrift*, 250:2 (April 1990), 265-301, esp. pp. 265-70, 293-301.

recognizance, whose repayment provisions were encoded in Parliamentary law, from as early as the Statute of Acton Burnell (*Statutum de Mercatoribus*) of 1283; and in the subsequent decisions of Common Law Courts.[28] Therefore the risk of renunciation or of non-payment of bills-of-exchange and similar holograph bills -- as 'dishonoured bills' – was far higher, all the more so if the bills had been transferred in payment for other transactions to third parties, as 'bearer bills'. That was a severe problem that would not begin to be addressed until the 1430s, and was not fully resolved until the sixteenth century, under circumstances involving both law-merchant courts and, perhaps surprisingly, fairs.[29]

The 'Decline of the Champagne Fairs': the new maritime routes from Italy to north-west Europe

For most medieval economic historians, however, the chief explanation for the disappearance of the Champagne Fairs, and by implication at least, of all inland-oriented international fairs, is to be found in an even more important technological revolution, in shipping and navigation: i.e. the establishment of a direct sea route from the Italian maritime republics to the chief ports of northern Europe, especially to Bruges, Southampton, and London.[30] If the Genoese and the Majorcans were evidently the first to do so, from about 1274, a regular, more or less continuous galley service between the major Italian maritime republics and the

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[28] *Statutum de Mercatoribus*, 11 Edward I, 12 October 1283: in Great Britain, Record Commission, *Statutes of the Realm,* 6 vols. (London, 1810-22), vol. I, pp. 53-54. See John Munro, 'The International Law Merchant and the Evolution of Negotiable Credit in Late-Medieval England and the Low Countries,' in Dino Puncuh, ed., *Banchi pubblici, banchi privati e monti di pietà nell'Europa preindustriale: amministrazione, tecniche operative e ruoli economici*, Atti della Società Ligure di Storia Patria, Nouva Serie, Vol. XXXI (Genoa: Società Ligure di Storia Patria, 1991), pp. 49-80; reprinted in John Munro, *Textiles, Towns, and Trade: Essays in the Economic History of Late-Medieval England and the Low Countries*, Variorum Collected Studies CS 442 (Aldershot, 1994); Michael Postan, 'Private Financial Instruments in Medieval England,' *Vierteljahrschrift für Sozial- und Wirtschaftsgeschichte*, 23 (1930), 26-75; reprinted in Michael Postan, *Medieval Trade and Finance* (Cambridge, 1973), pp. 28-64.

[29] See below, pp. 32-36, for the final section of this paper.

[30] Renée Doehaerd, 'Les galères génoises dans la Manche et la Mer du Nord à la fin du XIIIe siècle et au début du XIVe siècle,' *Bulletin de l'Institut historique belge de Rome,* 19 (1938), 5-76; Georges Yver, *Le commerce et les marchands dans l'Italie mériodoniale au XIIIe et au XIVe siècle* (Paris, 1903); Alfons Schaube, 'Die Anfänge der venezianischen Galeerenfahrten nach der Nordsee,' *Historische Zeitschrift*, 3rd series, 101 (1908), 28-89; R. Cessi, 'Le relazioni commerciali tra Venezia e le Fiandre nel secolo XIV,' *Nuovo Archivio Veneto*, new series, 27 (1914); E.H. Byrne, *Genoese Shipping in the Twelfth and Thirteenth Centuries* (Cambridge, MA, 1930); Doris Stoeckly, *Le système de l'Incanto des galées du marché à Venise, fin XIIIe-milieu XVe siècle* (Leiden-Cologne-New York, 1995), an excellent but not readily available study.

northern ports of Bruges, then Southampton, and London was not established until after 1317; and then the Venetians, after founding their Bruges consulate in 1322, came to dominate that northern galley trade.[31]

The Bautier-Verlinden 'Textile Industrialization' Model and the International Trade in Textiles

For both R.H. Bautier and Charles Verlinden, the truly decisive factor, though one in their view clearly related to the establishment of the Italian galley routes, was the 'industrialization of Italy'.[32] Its most important aspect was the establishment of high-quality, luxury-oriented woollen cloth industries, in Florence, and in a considerable number of other Tuscan and Lombard towns. That industry became heavily dependent on imported English wools, then by far the world's finest; and most historians would naturally assume that the cheapest, safest way of importing them from far distant England was by galleys. Not before the early fifteenth century, furthermore, would the primacy of English wools begin to be seriously challenged, and from a much closer source: Spanish *merino* wools, whose use, however, was not so readily accepted in this era by all Italian (and certainly not by Netherlander) textile industries.[33]

The problem with all of these plausible and fanciful 'progress-oriented' theses to explain the decline of the Champagne Fairs is that they all pertain to developments that came long after the Fairs's decadence

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[31] See the previous note; and also Armando Sapori, *Le marchand italien au moyen âge*, École Pratique des Hautes Études, VIe section: Affaires et gens d'affaires (Paris, 1952), part IV: 'Routes et transports,' pp. 64-74; Robert Lopez, *Studi sull'economia genovese nel medio evo* (Turin, 1936); and Lopez, 'The Trade of Medieval Europe: The South' (n. 2), pp. 374-479.

[32] Verlinden, 'Markets and Fairs' (n. 13), pp. 133-34; Bautier, 'Fairs of Champagne' (n. 13), pp. 61-63.

[33] See Robert Lopez, 'The Origin of the Merino Sheep,' *The Joshua Starr Memorial Volume: Studies in History and Philology* (a publication of *Jewish Social Studies* no. 5, New York, 1953), pp. 161-68; Federigo Melis, 'La lana della Spagna mediterranea e della Barberia occidentale nei secoli XIV-XV,' in Marco Spallanzani, ed., *La lana come materia prima: I fenomeni della sua produzione e circolazione nei secoli XIII-XVII* (Florence, 1974), pp. 241-51; Carla Rahn Phillips and William D. Phillips, *Spain's Golden Fleece: Wool Production and the Wool Trade from the Middle Ages to the Nineteenth Century* (Baltimore and London, 1997); but see also Hidetoshi Hoshino, *L'arte della lana in Firenze nel basso medioevo:il commercio della lana e il mercato dei panni fiorentini nei secoli XIII-XV* (Florence, 1980), for the various wools in the Florentine cloth industry in the 14th and 15th centuries, including domestic Italian wools. Spanish *merino* wools had certainly become predominant in the Florentine cloth industry, as well as in those of the Low Countries, by the 16th century. See Raymond De Roover, 'A Florentine Firm of Cloth Manufacturers: Management of a Sixteenth-Century Business,' *Speculum*, 16 (1941), 3-33; reprinted in his *Business Banking, and Economic Thought* (n. 22), pp. 85-118.

had been exposed in full view.[34] Therefore, they should instead be considered more as consequences than as prior causes of their decline; or at least the indirect consequences of the forces that had led to their decline, by the very early fourteenth century. Furthermore, the term for the final explanation given for the Fair's decline, Bautier-Verlinden's 'industrialization of Italy', is itself very misleading, and especially so in the sphere of textiles. For almost two centuries, from the twelfth to early fourteenth, Florence had achieved great fame for its Arte di Calimala, a mercantile-industrial organization that was based upon on importing, dyeing, finishing and then re-exporting Franco-Flemish woollens. Furthermore, during this same era, Florence and many other Italian towns had experienced an impressive industrial growth in several flourishing textile industries that had exported a wide variety cheap and light worsted or semi-worsted fabrics to markets in the Mediterranean. Marketed with such names as *saia, saia cotonata, stametto, trafilato, taccolino, tritana* (cf. Flemish *tiretaines*), they ranged in value from about 10 to 30 percent, at the most, of the Franco-Flemish woollens imported by the Arte di Calimala.[35] Of even greater importance were *fustians,* equally cheap and

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[34] Bautier, evidently supported in this thesis by Verlinden, added yet another, final monetary factor: the vicissitudes of bimetallism, with radical changes in the gold:silver ratios, 'which completely disorganized the balances of the [Italian gold-based] companies whose activity rested on foreign exchange sales'. Indeed, earlier Bautier had established the point that 'the main purpose of the fairs of Champagne was the provision of specie for the Italian purchases of French and Flemish draperies'. See Bautier, 'Fairs of Champagne' (n. 13), pp. 62- 63; Cf. also Verlinden, 'Markets and Fairs' (n. 13), pp. 133-34. But this thesis also fails to provide an adequate explanation of the Fairs's decline for the same reason: these monetary changes came well after the onset of the Fairs's decline. Indeed the bimetallic monetary perturbations, which led to what Frederic Lane called the 'first infidelities of the Venetian lire,' can be the most precisely dated: 1330-32, after which the bimetallic ratio (at Venice) plunged from a high of 14.2:1 to just 9.4:1 by 1350, thus radically undermining the assets of all gold-based commercial firms. Based upon the bimetallic ratios cited in Peter Spufford, *Handbook of Medieval Exchange* (London, 1986), Table II, p. lxiii; and Peter Spufford, *Money and Its Use in Medieval Europe* (Cambridge, 1988), pp. 271-82, with Graph II, p. 272; and Table 7, p. 354. See also Frederic Lane, 'The First Infidelities of the Venetian Lire', in Harry Miskimin, David Herlihy, and A. L. Udovitch, eds., *The Medieval City* (New Haven and London, 1977), pp. 54-55. He comments that 'gold coins, which had been rising generally [in value, relative to those of silver], took a sharp downward turn in Italy in 1326-32.' Spufford, however, states that 1328 was the year in which gold values peaked; but the drop is not apparent until 1330. They both ascribe this dramatic change in the bimetallic ratio to sudden increases of both African 'Sudanese' and Hungarian gold supplies on west European markets.

[35] See Patrick Chorley, 'The Cloth Exports of Flanders and Northern France During the Thirteenth Century: A Luxury Trade?' *Economic History Review*, 2nd ser. 40 (1987), 349-79; Hidetoshi Hoshino , 'Per la storia dell'arte della lana in Firenze nel trecento e nel quattrocento: un riesame,' *Annuario dell'Istituto giapponese di Roma*, 10 (1972-73); Hidetoshi Hoshino, *L'arte della lana in Firenze nel basso medioevo:il commercio della lana e il mercato dei panni fiorentini nei secoli XIII-XV* (Florence, 1980); Hidetoshi Hoshino, 'The Rise of the Florentine Woollen Industry in the Fourteenth Century,' in N.B. Harte and K.G.

light linen-cotton based fabrics, whose production, chiefly in Lombardy, and export sales abroad enjoyed a spectacular expansion during the twelfth and thirteenth centuries.[36]

The Great Medieval Turning-Point: the Warfare of c.1290-1340 and Rising Transaction Costs

What Bautier and Verlinden so misleadingly labelled 'industrialization' was in fact a dramatic industrial transformation that must be explained as the rational response to severe market adversities, with sharply rising transportation and transaction costs. These, in turn, were chiefly the deleterious consequences of a spreading stain of continuous, chronic, ever more disruptive and costly series of wars and other conflicts throughout the Mediterranean basin and western Europe, from the 1290s to the 1340s, and then merging into the better known and even more destructive era of the Hundred Years' War (1337-1453) and related wars in western Europe. Having extensively analysed this warfare and its consequences elsewhere, I need do no more here than point out the highlights. In the eastern Mediterranean, that warfare had commenced in 1291 with the Mamluk conquest of Acre and the Latin Kingdom of Jerusalem, terminating a vital European connection with the Near East and Asia; and worse, that conquest led to both papal and secular trade bans with the Muslims, which, while not totally severing trade, certainly raised the transaction costs of conducting that vital commerce. Furthermore, the loss of these crucial Palestinian ports almost immediately led to a bitter war between Venice and Genoa (1291-99) for control over alternative trade routes to Asia via the Black Sea. Barely had that conflict ended when, in 1303, the Ottoman Turks began their relentless conquest of Asia Minor and, subsequently, parts of Greece and the Balkans. In turn that was followed by Mongol attacks against the Italian's Black Sea colonies; by anarchy in the Mongol Khanate in Persia and the Caucasus; and by Mamluk conquests in Lesser Armenia (Cilicia), effectively closing off the last alternative route and

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Ponting, eds., *Cloth and Clothing in Medieval Europe* (London, 1983), pp. 184-204; John H. Munro, 'The Origins of the English 'New Draperies': The Resurrection of an Old Flemish Industry, 1270 - 1570,' in Negley Harte, ed., *The New Draperies in the Low Countries and England, 1300 - 1800*, Pasold Studies in Textile History no. 10 (Oxford, 1997), pp. 35-127; Armando Sapori, *Una compagnia di calimala ai primi del trecento*, Biblioteca storica toscana, Vol. 7 (Florence, 1932). See also Table 3, below, p. 43, for the relative prices of similar cheap, light textiles imported from north-western Europe in the early 14th century.

[36] Maureen Mazzaoui, *The Italian Cotton Industry in the Later Middle Ages, 1100 - 1600* (Cambridge, 1981), pp. 18-69.

subjecting the Christian West to a virtual Mamluk monopoly over the Asian trades, at Alexandria (the *karimis* cartel), certainly by 1344.[37]

In the Muslim reaches of the western Mediterranean, equally destructive strife had commenced in 1291, when the aggressively expanding Berber Marinid state became embroiled in wars with Castile, Aragon, and Muslim Granada for control of the Iberian peninsula, a vicious struggle prolonged by military strife between these anti-Marinid allies, until the Spanish Christian victory at Rio Salado, in 1340, dispelled that Berber-Marinid threat forever.[38]

Perhaps even worse for western trade was an even earlier related conflict, the infamous Wars of the Sicilian Vespers, commencing in 1282, and soon embroiling not only Sicily but Naples, the Papacy and its allies, the Angevin realms of southern France, and Catalonia-Aragon. The ensuing papal Peace of Caltobelleta in 1302 served only to unleash over ten thousand Catalan mercenaries: who, in being sent east to defend the Byzantine Empire against the Ottoman Turks, ended up ravaging parts of Anatolia, Macedonia, Thrace, and Greece (1303-12), while a smaller group plundered the North African coasts for many years with their fleets of corsairs. In Italy itself, Imperial German armies took advantage of this Peace to launch an invasion of Lombardy and Tuscany, which then provoked a resumption of the former intra-Italian wars in the

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[37] Italian trade had become very important in these Mongol-ruled areas; and this warfare marked the initial crumbling of the famed 'Pax Mongolica'. In Persia, the end of the Ilkhanid dynasty in 1335 was followed by a 'long period of anarchy'. Western merchants also utilized Crete, Cyprus, and Lajazzo (Cilicia or 'Lesser Armenia') as intermediaries to conduct trade with the Muslim Levant, but paid a higher price in doing so. Lajazzo was conquered by the Mamluks in 1347. See Wilhelm von Heyd, *Histoire du commerce du Levant au moyen-âge*, 2 vols. (Leipzig, 1923), vol. 1, pp. 470-604; vol. 2, pp. 64-140, 156-215; Eliyahu Ashtor, 'Observations on Venetian Trade in the Levant in the XIVth Century,' *Journal of European Economic History*, 5 (1976), 533-86; Eliyahu Ashtor, *The Levant Trade in the Later Middle Ages* (Princeton, 1983), pp. 54-86; David Abulafia, 'Asia, Africa, and the Trade of Medieval Europe,' in M. M. Postan and Edward Miller, eds., *Cambridge Economic History of Europe*, Vol. II: *Trade and Industry in the Middle Ages*, 2nd edn. (Cambridge, 1987), pp. 459-62; David Abulafia, *Commerce and Conquest in the Mediterranean, 1100 - 1500*, Variorum Collected Studies series 410 (Aldershot, 1993).

[38] See Charles-Emmanuel Dufourcq, *L'Espagne catalane et le Maghrib aux XIII^e et XIV^e siècles: de la bataille de Las Navas de Tolosa (1212) à l'avènement du sultan mérinide Abou-l-Hasan (1331)* (Paris, 1966), pp. 193-587; Charles-Emmanuel Dufourcq and Jean Gautier Dalché, *Histoire économique et sociale de l'Espagne chrétienne au moyen âge* (Paris, 1976); Abdallah Laroui, *The History of the Maghrib: An Interpretative Essay*, trans. by Ralph Manheim (Princeton, 1977), pp. 193-218; and John H. Pryor, 'The Naval Battles of Roger de Lauria,' *Journal of Medieval History*, 9 (1983), 179-216.

form of the even more ferocious Guelf-Ghibelline Wars (Papal-Imperial, 1313-43) and then civil war within southern Habsburg Germany itself. Such wars devastated Italy in particular for the next three decades, with almost continuous foreign intervention by Catalan, French, German, and Hungarian armies, along with constant devastations from mercenary Free Companies of disbanded soldiers, whose depredations continued long after the wars had formally ended. Nor had north-western Europe been spared such conflicts. For again, from the 1290s, the Anglo-French, Anglo-Scottish, and Franco-Flemish wars (to 1319), which then led into the Flemish civil wars (1323-28), certainly did produce some sporadic disruptions in the commerce of this entire region, especially in the Low Countries and along the routes leading to the Champagne Fairs in northeastern France.

The most harmful consequences of these overlapping, entangling sets of wars and conflicts were by no means the destruction that they wrought or even the physical impediments imposed on normal trade routes. More disastrous were the steadily rising transport and general transaction costs that ensued from their various ancillary consequences: from periodic but ever increasing trade embargoes, from ever more costly licences to transact trade with enemies (especially those in the Muslim-dominated Mediterranean ports), from increased tolls and taxes on trade, and from other fiscal and monetary policies, in particular from coinage debasements, adopted and long pursued to finance warfare, defence, and ever more costly modes of protection, on land and at sea. The abundant and very detailed statistical evidence on such rising transport and transaction costs in international trade, from the 1290s into the fifteenth century, demonstrating a doubling or more in even maritime freight rates, are provided in several of my publications on these topics.[39]

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[39] John Munro, 'Industrial Transformations in the North-West European Textile Trades, c. 1290 - c. 1340: Economic Progress or Economic Crisis?' in Bruce M. S. Campbell, ed., *Before the Black Death: Studies in the 'Crisis' of the Early Fourteenth Century* (Manchester and New York, 1991), pp. 110 - 48; reprinted in John Munro, *Textiles, Towns, and Trade* (n. 28); Munro, 'The Origins of the New Draperies' (n. 35), pp. 35-127; Van der Wee and Peeters, 'Modèle' (n. 10), pp. 1-26; North and Thomas, *Rise of the Western World* (n. 6), pp. 78-80; Robert Lopez, 'Hard Times and Investment in Culture,' K.H. Dannenfeldt, ed., *The Renaissance: Medieval or Modern*? (Heath Series, New York, 1959), pp. 50-63; Robert Lopez, Harry Miskimin, and Abraham Udovitch, 'England to Egypt, 1350-1400: Long-Term Trends and Long-Distance Trade,' in M.A. Cook, ed., *Studies in the Economic History of the Middle East* (London, 1970), pp. 93-128. See also: See Dufourcq, *Espagne catalane* (n. 38), pp. 534-42: shipping costs ranged from £200 Barcelonese for small ships (30-40 sailors) to £400 for galleys (80-120 rowers and 100-150 sailors); and monthly costs of arming such ships against corsairs ranged from an additional £50 to £100. For Sicily, see

Finally, as Van der Wee, Lopez, and North have also contended, the negative consequences of such economic turmoil and disruptions, and of government responses, may have produced a more highly skewed distribution of wealth and income.

The Impact of Rising Transaction Costs on the International Trade in Textiles

How then, as the major question to be posed, did this very adverse combination of rising transportation and transaction costs affect and adversely alter the existing patterns and structure of international trade, particularly fair-oriented commerce? How did it affect the structure, orientation, and products of the various textile industries, north and south, that had served and fuelled the very growth of that trade? For the major textile industries of the western Mediterranean basin itself, principally in Italy and Catalonia, the impact of such rising costs was two-fold, by the early to mid fourteenth century: (1) to promote the growth of import substitution industries to replace some if by no means all of the high-grade Franco-Flemish woollen cloths, whose supplies, when not disrupted, were now much more costly to obtain ; and (2) to undermine seriously the export-oriented production of the very cheap and coarse worsted, woollen, and worsted fabrics, which, to cite a common simile, could no longer 'bear the freight' in long-distance trade. Obviously the highly diversified textile industries of north-west Europe were even more seriously afflicted, because of their vastly greater distances from their primary markets, in the Mediterranean basin.

Many, if not all, the western European textile industries, and certainly those chiefly dependent on distant international rather than local markets, underwent a radical transformation during the first half of the fourteenth century: with a reorientation away from the cheap, light, coarse fabrics to concentrate more and more on much higher-quality and much higher priced woollens. In northern France, the Low Countries, the adjacent Rhineland, and England, those that were the most dramatically affected were the various *sayetteries*, other worsted-type *draperies légères*, and the cheaper, coarser linen and fustian (*tiretaine)* industries. Most of them were then producing virtually undifferentiated fabrics, i.e. with many close substitutes, chiefly for

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Henri Bresc, 'Course et piraterie en Sicile (1250-1450),' *Anuario de estudios medievales*, 10 (1980), 751-57; Henri Bresc, *Un monde méditerranéen: Économie et société en Sicile, 1300 - 1450*, 2 vols., Bibliothèque des Écoles françaises d'Athènes et de Rome, no. 262 (Rome, 1986), vol. I, pp. 350-52.

export to Mediterranean markets, where they had to compete with lower-cost domestic producers, those with lower transportation costs in particular. Furthermore, to worsen the plight of these northern producers, such markets had evidently become saturated by the early fourteenth century, just when their combined production, transport, marketing, and other transaction costs were rising above the prevailing prices in the Mediterranean. In essence, those northern draperies that did survive, those with access to capital and market connections, were forced to transform themselves from their long-standing role as mere passive 'price-takers' to become aggressive 'price-makers: i.e. to engage in 'monopolistic competition' producing much more differentiated, luxury-oriented woollens, with a far higher value:weight ratio, which could thus much better sustain these rising transport and transaction costs. Only a few would succeed in doing so and establish a secure market niche with their much-higher priced woollens.

For Italy itself such a dramatic industrial transformation is clearly evident from the early fourteenth century. As Maureen Mazzaoui has shown, the once flourishing and widespread fustian industries began to experience a decline, at first gradual, but then steeper and inexorable, from at least the 1320s.[40] By that same decade, the Tuscan and Lombard semi-worsted industries were in even more serious decline. As Hidetoshi Hoshino has also demonstrated, in various publications on the Italian cloth industries, first Florence, and then other Tuscan and Lombard towns began to reorient their textile production more and more, from the later 1320s, to much higher quality, indeed expensive woollens made from chiefly the better English wools. As early as the late 1330s, just a decade later, such woollens accounted for almost 75 percent of the aggregate value of their urban textile production, though this shift was not complete until the mid-century.[41] Embraced within this same transformation of course was the decay of the cloth-importing and cloth-finishing Arte di Calimala, as the Arte di Lana became pre-eminent in producing the same type of luxury woollens, or even more luxurious varieties, from imported English wools. The very same and equally dramatic industrial

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[40] Mazzaoui, *Italian Cotton Industry* (n. 36), pp. 129-39.

[41] Hoshino, 'The Rise of the Florentine Woollen Industry (n. 35)', pp. 183 - 204; Hoshino, *L'arte della lana in Firenze* (n. 33), pp. 35-120.

transformations may be clearly observed in Catalan cloth production during this very same era.[42]

Even more substantial and much more detailed evidence for this very same industrial metamorphosis may be observed in north-western Europe, especially throughout the southern Low Countries, from the very early years of the fourteenth century: (1) the virtual disappearance of almost all the once prominent and flourishing *sayetteries*, other *draperies légeres* or *draperies sèches*, and the coarser linen industries, except for the *sayetteries* of Hondschoote and Arras, which, though losing their southern markets, did manage to retain some local and northern, principally German markets; (2) the consequent *relative* shift of textile production to the so-called *draperies ointes* ('greased' draperies), of which the most important were in Ghent, Ypres, Bruges, Mechelen, Brussels, and Leuven. By the 1350s, their high-priced, heavy-weight woollen broadcloths, such as the Ghent *dickedinnen* (30 ells = 21 m), would cost a master mason over nine months daily wages (173 days's wages) for just a single broadcloth. For many historians, to be sure, one of the more striking aspects of the Flemish industrial transformation was the rise, in small towns and the larger villages, of the so-called *nouvelles draperies*, of which Wervik, Kortrijk, Menen, and Comines were the most prominent. But they, too, had transformed themselves from their former status as members of the *draperies légères* to join the *draperies ointes* in similarly producing heavy-weight woollens, but as lower-priced imitations of those sold by the major urban draperies: by resorting to cheaper dyes, and especially by using lesser quantities of somewhat cheaper wools. These cloths, in contrast to the image of cheap, light fabrics, so falsely portrayed by Pirenne and his followers, were in fact better in quality and more expensive than later-medieval England's esteemed broadcloths. In the 1360s, a Wervik woollen broadcloth (27 ells = 19 m) would have cost a Bruges or Ghent mason 85 days's wages, and the lesser paid English (Oxford or Exeter) mason

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[42] Claude Carrère, *Barcelone: centre économique à l'époque des difficultés, 1380 - 1462* (Paris, 1967), chapter 6: 'La draperie barcelonaise,' pp. 423-528; Claude Carrère, 'La draperie en Catalogne et en Aragon au XVe siècle,' in Marco Spallanzani, ed., *Produzione, commercio e consumo dei panni di lana (nei secoli XII - XVIII)*, Atti della Seconda Settimana de Studio, 10-16 April 1970 (Florence, 1976), pp. 475-509; Manuel Riu, 'The Woollen Industry in Catalonia in the Later Middle Ages,' in Harte and Ponting, *Cloth and Clothing in Medieval Europe* (n. 35), pp. 205-29.

132 days's wages.[43]

In England itself, virtually all of the old, traditional eastern seaboard urban draperies, chiefly producing very cheap and light cloths (including stamfords or *stanfortes* and says) had collapsed by the 1330s, though Norfolk's native worsted industry managed to survive until the 1370s, by focusing on the still relatively peaceful Baltic and north German-Scandinavian markets. Thereafter, and especially from the 1390s, the precipitous decline of the remaining worsted exports was mirrored by the dramatic rise of woollen broadcloth exports.[44] But in this era, very few English woollen broadcloths reached Mediterranean markets; and they did not in fact begin to make a real impact there until about the 1430s or 1440s.[45]

In the continental north-west, the aforementioned industrial-transformation strategy did allow a small number of Norman, Brabantine, and Flemish producers, including, remarkably, the Flemish *nouvelles draperies*, to maintain or even gain some foothold in Mediterranean markets. Nevertheless, the luxury-oriented woollen draperies in northern France, the Low Countries – including the late-comer Leiden (Holland), which became a major participant from the 1360s -- and England, were also forced to rely on the more accessible, northern and especially Hanseatic-dominated markets in Germany, Scandinavia, Poland, and

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[43] See Munro, 'Industrial Transformations' (n. 39), pp. 110-48 (especially Table 4.1, p. 142); Munro, 'New Draperies' (n. 35), pp. 35-127; John Munro, 'The Symbiosis of Towns and Textiles: Urban Institutions and the Changing Fortunes of Cloth Manufacturing in the Low Countries and England, 1270 - 1570,' *The Journal of Early Modern History: Contacts, Comparisons, Contrasts*, 3:1 (February: 1999): 1-74; John Munro, 'Textiles as Articles of Consumption in Flemish Towns, 1330 - 1575,' *Bijdragen tot de geschiedenis*, 81:1-3 (1998), 275-88. Special issue on: *'Proeve 't al, 't is prysselyck': Verbruik in Europese steden (13de - 18de eeuw)/Consumption in the West European City (13th - 18th Century): Liber Amicorum Raymond Van Uytven*. See also Henri Pirenne, 'Une crise industrielle au XVIe siècle: la draperie urbaine et la nouvelle draperie en Flandre,' *Bulletin de l'Academie royale de Belgique: Classe des Belles Lettres* (Brussels, 1905), reprinted in *Histoire économique de l'occident médiéval*, ed. Emile Coornaert (Bruges, 1951), pp. 621-43.

[44] See John Munro, 'The 'Industrial Crisis' of the English Textile Towns, 1290 - 1330,' *Thirteenth-Century England:* VII, ed. Michael Prestwich, Richard Britnell, and Robin Frame (Woodbridge, UK 1999), pp. 103-41; Munro, 'Symbiosis of Towns and Textiles' (n. 43), pp. 1-74. See Table 1 below, pp. 39-40.

[45] E. B. Fryde, 'Italian Maritime Trade with Medieval England (ca. 1270 - c. 1530),' *Recueils de la Société Jean Bodin*, 32 (1974), 291 - 337; E. B. Fryde, 'The English Cloth Industry and the Trade with the Mediterranean, c. 1370 - c. 1530,' in Spallanzani, ed., *Produzione, commercio e consumo de panni di lana* (n. 42), pp. 343-67; both articles reprinted in his *Studies in Medieval Trade and Finance* (London, 1983).

Livonia-Russia, i.e. those with relatively lower transport and transaction costs, as did the few surviving *sayetteries.*

To gain historical perspective on this geographic market reorientation, we must remember that much earlier, during the twelfth and thirteenth centuries, the northern textile industries had gained decisive dominance in most of the Mediterranean markets for both cheap fabrics and luxury woollens, even if some of the latter were re-finished there. But from the 1340s, the presence of northern-produced cheap says, other worsted and semi-worsted fabrics was almost non-existent in these southern markets, except for a few so-called 'Irish sayes' of doubtful provenance. Furthermore, by the later fourteenth century, the northern industries's share of Mediterranean markets for luxury-woollens had shrunk considerably, in the face of a growing preponderance from Tuscan, Lombard, and Catalan producers of finer woollens, some of which, the Florentine in particular, were in fact far more luxurious and costly than even the very best Flemish and Brabantine woollens.[46]

Textiles and Fairs: the Decline of the Champagne and English Fairs

The importance of the Champagne and other international Fairs of the twelfth and thirteenth centuries, and of their subsequent decline, as integral aspects of these industrial-commercial transformations from the later thirteenth to fifteenth centuries, cannot be too strongly emphasized. The publications of Patrick Chorley, if not necessarily my own, have surely demonstrated beyond any doubt that the Champagne Fairs had owed their great and flourishing expansion during the later twelfth and thirteenth centuries primarily to the sale or re-export of northern textiles to the Mediterranean basin. Furthermore, those textiles were not primarily high-quality woollens, as Pirenne, Bautier and so many others have wrongly asserted, but more especially, in terms of both volume and value, the aforementioned cheaper, lighter fabrics: the semi- and full worsteds, coarse woollens, mixed fabrics, and linens. Equally evident is the fact that the decline of these Fairs

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[46] Munro, 'Industrial Transformations' (n. 39), pp. 110-48; Munro, 'New Draperies' (n. 35), pp. 35-127; Munro, 'Symbiosis of Towns and Textiles' (n. 43), pp. 1-74. See also Hidetoshi Hoshino and Maureen Mazzaoui, 'Ottoman Markets for Florentine Woolen Cloth in the Late Fifteenth Century,' *International Journal of Turkish Studies*, 3 (1985-86), 17 - 31; Eliyahu Ashtor, 'Catalan Cloth on the Late Medieval Mediterranean Markets,' *Journal of European Economic History*, 17 (Fall 1988), 249-250.

coincides exactly contemporaneously with the dramatic disappearance of these cheap and light *sayetteries* and other *draperies légères* in the Low Countries and elsewhere in north-western Europe.[47]

Less well known is the indisputable fact the once famed medieval English fairs -- such as the St. Ives, St. Giles (Winchester), Stamford, and Northampton Fairs-- were also similarly undergoing a precipitous decline in commercial transactions from the 1290s, precisely when the once important English textile towns of York, Louth, Beverley, Lincoln, Stamford, Northampton, Leicester, Huntingdon, Norwich, Colchester, Oxford, Winchester, and London were all suffering from an equally dramatic slump in their export-oriented production. As Chorley, Childs, and myself have all contended, that cloth production had been predominantly in the form of very cheap and light fabrics, which were also chiefly destined for Mediterranean markets, via the English and then the Champagne Fairs: e.g. serges, says, wadmal, the famed if ill-understood, mixed-fabric stamfords (*stanfortes)* and the even cheaper and lighter 'Northamptons'.[48] Indeed, Ellen Moore, the leading historian of England's medieval fairs, contends that the fortunes of all these fairs had been very closely to tied to the economies of the eastern textile-manufacturing towns, and thus that such cloths had constituted the major part of their commerce, especially in sales to visiting Flemish and Italian merchants.[49]

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[47] See Chorley, 'Cloth Exports of Flanders' (n. 35), pp. 349-87; Munro: sources cited in nn. 43and 46.

[48] See Patrick Chorley, 'English Cloth Exports During the Thirteenth and Early Fourteenth Centuries: the Continental Evidence,' *Historical Research: The Bulletin of the Institute of Historical Research*, 61:144 (February 1988), 1-10; Wendy Childs, *Anglo-Castilian Trade in the Later Middle Ages* (Manchester, 1978), pp 73-75; Wendy Childs, 'The English Export Trade in Cloth in the Fourteenth Century,' in Richard Britnell and John Hatcher, eds., *Progress and Problems in Medieval England: Essays in Honour of Edward Miller* (Cambridge and New York, 1996), pp. 121-47; Munro, 'Industrial Crisis' (n. 44), pp. 103-42. Thus at St. Ives, court incomes fell from £8 9*s* 2*d* in 1287 to £2 7*s* 6*d* in 1302. At Winchester's St. Giles Fair, commercial revenues had dropped from £84 16*s*. 0*d.* in 1291 to £44 1*s* 0*d* in 1314; as early as 1291 their formerly reliable earnings from Lincoln cloth merchants had ceased; and by 1302 so had those from the York merchants. Moore, *Fairs* (n. 13), pp. 204-22.

[49] *Ibid.* To be sure, Moore also adduces several other reasons for this decline: including the dwindling attendance of Flemish merchants and the more aggressive role of London's commercial sector. But, While London had certainly succeeded in enlarging its commercial role in the English economy by the later thirteenth century, Pamela Nightingale has recently demonstrated that London was experiencing a severe commercial depression (with some depopulation) by the 1320s, one that probably had begun somewhat earlier. See Pamela Nightingale, 'The Growth of London in the Medieval English Economy', in Richard Britnell and John Hatcher, eds., *Progress and Problems in Medieval England: Essays in Honour of Edward Miller* (Cambridge, 1996), 89-106. For example, London's share of taxable national wealth fell from 3.5

Relative Transportation Costs by Maritime and Continental Routes in the Fourteenth Century

The other and even more striking contemporaneous transformation, the aforementioned development of the direct sea route from the Mediterranean to northwestern ports, must also be viewed, as suggested earlier (p. 13), as one of the major consequences of the Fairs's decline. More precisely it was the consequence of those adverse war-related factors that so sharply raised the transport and transaction costs of trading along the frequently disrupted overland continental routes that had earlier fuelled the trade of the Fairs. To cite just one example, in 1327, an Italian merchant complained that the disruptions from the then raging Guelf-Ghibelline and Angevin wars had prevented his firm from transporting Franco-Flemish cloths from the Champagne Fairs to Genoa.[50] Similarly, in 1342, a report commissioned by the government of the nearby port of Marseilles, so concerned about the serious decline in its trade and population, clearly evident from c.1330, specifically laid the blame on the very same Angevin wars, and also on the 'the Fall of Acre'.[51]

I am, of course, not the first to observe the basic nature of this early fourteenth-century shift from overland, continental trade routes, those based so much on the Champagne Fairs, to some increasing reliance on maritime routes to the North. Indeed, for the past thirty years much of my research has been inspired by Herman Van der Wee's seminal but sadly neglected *Annales* article of 1970, even if I must now offer a minor criticism. For the Van der Wee article still leaves the reader with the impression that the establishment of

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percent in 1307 to 2.1 per cent in 1315, retaining that low figure in 1334 assessment; in her view, the recession lasted until the 1360s. See also Munro, 'Industrial Crisis' (n. 44), pp. 103-41.

[50] Renée Doehaerd, ed., *Les relations commerciales entre Gênes, la Belgique, et l'Outremont, d'après les archives notariales génoises aux XIII^e^ et XIV^e^ siècles*, 3 vols., Institut Historique Belge de Rome: Études d'histoire économique et sociale (Brussels, 1941), III, no. 1869, p. 1156: 'Nec per terra ire potuit communiter propter guerras que presentaliter occurentes inter Januinos guelfos et guibelines'.

[51] Text in Georges Lesage, *Marseille angevine: recherches sur son evolution administrative économique et urbaine de la victoire de Charles d'Anjou à l'arrivée de Jeanne Ire, 1264 - 1348* (Paris, 1950), doc. no. 7, pp. 184-6: 'quod deterioratio et diminutio dictorum reddituum provenit propter diminucionem boni status civitatis Massilie, nam sicut civitas in personis et divitiis a tempore quo perdita fuit Acon et propter perdicionem ipsius et propter guerras quas habuerent ipsi Massilienses et sicut omnes redditus quos civitas ipsa habeat in communi et successive habuit domnus noster Rex et precessores sui diminuti sunt et reducti ad minorem quantitatem'. See also doc. no. 6, p. 184: letter of Robert d'Anjou (King of Naples), dated 21 Oct. 1331, concerning the serious depopulation of Marseille; also Edouard Baratier and Félix Reynaud, *Histoire du commerce de Marseille*, vol. II: *De 1291 à 1480* (Paris, 1951), pp. 38-40, 207-28, 304-13.

the direct sea route was nevertheless a primary factor in the decline of the Fairs. In this all too brief article, he does, to be sure, focus on the consequences of warfare, but primarily the subsequent Hundred Years's War, in making the costs of overland, continental trade so often prohibitive, except for very high-value items; and thus his article does not really consider the impact of the previous era of warfare, that from the 1290s to the 1340s, which had been so crucial in determining the initial, if partial, shift from the continental overland to maritime routes. At the same time, one must also admit that this shift was far from ever becoming a total one, that much overland trade still continued, and that the relative shares of north-south commerce by overland and maritime routes varied with the particular economic and political circumstances of the ensuing decades.

However, even for the trade in high-valued items, such as luxury woollens, two more statistical examples, from the 1390s, may be usefully cited. In 1397, a member of the Florentine Alberti firm contended that overland transport was feasible only for the very highest priced woollens.[52] In 1398, the Italian merchant Gulgielmo Barberi, employed by the Datini firm of Prato, reported that the cost of shipping Wervik woollens from Bruges to Barcelona by sea amounted to 15 percent of the price (22 florins), while shipping them overland, when routes were safer, cost 22 percent of that price. But he also explicitly noted that some other merchants had 'lost all their profit' by so foolishly choosing to send their woollens overland. In contrast, we may note that, around 1310, the costs of transporting far cheaper Caen *sayes* overland via the Champagne Fairs and the Rhone valley route to Florence had cost only 8.8 percent of their much lower value (11.5 florins).[53]

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[52] Cited in Federigo Melis, 'La diffusione nel Mediterranea occidentale dei panni di Wervicq e delle altre citta della Lys attorna al 1400,' in *Studi in onore di Amintore Fanfani*, vol. III: *Medioevo* (Milan, 1962), p. 233-34, n. 30. Letter of Gulgielmo Barberi to the Datini Co. in Barcelona, 10 May 1398: for transporting a Wervik woollen cloth, worth 23 gold francs (or about 22 gold florins): by land, 5 francs; by sea, 3.5 francs. Earlier, on 28 May 1397, the Alberti firm in Bruges informed the Datini Company in Barcelona that only high-priced cloths could be shipped overland: 'perch' e panni di grande pregio possono meglio che que' di piccoli pregi [sopportare il viaggio terrestre]; anzi, lo possono e gli altri non'. *Ibid.*, pp. 233-4, n. 30.

[53] Sapori, *Una compagnia di calimala* (n. 35), pp. 97-99: 1.01 florin per say in transporting 133 says; but total marketing costs amounted to 2.20 florins per say (19.2 percent). In another account, total marketing costs for 64 Caen says were 2.41 fl. per say, or 9.5 percent more per say in the smaller shipment. Caen says were then most expensive sold. See also Chorley, 'Cloth Exports of Flanders' (n. 35), p. 369. Comparing

Even if maritime trade did subsequently become relatively cheaper than overland continental trade, via the traditional routes, the reasons for those advantages did not lie in any supposed technological innovations. For most of the supposed cost-saving advances, and especially those in naval technology that finally produced the caravel-designs and the full-rigged carracks, came a full century after this shift to maritime trade.[54] In any event, Russell Menard has argued that, from the fourteenth to eighteenth centuries, such changes in naval technology had little impact on direct shipping costs, whose changes were much more a function of political and commercial developments, especially in terms of providing relative security.[55] Indeed on this very issue he also cited Postan's comment: that 'medieval communications, like other trading activities, suffered much more from instability and uncertainty, political in origin, than from high costs of an inefficient transport service.'[56]

Furthermore, the actual costs of both shipbuilding itself and of maritime shipping rose in real terms, and quite substantially, principally again because of more advanced forms of naval warfare, especially in

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relative values is difficult, except to note that the early 14th century was a period of inflation, while the late 14th was one sharp deflation. See also Lopez, 'Trade of Medieval Europe' (n. 2), p. 374: noting that in 1318 the Del Bene Company, in transporting northern textiles to Florence, 'paid less per mile [or km] on the overland stretch from Paris to Marseilles than on the maritime stretch from Marseilles to Pisa.'

[54] See Richard Unger, 'Dutch Ship Design in the Fifteenth and Sixteenth Centuries,' *Viator*, 4 (1973), 387-412; Unger, *Dutch Shipbuilding Before 1800: Ships and Guilds* (Van Gorcum, 1978); Richard Unger, *The Ship in the Medieval Economy, 600-1600* (London and Montreal, 1980); Richard Unger, 'Warships and Cargo Ships in Medieval Europe,' *Technology and Culture*, 22 (April 1981), 233 - 52 (reprinted in Richard Unger, *Ships and Shipping in the North Sea and Atlantic, 1400-1800*, Variorum Collected Studies Series [Aldershot, 1997]; Richard Unger, 'Portuguese Shipbuilding and the Early Voyages to the Guinea Coast,' in *Vice-Almirante A. Teixeira Da Mota, In Memoriam*, I (Lisbon, 1987), 229-49; Carlo Cipolla, *Guns, Sails, and Empires: Technological Innovation and the Early Phases of European Expansion 1400 - 1700* (New York, 1965); Charles Boxer, *The Portuguese Seaborne Empire, 1415-1825* (London, 1969); Martin Elbl, 'The Portuguese Caravel and European Shipbuilding: Phases of Development and Diversity,' *Revista da Universidade de Coimbra*, 33 (1985), 543-72; M. Elbl, 'The Caravel and the Galleon,' in Robert Gardiner, ed., *Conway's History of the Ship*, III: *Cogs, Caravels and Galleons* (London, 1994), pp. 91-98; Archibald Lewis and Timothy Runyan, *European Naval and Maritime History, 300 - 1500* (Bloomington, 1985).

[55] Russell Menard, 'Transport Costs and Long-Range Trade, 1300 - 1800: Was There a European 'Transport Revolution' in the Early Modern Era?' in James Tracy, ed., *The Political Economy of Merchant Empires: State Power and World Trade, 1350 - 1750* (Cambridge, 1991), pp. 228 - 75. For similar views published in the same year, see Munro, 'Industrial Transformations' (n. 39), pp. 110 - 48.

[56] Postan, 'The Trade of Medieval Europe' (n. 8), pp. 203-04.

response to the piracy and corsair raids that so often accompanied such warfare. As Irene Katele has contended, the very commencement of the fourteenth century witnessed a veritable 'watershed in the history of naval plundering.'[57] In defence against such piracy and corsair warfare, Italians and Catalans built more heavily armed and thus much bigger, more sturdily designed ships, outfitted with larger complements of cross-bowmen, all of whom, along with regular sailors, were given steel-plated body armour. Costs mounted even more, from the 1330s, with the introduction of naval artillery and mobile small arms. Catalan shipping records show that freight rates indeed did rise substantially with such increased construction costs, at least for the heavily armed merchant ships: by over 25 percent between 1275 and 1330. Comparable Sicilian records reveal that freight rates virtually doubled over the fourteenth century.[58] To be sure, that remarkable Genoese innovation of maritime insurance, from the early to mid fourteenth century, was designed to share the costs of such risks; but rising insurance premiums still added to transaction costs.

The Venetians, who curiously eschewed this financial innovation, instead chose, as their most cost-effective remedy, to design and build, with heavy state subsidies, even better galleys: the heavily-armed, three-masted so-called great-galley, a speedy military and commercial hybrid vessel that, as Lane has demonstrated, became the exclusive carrier of precious cargoes.[59] By the fifteenth century they were outfitted as well with

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[57] Irene B. Katele, 'Piracy and the Venetian State: The Dilemma of Maritime Defense in the Fourteenth Century,' *Speculum*, 63 (Oct. 1988), 865-889. See also Benjamin Kedar, *Merchants in Crisis: Genoese and Venetian Men of Affairs and the Fourteenth-Century Depression* (New Haven, 1976), and nn. 53-54.

[58] Dufourcq, *L'Espagne catalane* (n. 38), pp. 534-542; and the data cited in n. 39. For Sicily, see Henri Bresc, 'Course et piraterie en Sicile' (n. 39), pp. 751-7; and Bresc, *Un monde méditerranéen* (n. 39), pp. 350-352.

[59] Katele, 'Piracy' (n. 57), pp. 865-889; Frederic Lane, *Venetian Ships and Shipbuilders of the Renaissance* (Baltimore, 1934), pp. 6-26, 36-46 and 129-134; Frederic Lane, 'From Biremes to Triremes,' *Mariner's Mirror*, 49 (1963), 48-50, reprinted in his *Venice and History* (n. 7), pp. 189-192; Frederic Lane, 'Merchant Galleys, 1300-34: Private and Communal Operations,' *Speculum*, 38 (1963), 179-205; reprinted in *Venice and History* (n. 7), pp.193-226; Frederic Lane, 'The Crossbow in the Nautical Revolution of the Middle Ages,' in David Herlihy, Robert Lopez, and Vsevolod Slessarev, eds., *Economy, Society, and Government in Medieval Italy: Essays in Memory of Robert L. Reynolds* (Kent OH,1969), pp.161-172; Frederic Lane, *Venice: A Maritime Republic* (Baltimore, 1973); Cipolla, *Guns, Sails, and Empires* (n. 54), pp. 75-79; Dufourcq, *L'Espagne catalane* (n. 38), pp. 534-542; Unger, *Ship in the Medieval Economy* (n. 54), pp.176-182; and Unger, 'Warships and Cargo Ships' (n. 54), pp. 238-48.

three lateen sales and one enormous forward-facing bronze cannon. Nevertheless, even Venetian merchants and their government would not risk sending their galleys to Alexandria, Constantinople, Beirut, or the northern ports (Bruges, Southampton, London), when shipping lanes were menaced by naval war (e.g. during the Venetian-Genoese War of 1350-55), or by fleets of corsairs. Thus, according to Venetian state records, the Flanders galleys made only 24 northbound voyages from 1332, when state-subsidies commenced, to 1400 (i.e. a mean of 2.8 per decade); but in the relatively more peaceful and commercially more propitious fifteenth century they made 86 such northbound voyages. [60] Even then, sea transport was hardly cheap, for shipping a sack of English Cotswold wool by galleys to Venice c. 1460 added about 25 percent to the cost.[61]

The Revival of Overland Trade and International Fairs: the Epstein and Van der Wee Models

By that time, however, and indeed perhaps even before the mid-fifteenth century, as Van der Wee has even more cogently demonstrated, the European economy was now undergoing yet another profound transformation in its international trading patterns, with: (1) the commercial development of chiefly new overland, continental routes; (2) a consequent *relative* shift away from the previously established maritime routes; and (3) a revival of internationally-oriented fairs. Indeed, the chief and clearly fatal flaw about all the 'progress-oriented' theories to explain the decline of the earlier medieval international fairs, the Champagne

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[60] Alberto Tenenti and Corrado Vivanti, 'Le film d'un grand système de navigation: Les galères marchandes vénitiennes, XIV^{e} - XVI^{e} siècles,' *Annales: ESC*, 16 (Jan.-June 1961), 83-86, and pull-out chart. A more accurate record can be found in Stoeckly, *Le système de l'Incanto des galées* (n. 30); but unfortunately her study ceases in 1453, thus preventing a valid comparison of these two centuries. For the Florentines, see Fryde, 'Italian Maritime Trade (n. 45),' pp. 321-26.

[61] Wool, purchased in London for £8 sterling per sack, shipped to Venice with another £2 in shipping costs per sack; other charges raised total marketing costs to £6 11s sterling per sack (81.9 percent). British Library, 'Noumbre of Weyghtes', in Cotton MS Vespasian, E. IX, fo. 106r-108v, partially presented in H. Hall and F.J. Nicholas, eds., 'Select Tracts and Table Books Relating to English Weights and Measures, 1100-1742,' *Camden Miscellany*, XV (*Camden Third Series*, vol. 12, London, 1929), pp. 120-20; and also partially cited in E. B. Fryde, 'Anglo-Italian Commerce in the Fifteenth Century: Some Evidence about Profits and the Balance of Trade,' *Revue belge de philologie et d'histoire*, 50 (1972), 345-55; reprinted in his *Studies in Medieval Trade* (n. 45), p. 355. The Genoese usually employed the much cheaper round ships or cogs, and later, the carracks; Fryde, 'Italian Maritime Trade,' pp. 309-310, states that Genoese freight rates for wool were only 5.16% of the price (8s 3d per sack); those for alum and woad, about eight percent of their prices. See also Fryde, 'English Cloth Industry (n. 45)'; and Ashtor, 'Catalan Cloth' (n. 46), pp. 249-250. But other shipping costs were much higher. According to Unger, *Ship in the Medieval Economy* (n. 54), p. 169, shipping salt from Portugal to Bruges accounted for 85 percent of the landed price; and shipping Baltic grain from Danzig to Bruges was about half the landed price, c. 1400.

Fairs in particular, was to ignore this very phenomenon of the revived pre-eminence of international fairs from the early to mid fifteenth century.[62] Obviously they could not possibly have become outdated, and redundant; and obviously they still had much to offer in lowering or reducing transaction costs for international trade.

Furthermore, in another important, much more recent article, Stephan Epstein has demonstrated that the European economy of the later Middle Ages (though clearly more so in the fifteenth than in the fourteenth century) had benefited from a profusion of regional, chiefly land-based fairs that reduced transaction costs in such regional trade, an article in which he similarly ridiculed traditional arguments about the decline of medieval fairs.[63] While conceding the point that 'why fairs should have been the preferred response to rising transactions costs ... is not in fact immediately clear', he also correctly observes that the opposite is also true: that 'the cost advantages of town markets over new fairs are hard to discern'. Indeed he then makes the very cogent observations that capital investment and administrative costs for fairs, and living costs for visiting merchants there, were generally much lower than for permanent town markets, especially with smaller sizes. Even more important were the ability of fairs, and certainly the newer fairs, 'to respond far more flexibly ... to changes in the character, patterns, and intensity of trade' than did most town markets, especially in so flexibly changing locations for new commercial opportunities. One might also add to these arguments the point that such fairs tended to congregate a greater variety of regional or international merchants than did most towns, thus facilitating the dissemination of market information and mercantile reputations. Finally, as he so cogently comments, 'the proof of the pudding is the fact that most of the new fairs survived.'[64]

In so far as Epstein is concerned with regional European fairs that did flourish before what Van der Wee discerned to be the true fifteenth-century revival of international fairs, connected to the renewed growth

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[62] But cf. Verlinden, 'Fairs' (n. 13), p. 133: 'Contrary to a commonly expressed opinion, it was not apparently the localization of large-scale trade in the towns which caused the decay of the Champagne fairs; otherwise, it would be difficult to understand how, later, fairs such as those of Geneva, Lyon, Antwerp, Frankfurt and others could have played such an important role [even though] ... it is true that they were held in regions which developed later.'

[63] Epstein, 'Regional Fairs' (n. 20), pp. 459-82.

[64] *Ibid.,* pp. 470-71.

continental long-distance trade, we may conclude that either: (1) the extent of the late-medieval decline in such overland trade and shift to maritime trade has been exaggerated; or (2) conversely, that, in terms of the North-Thomas (1973) model and of their own analyses of the economic transformations in this era, disruptions of traditional long-distance trade patterns and consequent rises in transaction costs not only reduced the scope of such trade but necessarily made it all the more regional and localized.[65]

Indeed the major components of the earlier Van der Wee model, so closely corresponding to the North-Thomas model, must be reiterated here to elucidate the dynamics of this revival of overland continental trade. That revival had commenced from the early fifteenth century by following entirely new routes, those secure from the ravages of the Hundred Years' and other wars: from Italy, especially from Venice, across the eastern Alps (Brenner Pass, from Bolzano to Innsbruck), into Austria-South Germany, and from there via Frankfurt to the Rhine, leading down that river highway to the Low Countries, and in particular to the Brabant Fairs of Antwerp and Bergen-op-Zoom.[66] As Van der Wee has argued, the Brabant Fairs owed their later fourteenth-century origins to a purely regional trade in foodstuffs and raw materials; but these commercial transformations converted them into truly international fairs. As the very mirror image of the negative consequence of the earlier *relative* shift from continental to maritime routes, the renewed expansion in

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[65] North and Thomas, *The Rise of the Western World* (n. 6), pp. 78-96: 'The decline of population, coupled with war, confiscation, pillage and revolution, reduced the volume of trade and stimulated a trend toward local self-sufficiency. The losses to society due to the decline in specialization and reduced division of labor certainly argues against a rise in the standard of living'. (p. 78) One or more referees for this article suggested that I consider even more fairs, such as Zurzach; but those that are merely local or regional are not the concern of this paper. However, see Hektor Ammann, 'Nachträge zur Geschichte der Zurzacher Messen im Mittelalter', *Argovia*, 48 (1936), 101-24, and n. 68 below. For one of the most important late-medieval regional fairs, see Henri Dubois, *Les foires de Chalon et le commerce dans la vallée de la Saône à la fin du Moyen Âge, vers 1280 - vers 1430* (Paris, 1976).

[66] For the most recent and most impressive study (in 726 pp.) see Michael Rothmann, *Die Frankfurter Messen im Mittelalter*, Frankfurter Historische Abhandlungen Band 40 (Stuttgart, 1998), especially pp. 80-136 for their activities in this era; and for the fustians (Barchent) trade, pp. 137-41, 500-15. See also Wolfgang von Stromer (Freiherr Stromer von Reichenbach), *Oberdeutsche Hochfinanz, 1350 - 1450*, Vierteljarhrschrift für Sozial- und Wirtschaftsgeschichte, Beheifte series, nos. 55-57, 3 vols. (Wiesbaden, 1970), vol. I, pp. 47-89, 178-218; vol. II, pp. 219-94, 342-86, 436-60 (for Nürnberg and Frankfurt). For the Brabant fairs of Antwerp and Bergen-op-Zoom, see the classic study: Herman Van der Wee, *Growth of the Antwerp Market and the European Economy, 14th to 16th Centuries*, 3 vols. (The Hague, 1963), vol. II: *Interpretation*; and also Van Houtte, 'Les foires dans la Belgique', pp. 175-207.

continental trade more than proportionately augmented demand for commercial services, manufactures, labour, raw materials and foodstuffs. It thereby increased aggregate incomes, and investments by a multiplier-accelerator effect: not just along these arterial routes, but via both international and regional fairs, throughout an interlacing network of regional routes that serviced thousands of towns and villages in a vast continental hinterland. While earlier the major port towns had disproportionately gained from the shift to maritime routes, the relative shift back to overland continental trade now benefited a far greater number of continental towns and villages, from very large to small.[67] Nor should we just focus just on the importance of the Brabant Fairs, even if they were to make Antwerp the commercial and financial capital of the early-modern European economy, in the full century from c.1460 to c.1568, i.e. to the commencement of the Revolt of the Low Countries against Spanish rule. For both the fifteenth and sixteenth centuries we must also consider the powerful stimulus from other international fairs, especially the Frankfurt Fairs, and those in Geneva, Lyon, Besançon, Leipzig, Piacenza, Cremona, Lanciano, Medina del Campo (Castile), etc.[68]

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[67] Van der Wee, *Growth of the Antwerp Market* (n. 66), vol. II, 137-212; Van der Wee and Peeters, 'Modèle dynamique' (n. 10), pp. 1-26. See n. 10 above.

[68] See nn. 65-66 above; and *inter alia*, Jean-François Bergier, *Genève et l'économie européenne de la Renaissance*, École Pratique des Hautes Études: VIe section, Centre de Recherches Historiques: Affaires et Gens d'Affaires, vol. XXIX (Paris, 1963), especially pp. 217-436; Jean-François Bergier, *Histoire économique de la Suisse* (Lausanne, 1984), pp. 37-66; Jean-François Bergier, *Problèmes de l'histoire économique de la Suisse: population, vie rurale, échanges et trafics* (Bern, 1968), pp. 66-83: 'Genève, Zurzach: deux pôles de la vie commercante de la Suisse ancienne' (pp. 76-77); Martin H. Körner, *Solidarités financières Suisses au XVIe siècle: Contribution à l'histoire monétaire, bancaire et financière des cantons Suisses et des états voisins*, Université de Génève: Faculté des Sciences Économiques et Sociales (Geneva, 1980), especially pp. 105-06, 227-64; Domenico Gioffrè, *Gênes et les foires de change de Lyon à Besançon*, École Pratique des Hautes Études: VIe section, Centre de Recherches Historiques: Affaires et Gens d'Affaires, vol. XXI (Paris, 1960), pp. 7-87; A. Genevet, *Compagnie des agents de change de Lyon: histoire, depuis les origins jusqu'à l'établissement du Parquet en 1845* (Lyon, 1890); Marc Brésard, *Les foires de Lyon aux XVe et XVI siècles*, Académie des Sciences, Belles-Lettres et Arts du Lyon (Paris, 1914); Richard Gascon, *Grand commerce et vie urbaine au 16e siècle: Lyon et ses marchands, environs de 1520 - environs de 1580*, École Pratique des Hautes Études: VIe section, Centre de Recherches Historiques: Affaires et Gens d'Affaires (Paris, 1971); Corrado Marciani, *Lettres de change aux foires de Lanciano au XVIe siècle*, École pratique des hautes études, VIe section, Centre de recherches historiques: Affaires et gens d'affaires, no. XXVIII (Paris, 1962), pp. 1-9; Hektor Ammann, 'Die deutschen und schweizerischen Messen des Mittelalters', *Recueils de la société Jean Bodin* 5: *La foire* (n. 13), pp. 149-73*;* Ernst Kroker, *Handelsgeschichte der Stadt Leipzig: Die Entwicklung des Leipziger Handels und der Leipziger Messen, von der Gründung der Stadt bis auf die Gegenwart* (Leipzig, 1925). For a very important and more general financial survey, see Marie-Thérèse Boyer-Xambeu, Ghislain Deleplace, Lucien Gillard, *Private Money and Public Currencies: the 16th Century Challenge*, trans. Azizeh Azodi, with a forward by Charles Kindleberger

Falling Overland Transport and Transaction Costs in the Fifteenth and Sixteenth Centuries

Furthermore, along these continental overland routes, transportation and transaction costs quite evidently did fall, from at least the mid-fifteenth century, and relatively more so than on the maritime routes. Undoubtedly, the restoration of *relative* peace and security along these aforementioned new routes was the primary factor in lowering continental overland transport costs. As J.E. Thorold Rogers demonstrated more than a century ago, and as James Masschaele has more recently shown, overland 'transport costs were remarkably low', at least during relatively tranquil times in medieval and early-modern England, averaging just 1.5d per ton-mile or just 0.4 percent for the land-carriage of wheat.[69] Second, since the transactions sector, as stressed earlier, was so subject to scale economies, equally or even more important for sixteenth-century Europe was the rapid demographic, urban, and commercial expansion, especially in the Mediterranean basin, which offered much larger and more concentrated markets.

Third, during this era, continental overland transport itself benefited from several major innovations: the emergence of specialized 'commission' houses, transport, and cartage firms; the new, larger-scale, lower-cost Hesse wagons (carts), in well organized convoys. These new transport firms offered merchants, both large and small, those selling in nearby or in distant overland markets, fully insured passage for their goods at predetermined, fixed rates; and they also provided an efficient overland postal service. Beginning with the arterial Italy-Antwerp routes, these new modes of commercial transport soon spread to other overland routes

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(London, 1994), pp. 17-43, 66-102.

[69] See James E. Thorold Rogers, *A History of Agriculture and Prices in England From the Year After the Oxford Parliament (1259) to the Commencement of the Continental War (1793)*, 7 vols. (Oxford, 1866-1902), Vol. I: *1259-1400*, pp. 650- 66 ('There is a general impression that in medieval times communication between places was infrequent, and carriage dear. I have attempted to shew ... that the former view is erroneous; and I hope ... to give such on information on the cost of carriage as will modify the latter.'); vol. IV: *1401-1582* (1882), pp. 692-713; vol. V: *1583-1702* (1887), pp. 755-78; and James Masschaele, 'Transport Costs in Medieval England,' *Economic History Review*, 2nd ser., 46:2 (May 1993), 266-279, tables 1 (p.271) and 3 (p. 274). In contrast to the following evidence for continental overland routes, however, he also contends that land transport costs were substantially the same in 18th -century England (pp. 275-77).

servicing France, Germany, and Central Europe. [70] According to both Van der Wee and Brulez, such improvements in overland transport made the overland continental routes both speedier and more reliable than Atlantic shipping routes from north-west Europe into the Mediterranean;[71] and proof for that supposition may also be seen in the dramatic decline in Italian shipping to Antwerp, Bruges, and London, by the late fifteenth, early sixteenth century.[72] Furthermore, even without these innovations, as any map will reveal, the overland route from Antwerp to Venice had the enormous advantage of a far shorter distance: just 1300 km, less than 20 percent of the distance by sea .[73] Not surprisingly, therefore, the meticulously detailed Habsburg tax registers for a special levy on the Low Countries' export trade for the years 1543-45 reveal that virtually all

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[70] Van der Wee, *Antwerp Market* (n. 66), vol. II, 177-94, 325-64; Van der Wee and Peeters, 'Modèle dynamique' (n. 10), pp. 200-26; Florence Edler, 'Le commerce d'exportation des sayes d'Hondschoote vers Italie d'après la correspondance d'une firme anversoise, entre 1538 et 1544,' *Revue du Nord*, 22 (1936), 249-65; Edler, 'Winchcombe Kerseys in Antwerp (1538-44),' *Economic History Review*, 1st ser., 7 (1936-37), 57-62; Walter Endrei, 'English Kerseys in Eastern Europe with Special Reference to Hungary,' *Textile History*, 5 (1974), 90-99; Wilfrid Brulez, 'L'exportation des Pays Bas vers l'Italie par voie de terre au milieu du XVIe siècle,' *Annales: ESC,* 14:3 (Jul-Sept 1959), 461-91; Munro, 'Industrial Transformations' (n. 39), pp.128-38; Munro (n. 35), 'New Draperies', pp. 60-95; Van der Wee, 'Structural Changes in European Long Distance Trade' (n. 10), pp. 14-33; Van der Wee and Jan Materné, 'Antwerp as a World Market in the Sixteenth and Seventeenth Centuries,' in J. Van der Stock, ed., *Antwerp: Story of a Metropolis, 16th- 17th Century* (Gent, 1993), pp. 19-31.

[71] Van der Wee, *Antwerp Market* (n. 66), vol. II, pp.177-94; Brulez, 'L'exportation des Pays Bas' (n. 70), pp. 461-91; Wilfrid Brulez, 'Les routes commerciales d'Angleterre en Italie au XVIe siècle,' in *Studi in onore di Amintore Fanfani* (n. 52), vol. IV, pp. 123-84; Wilfrid Brulez, 'Le commerce international des Pays-Bas au XVI siècle: essai d'appréciation quantitative,' *Revue belge de philologie et d'histoire*, 46 (1968), 1205-21; republished as 'The Balance of Trade of the Netherlands in the Middle of the 16th Century', *Acta historiae neerlandica: Historical studies in the Netherlands*, 4 (Leiden, 1970), 20-48; Wilfrid Brulez, *De firma Della Faille en de internationale handel van Vlaamse Firma's in de 16 eeuw* (Brussels, 1959).

[72] The last Florentine galley arrived in 1478; and the Venetian galleys, after regular trips for most of the 15th century, failed to arrived in 1492, 1496-7, 1499, 1502, 1509-15, 1518, 1521-29, and 1531-32, making their final voyage in 1533. Tenenti-Vivanti, 'Les galères marchandes vénitiennes' (n. 60), pp. 83-6, and pull-out map. Fryde also notes that, by the 1480s, the Genoese carrack trade with England was 'in catastrophic decline.' See Fryde, 'Italian Maritime Trade with Medieval England' (n. 45), p. 331; Fryde, 'English Cloth Industry and the Trade with the Mediterranean' (n. 45), p. 362; Lane, *Venetian Ships and Shipbuilders* (n. 59), pp. 26-28.

[73] Cf. Lopez, 'Trade of Medieval Europe: the South' (n. 2), p. 354, noting that the Italians had had little incentive to develop a sea-route before the 1270s, 'when commercial opportunities in the western Iberian states seemed too modest to warrant the effort, while the Atlantic coast of France and northern Europe could be reached faster by an overland shortcut.'

of the textiles and other merchandise destined for sale in Mediterranean markets were transported – chiefly from Antwerp – by the very same continental overland routes discussed above.[74]

Textiles, Overland Trade, and the Brabant Fairs: the Revival of the *Sayetteries* and English Cloths

Thus the final proof for the economic superiority of the overland routes in later fifteenth- and sixteenth-century Europe is their overwhelming predominance in the transport of a renewed and greatly expanded trade in various cheap textiles from England and the Low Countries, both via the Brabant Fairs, to the Mediterranean basin: not only in the steadily growing trade in South German *fustians* (see below, pp. 30-32), but also in cheap English woollen *kerseys*, and most especially in the says (*sayes*) and similar cheap, light serge-fabrics from the rapidly reviving and expanding Flemish *sayetteries*, and other *draperies légères*, once again led by Hondschoote. These says weighed only 40 percent as much as a Ghent *dickedinnen* broadcloth (260.4 g v. 633.8 g per m^2,); and in 1540 an Antwerp master mason would have paid only 15.8 days's wages to purchase a Hondschoote single *saye* but 284.2 days's wages for a Ghent *dickeninnen*.[75] Without question the revival and dramatic expansion of this textile industry, the most remarkable industrial transformation in the early-modern Low Countries, is closely linked to the expanding overland continental

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[74] Algemeen Rijksarchief, Rekenkamer, registers nos. 23,357-364: for the levy of 1% tax on the value of all merchandise exported from the Habsburg Netherlands, from 10 February 1543 (ns) to 22 September 1545. These accounts have been analysed by: John Munro, 'The Low Countries' Export Trade in Textiles with the Mediterranean Basin, 1200-1600: A Cost-Benefit Analysis of Comparative Advantages in Overland and Maritime Trade Routes', *International Journal of Maritime History*, 11:2 (December 1999), 25-30; J.A. Goris, *Étude sur les colonies marchandes mériodionales à Anvers de 1488 à 1567* (Leuven, 1925); Wilfrid Brulez, 'Les routes commerciales d'Angleterre' (n. 71), pp. 123-84; and Brulez, 'L'exportation des Pays-Bas vers l'Italie' (n. 70), pp. 461-91. In the latter, Brulez comments (p. 462) that: 'Il est certain, en tout cas, que le rôle de l'exportation par mer vers l'Italie, comparé à celui de l'exportation par terre est, en ces années, d'importance minimine,' citing as an exception only the shipment of 280 wagues of lead from Veere to Genoa by sea in October 1544. For overland shipments of textiles to Italy in this period, see Wilfrid Brulez, *De firma Della Faille* (n. 71); and Florence Edler, 'Le commerce d'exportation des sayes d'Hondschoote' (n. 70), pp. 249-65: for records for Van der Molen, della Faille, and van der Heyden firms. For Italian documentation of importations of northern textiles, including Hondshoote says and English kerseys, by Genoese merchants at the Lyon fairs, see Gioffrè, *Gênes et les foires* (n. 68), pp. 72-87, with numerous but unnumbered tables.

[75] See Table 4 below, pp. 44-45; and Munro, 'Textiles as Articles of Consumption' (n. 43), Tables 1 and 4, pp. 275-88.

trade.[76] Thus, on the very eve of the 1568 Revolt of the Netherlands, when aggregate exports, chiefly from the Brabant Fairs, had an estimated value of about 16.0 million Carolus *gulden* (florins of 40d *groot* Flemish), aggregate say and serge exports accounted for about 2.5 million *gulden* (15.6 percent), while the domestic heavy-weight woollens now accounted for only 1.4 million *gulden* (8.8 percent); but re-finished English cloths (including kerseys), valued at 3.12 million *gulden*, accounted for the lion's share of total textile exports (11.5 million *gulden*), and 19.5 percent of total exports by value (Table 5).[77]

Indeed, more than a century earlier, the English cloth trade had provided the first leg of the tripod that supported the subsequent growth and ultimate hegemony of the Brabant Fairs in European commerce and finance. In 1421, after encountering severe difficulties in their chief overseas markets, especially in Prussia, those English merchants who had just organized the Merchants Adventurer Company established a new overseas cloth staple at Antwerp, which eagerly welcomed this trade, since it no longer had a local woollens industry to protect. That very reason, a long-standing, rigorously enforced Flemish ban on all English woollens, rendered the much larger and more international emporium of Bruges inaccessible, until well into the sixteenth century. By the mid-century, English merchants had lost all their other Baltic and Scandinavian markets, and with final defeat in the Hundred Years' War, those in Gascony as well, while the Italians still barred their access to Mediterranean markets. Thus they were forced, more and more, to funnel virtually all of their export trade, certainly in the form of unfinished textiles, via London into the Brabant Fairs. Indeed merchants trading at these fairs commissioned dyers and shearers to 'finish' the English broadcloths that they

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[76] Munro, 'New Draperies' (n. 35), pp. 35-127; Munro, 'Symbiosis of Towns and Textiles' (n. 43), pp. 1-74; John Munro, 'Anglo-Flemish Competition in the International Cloth Trade, 1340 - 1520,' *Centre Européen d'Études Bourguignonnes*, 35 (1995), pp. 37-60 [Jean- Marie Cauchies, ed., *L'Angleterre et les pays bas bourguignonnes: relations et comparaisons, XVe - XVIe siècle: Rencontres d'Oxford (septembre 1994)*]; Munro, 'The Low Countries' Export Trade in Textiles' (n. 74), pp. 1 - 30. In the mid-16th century, the southern Low Countries were then producing 3.64 million metres of cloth in the form of the various products of the *sayetteries* and other *draperies légères*, and only about 2.07 million metres of heavy-weight woollens, most of which were then produced by the so-called *nouvelles draperies*, no longer new, and a few traditional urban draperies, led by Mechelen. Hugo Soly and Alfons Thijs, 'Nijverheid in de Zuidelijke Nederlanden,' *Algemene geschiedenis der Nederlanden*, vol. VI (Haarlem, 1979), 27-57. See the next note.

[77] Brulez, 'Balance of Trade of the Netherlands' (n. 71, pp. 22-45; Jan De Vries and Ad Van der Woude, *The First Modern Economy: Success, Failure, and Perseverance of the Dutch Economy, 1500 - 1815* (Cambridge, 1996), Table 9.1, p. 360. See the previous note, and Tables 1, 2, and 5 below.

had purchased for re-export to Germany, France, Central Europe, Italy, and elsewhere.[78]

That growing and finally overwhelming dependence of England's key export, woollen broadcloths and kerseys, on Antwerp and the Brabant Fairs is well reflected in the export statistics. In 1416-20, London's share of total English cloth exports was 41.7 percent (12,698 out of 27,977 cloths); in 1466-70, when the English cloth trade began to recover from a quarter-century slump, it was 55.5 percent; by 1486-90, it was 70.2 percent (35,122 out of 50,005 cloths); and by 1546-50, 91.6 percent (123,780 out 135,910 cloths), when such textiles accounted for well over 90 percent of all English exports by value (Table 1).[79]

At the same, time, of course, the Brabant Fairs also served as England's chief source of European imports, via the agency of the London Mercers's Company (of which the Merchants Adventurers had been an offshoot).[80] That new Antwerp-based European commercial structure also explains why there was no comparable revival of England's medieval fairs: simply because the Brabant Fairs now fully served that function for both the cloth export trade – as the Calais Staple had long done for the wool trade (1363-1558) – and also for the bulk of its import trades.

The Catalyst: South German Fustians and the Silver-Copper Mining Boom, 1460 - 1530

Nevertheless, the initial and true catalyst for the revival and rapid expansion of the continental

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[78] See John Munro, 'Bruges and the Abortive Staple in English Cloth: An Incident in the Shift of Commerce from Bruges to Antwerp in the Late Fifteenth Century', *Revue belge de philologie et d'histoire/Belgisch tijdschrift voor filologie en geschiedenis*, 44 (1966), 1137-59; and John Munro, 'Industrial Protectionism in Medieval Flanders: Urban or National?' in Miskimin, Herlihy, and Udovitch, eds., *The Medieval City* (n. 34), pp. 229-68; both reprinted in Munro, *Textiles, Towns, and Trade* (n. 28); Munro, 'Symbiosis of Towns and Textiles' (n. 43), pp. 1-74; Munro, 'Anglo-Flemish Competition' (n. 76), pp. 37-60; Michael Postan, 'Economic and Political Relations of England and the Hanse from 1400 to 1475,' in Eileen Power and Michael Postan, eds., *Studies in English Trade in the Fifteenth Century* (London, 1933), pp. 91-153; Van der Wee, *Antwerp Market* (n. 66), vol. II, 73-124.

[79] See Table 1, pp. 39-40. In these statistics, three kerseys are counted as one broadcloth. The Bergen-op-Zoom toll registers for the Brabant Fairs, for the three years 1495-98, record the importation of 44,753 genuine English broadcloths and 11,115 English kerseys, i.e. 24.83% of the former, by number. Algemeen Rijksarchief (België), Rekenkamer, registers nos. 23,250-51; nos. 49,850-55.

[80] See Table 1; sources cited in the previous note, E.M. Carus-Wilson, 'The Origins and Early Development of the Merchant Adventurers' Organization in London', *Economic History Review*, 1st ser., 4:2 (1933), reprinted in her *Medieval Merchant Venturers: Collected Studies* (London, 1954), pp. 143-82; H.L. Gray, 'English Foreign Trade from 1446 to 1482', in Eileen Power and M.M. Postan, eds., *Studies in English Trade* (n. 78), pp. 39-90.

overland trade routes, the subsequent eighty-year boom in English cloth exports, and the real flourishing of the Brabant Fairs was to be found instead in the economy of South Germany, beginning with the development of its own fustian textile industry in the later fourteenth century. More than a century earlier, the opening of the St. Gotthard Pass through the Swiss Alps (8° 31E, at the Schöllenen gorge, c.1220-38) and then more especially the development of the aforementioned Brenner Pass (11° 32E) had opened up the South German and other Central European markets to the growing sales of Italian fustians.[81] Originally that trade was dominated more by German than by Italian merchants, peaking, as indicated earlier, in the early fourteenth century.[82] Thereafter the slow but irredeemable decline of the Lombard fustian industry became all the more rapid from the 1370s, when warfare in both northern Italy and South Germany seriously disrupted the distribution of its textiles, thereby encouraging the Swiss and South German towns, especially the Swabian – Constance, Basel, Ulm, Augsburg, Ravensberg, Memmingen, Biberach, Nördlingen, and Regensberg – to transform their local linen crafts into very similar import-substitution industries using domestic flax and imported cotton. By the 1390s, that was chiefly Syrian cotton that the Germans acquired in Venice, travelling via the relatively secure Brenner Pass, with their silver from Central European mines. This rapidly expanding production of fustians provided South Germany with a very major, rapidly growing industry, and a flourishing

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[81] On the economic history of the trans-Alpine passes, see Jean-François Bergier, 'Le trafic à travers les Alpes et les liaisons transalpines du haut Moyen Âge au XVIIe siècle', *Le alpi e l'Europa*, 3: *Economia e transiti* (Bari, 1975), pp. 1-72 (pp. 29-34 for the St. Gotthard pass), republished in: Jean-François Bergier, *Pour une histoire des Alpes, Moyen Age et temps modernes*, Variorum Collected Studies Series (Aldershot, Hampshire, Great Britain ; Brookfield, Vt., USA : Ashgate, 1997); Marjorie Boyer, 'Travel and Transport, Western European', in Joseph R. Strayer, ed., *Dictionary of the Middle Ages*, vol. XII (New York, 1989), pp. 148-62; A.C. Leighton, *Travel and Communications in Early Medieval Europe, AD 500-1100* (London, 1972); Federigo Melis, *I trasporti e le comunicazioni nel medioevo* (Florence, 1984). Cf. Lopez, 'Trade of Medieval Europe', pp. 374-75, 398-99, who contends that in the 11th century most of the limited commercial traffic from Italy to northern Europe went by the Septimer and other central-western Alpine passes; but that during the 12th and early 13th centuries, most of this traffic had been diverted to the Rhone Valley - Champagne Fairs route (via Genoa and Marseilles), which, though three times as long, was a much cheaper route. Even with competition from new routes via the St. Gotthard Pass, the Rhone-Champagne routes still remained much cheaper, especially with reductions in freight rates along them, routes 'that exploited to the utmost the possibilities of cheap transportation by water' (p. 374).

[82] Wolfgang von Stromer (Freiherr Stromer von Reichenbach), *Oberdeutsche Hochfinanz, 1350 - 1450*, Vierteljarhrschrift für Sozial- und Wirtschaftsgeschichte, Beheifte series, nos. 55 - 57, 3 vols. (Wiesbaden, 1970), vol. I, pp. 47-89; Mazzaoui, *Italian Cotton Industry,* pp. 129-39; and above, nn. 34, 38; and the following note.

export trade that both depended on and helped foster the progress of the Frankfurt Fairs. Of even greater importance, it represented the first successful expansion of an internationally-oriented commerce in cheap, light textiles in later medieval Europe.[83]

This export trade and the concomitant revival and expansion of the overland continental trade routes from Venice to the Brabant Fairs, still via the Frankfurt Fairs, then received its most powerful stimulus from the South-German silver-copper mining boom, which commenced in the 1460s --at the very same time, therefore, as the onset of the English cloth trade boom. Evidently responding, in the mid-century, to a severely deflationary scarcity of silver, which had elevated the purchasing power of that metal, the South Germans had effected a dual technological revolution, in both mechanical and chemical engineering, one that succeeded in boosting European output of both metals over five-fold by the 1540s. Most of those mines lay near or astride the major overland routes linking Italy with the Brabant Fairs. In directing more and more of those metals (and fustians) to Antwerp rather than to Venice, and then in founding major branches of their merchant banking houses there, the South Germans established the second leg of the tripod that supported Antwerp's commercial greatness and subsequent hegemony, while also rapidly fuelling the growth of the Frankfurt fairs along that same route. The chief return commodities that the South Germans sought, in displacing the Rhenish merchants from that commerce, were these re-finished English textiles and the Low Countries's own say and serge textiles. If nothing succeeds so much as success, that burgeoning commerce also attracted the Portuguese, with their newly acquired trade in Asian spices. In establishing their spice staple at Antwerp, and thus the third leg of its tripod, the Portuguese sought in particular supplies of South German fustians, silver and copper, so necessary for purchasing East Indies spices, and also the banking facilities of the

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[83] The fundamental study for this era is: Wolfgang von Stromer, *Die Gründung der Baumwollindustrie in Mitteleuropa: Wirtschaftspolitik im Spätmittelalter*, Monographien zur Geschichte des Mittelalters Band 17 (Stuttgart, 1978), especially pp. 29-62, 128-54. See also: Hermann Kellenbenz, 'The Fustian Industry of the Ulm Region in the Fifteenth and Early Sixteenth Centuries', in Harte and Ponting, *Cloth and Clothing in Medieval Europe* (n. 35), pp. 259-76; Mazzaoui, *Italian Cotton Industry* (n. 36), pp. 129-53. Sales of Ulm *barchent* have been recorded at Cologne as early as 1389; and at the Frankfurt Fair in 1398. The wars were those of Visconti Milan vs. Florence and the Papal states (1370-75); Hungary and Padua vs. Venice (1372-73); the Swabian League against Emperor Charles IV (1376-78); Florence vs. the Papacy ('War of Eight Saints', 1376-78); Venice vs. Genoa (War of Chioggia, 1378-80); Visconti Milan vs. Verona, Padua, Bologna, Venice, Florence, Piedmont (1384-92). See also n. 66 above and the following note.

Fuggers, Welsers, and Hochstetters.[84]

Fairs, the Law Merchant, and the Financial Revolution in Negotiable Bills and *Rentes*

Indeed all these new Fairs -- those of Brabant, Frankfurt, Geneva, Lyon, Besançon, Cremona, Piacenza, Lanciano, and Medina del Campo (Castile) – were just as important in providing financial services; and in so doing these Fairs, beginning with those of Brabant, introduced a truly momentous financial revolution for the early-modern economy, in terms of both bills-of-exchange (and related) banking and in public finance.[85] We are thus led back to North's observations about the role of the international 'law merchant' and to the concluding financial contributions that these early-modern fairs provided in lowering the transaction costs of international, now world-wide commerce. Contrary to De Roover's misconceived assertions about bills of exchange, alluded to earlier, such bills were not designed just and only for town-based 'sedentary' branch-plant town-based trade, but were also employed just as much in fairs, regional and

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[84] John Nef, 'Silver Production in Central Europe, 1450-1618,' *Journal of Political Economy*, 49 (1941), 575-91; Jan A. Van Houtte, 'La genèse du grand marché international d'Anvers à la fin du moyen âge,' *Revue belge de philologie et d'histoire*, 19 (1940), 87-126; Van der Wee, *Antwerp Market* (n. 66), vol. II, pp. 73-124; John Munro, 'The Central European Mining Boom, Mint Outputs, and Prices in the Low Countries and England, 1450 - 1550,' in Eddy H.G. Van Cauwenberghe, ed., *Money, Coins, and Commerce: Essays in the Monetary History of Asia and Europe (From Antiquity to Modern Times)*, Studies in Social and Economic History, Vol. 2 (Leuven, 1991), pp. 119 - 83; Munro, 'The Monetary Origins of the 'Price Revolution' Before the Influx of Spanish-American Treasure: The South German Silver-Copper Trades, Merchant-Banking, and Venetian Commerce, 1470-1540', in Dennis Flynn, ed., *Monetary History in Global Perspective, 1500 - 1808*, Variorum Series: *An Expanding World: The European Impact on World History, 1450 - 1800* (London: Ashgate, forthcoming); Otto Hermann Brandt, *Die Fugger: Geschichte eines deutschen Handelshauses* (Jena: E. Diederichs, 1928); Götz Pölnitz, *Die Fugger* (Frankfurt am Main: H. Scheffler, 1960). For South-German and especially Nürnberg trade from the later 14th to the mid 15th century, see also Wolfgang von Stromer, *Die Nürnberger Handelsgesellschaft Gruber-Podmer-Stromer im 15. Jahrhundert*, Nürnberger Forschungen: Einzelarbeiten zur Nürnberger Geschichte, Band 7 (Nürnberg, 1963).

[85] See Rothmann, *Die Frankfurter Messen* (n. 66), pp. 329-487 (and pp. 479-87 on bills of exchange); Von Stromer, *Oberdeutsche Hochfinanz* (n. 66), vol. II, pp. 219-94, 342-86, 436-60 (for Nürnberg and Frankfurt); Bergier, *Genève et l'économie européenne* (n. 68), pp. 217-436; Körner, *Solidarités financières Suisses* (n. 68), especially pp. 105-06, 227-64; Gioffrè, *Gênes et les foires* (n. 68), pp. 91-119, with financial documents on pp. 123-251; Genevet, *Compagnie des agents de change de Lyon* (n. 68); Brésard, *Les foires de Lyon* (n. 68); Gascon, *Lyon et ses marchands* (n. 68); Marciani, *Lettres de change aux foires de Lanciano* (n. 68): bills of exchange and other financial documents, pp. 11-179; Boyer-Xambeu, Deleplace, Gillard, *Private Money and Public Currencies* (n. 68), pp. 17-43, 66-102; and Martin H. Körner, 'Public Credit', in Richard Bonney, ed., *Economic Systems of State Finance*, European Science Foundation (Oxford, 1995), pp. 507-38, esp. pp. 514-24. The Geneva fairs declined from the later 15th century, with and principally because of the growing success of the Lyon Fairs, especially thanks to the participation of Genoese merchant-bankers.

international.[86] Nor did they supersede or displace the financial contract that was virtually identical to the *instrumentum ex causa cambii*: the bill obligatory (promissory note), so commonly used, along with bills of exchange, by English and other merchants at the Brabant Fairs into the seventeenth century.[87]

Undoubtedly the most revolutionary development in the use of such bills for financing international trade was the introduction of full-fledged negotiability, via law-merchant courts. This most complex topic is also one that Herman Van der Wee has also investigated at some length, in many notable publications. My more modest contribution concerns the role of the London Mayor's Court: in establishing, as early as 1436, the first legal precedent to ensure the full protection of property rights and financial claims of the 'bearer', as the third party to whom a bill of exchange had been transferred.[88] This was a Parliamentary Staple court that was authorized by several English statutes to utilize the still evolving international law-merchant, with the same judicial power as that enjoyed by Common Law courts.[89] What is indeed most striking about the decision of this London law-merchant court, known as *Burton v Davy*, is that it involved a true bill-of-exchange: one that an English merchant in Bruges (John Audley), as the resident factor for the London Mercer Elias Davy, having received funds as the *taker* from another English merchant in Bruges (Thomas Hanworth, as the *deliverer*), and resident agent for the Norwich merchant John Burton, drew a bill upon his master Elias Davy (i.e. as the designated *payer)*, in London, instructing him to pay 'John Burton [the *payee*] *or the bearer*

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[86] See above, pp. 8-10 and n. 22.

[87] See Michael Postan, 'Credit in Medieval Trade,' *Economic History Review*, 1st. ser. 1 (1928), 234-61, reprinted in Michael Postan, *Medieval Trade and Finance* (n. 8), pp. 1-27; Postan, 'Private Financial Instruments in Medieval England' (n. 28), pp. 28-64; and the following notes.

[88] Munro, 'The International Law Merchant' (n. 28), pp. 49 - 80.

[89] See: Ordinance of the Staples, 27 Edwardi III, stat.2,1353, in *Statutes of the Realm* (n. 28), vol. I, pp. 332-43. This statute formally established mercantile Staple Courts and commercial stapling obligations in fifteen English towns, and stipulated that 'all Merchants coming to the Staple, their Servants and Meiny ... shall be ruled by the Law Merchant [*lei merchant*], of all Things touching the Staple, and not by the Common Law of the Land' (cap. 8); and it also explicitly enjoined the King's justices from interfering with anything 'which pertaineth to the Cognizance of the Mayor and Ministers of the Staple' (cap. 5). The Staple courts were to consist of the Staple or civic major 'having Knowledge of the Law-Merchant to govern the Staple, two constables and a jury composed of domestic or foreign merchants, or both, depending upon the circumstances of the case (cap. 8, 21); and they were given the power to seize the goods and chattels of defaulting debtors (cap. 9).

of this letter of payment' the sum of £30 sterling on the following 14 March 1436.[90] Subsequently, this bill was transferred to another merchant, John Walden, in payment for some other transaction; and when Davy refused to honour the 'accepted' bill that Walden presented, Walden then sued Elias Davy in this London court, necessarily having to secure the support of John Burton, who then played no further role in the proceedings.[91] The court, having met on 10 August, 1 September, and again on 3 November, to hear witnesses and establish the facts, ruled as early as 19 November, that 'according to the Law Merchant and the custom aforesaid in such like cases,' John Walden had full and equal standing with Burton, and thus ordered Davy to pay Walden the £30 sterling in full, plus costs and 20s in damages.[92] Significantly, as well, the London court pointedly stipulated that the parliamentary statutes on the law-merchant were designed to ensure speedy justice, *sine dilatione;* and that it would brook no further delays from Davy 'because no discontinuance, according to the Law-Merchant and custom aforesaid, is permitted in any mercantile causes of a court of this nature'. The judge (John Mitchell) also rebuffed Davy's demand to have the case heard in the Common Law court of King's Bench, asserting that his court had sole jurisdiction, 'according to the Law-Merchant ... and

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[90] Full text in: Hubert Hall, ed., *Select Cases Concerning the Law Merchant*, Vol. 2: *Central Courts, A.D. 1239 - 1633*, Selden Society Publications Vol. 46 (London, 1930), vol. III, pp. 117-19 (Latin and French, with English translations). Précis and incomplete, somewhat misleading analyses in Frederick Beutel, 'The Development of Negotiable Instruments in Early English Law', *Harvard Law Review*, 51 (1938), pp. 830-1, and James Holden, *The History of Negotiable Instruments in English Law* (London, 1955), pp. 23-4. The entire document is in the form of a reply by the London Mayor, John Mitchell, to a Chancery writ of Henry VI, dated 14 February 15 Hen. VI, or 1437, the year erroneously given by Beutel, Holden, and many others for the London case itself. See also a contrary and, in my view incorrect, interpretation in James Steven Rogers, *The Early History of the Law of Bills and Notes: A Study of the Origins of Anglo-American Commercial Law*, Cambridge Studies in English Legal History (Cambridge, 1995), pp. 24-25, 45-51, 174.

[91] Hall, *Law Merchant* (n. 90), pp.117-18. On 10 August 1436, after several further rebuffs, Walden presented this dishonoured bill to the London Mayor's court, along with 'a bill or supplication made in the name of the aforementioned John Burton, according to the Law Merchant and custom of the city of London'.

[92] *Ibid*., p. 117: 'To my very honoured master, Elias Davy, mercer, at London, let this be given. Very honoured sir, please it you to know that I have received here [in Bruges] of John Burton [by the hands of Thomas Hanworth] by exchange, 30 *l*. [sterling] payable at London to the aforesaid John [Burton] or to the bearer of this letter of payment on the 14th day of March next coming, by this my first and second letter of payment. And I pray you that it may be well paid at the day. Written at Bruges, the 10th day of December [1435], by your attorney, John Audeley, etc.'

by divers statutes and Parliaments' to hear this case.[93] If 'time is money', then obviously the major savings in transaction costs was such speedy justice, compared to the often drawn out proceedings of Common Law courts, which, in any event, would never have given any standing to holograph documents, such as this bill of exchange, nor any weight to current mercantile practices as those established in fair-oriented law-merchant courts.[94]

As Herman Van der Wee has also demonstrated, a similar law-merchant court in Antwerp issued, in 1507, an almost equivalent *turba* or verdict. Quite possibly it drew upon the 1436 London precedent; for this decision involved the transactions of an English cloth merchant trading at the Brabant Fairs, with payment by a letter-obligatory.[95] Subsequently, in 1527, another law-merchant court, in Bruges, similarly declared that 'the bearer had all the rights of a principal' in claiming payment on a commercial bill and in suing defaulting

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[93] *Ibid*., pp. 118-19. The text in translation: 'According to the Law-Merchant and the ancient liberties and free customs of the city itself, as by divers statutes and Parliaments...the mayor, etc. have the power and use of hearing and considering causes and actions of all and singular merchants, as to all manner of loans, barratries [vexatious litigations], exchanges and letters of payment and other things, and mercantile contracts made or entered into between merchants themselves or their factors making plaints at whatsoever ordinary fairs ... or merchant towns outside the realm of England... and of trying those causes and actions by juries of merchants passing between a foreign place'. Cf. Reginald Sharpe, ed., *Calendar of Letter-Books Preserved among the Archives of the Corporation of the City of London at the Guildhall*: *Letter Book K. Temp. Henry VI* (London, 1911), pp. 208-09: 'by the Law-Merchant and the ancient liberties and customs of the City the Mayor and Aldermen, from time immemorial, had exercised jurisdiction over mercantile disputes arising between merchants of the City; and that Elias Davy, mentioned in the writ, was for many years and is a merchant and citizen of London, and was warned by order of Henry Frowyk, the Mayor, and the Aldermen to appear before them in the Chamber of the Guildhall...'

[94] Cf. the following dubious statement in Boyer-Xambeu, Deleplace, Gillard, *Private Money and Public Currencies* (n. 68), p. 31: 'Until at least the late sixteenth century, the bill of exchange did not admit of any endorsement or possible transmissability of its holder's right [to payment], citing various publications of De Roover (see nn. 21-22 above, 97 below); but they are correct in citing Italian opposition to the legal acceptance of endorsed negotiable bills. See also Rogers, *Early History of the Law of Bills and Notes* (n. 90), pp. 45-51, 174; and my response in: Munro, 'English "Backwardness" and Financial Innovations in Commerce with the Low Countries'(n. 25), pp. 105-67.

[95] Herman Van der Wee, 'Anvers et les innovations de la technique financière aux XVIe et XVIIe siècles,' *Annales: E.S.C.*, 22 (1967), 1067-89; republished as 'Antwerp and the New Financial Methods of the 16th and 17th Centuries,' in Herman Van der Wee, *The Low Countries in the Early Modern World* (Cambridge, 1993), pp. 145-66; Van der Wee, *Growth of the Antwerp Market* (n. 66), vol. II, pp. 333-68 ; Herman Van der Wee, Herman, 'Monetary, Credit, and Banking Systems,' in E.E. Rich and Charles Wilson, eds., *Cambridge Economic History of Europe*, vol. V: *The Economic Organization of Early Modern Europe* (Cambridge, 1977), pp. 310-35.

debtors.[96] These in turn provided the necessary precedents to permit the Estates General of the Habsburg Netherlands to complete the necessary legal foundations for fully-fledged negotiability, in ordinances of March 1537 and October 1541, the first such national legislation in early-modern Europe. Together, they permitted the bearer of any bill to sue any and all prior assignors of the note for the full payment, and provided other legal guarantees of the property rights of bearers. Furthermore, and rather astoundingly for a still Catholic legislature, these ordinances also permitted interest payments up to 12 percent per annum on all debts and commercial bills.[97] Full and true negotiability, of course, depends upon the ability of third parties to engage in discounting – to sell a bill before maturity for less than its stipulated face value, i.e. by the amount of *forgone* interest; and that was possible only if merchants were not subjected to threats of prosecution for violating the usury laws (which thus now applied only to interest rates above 12 per cent).

European Public Finance and the Fairs in Sixteenth-Century Europe

As important as the principle of negotiability was for the world of private mercantile finance and international trade, equally significant was its immediate extension to the realm of government finance: in permitting, with far lower transaction costs, the transferability of government *rentes*, i.e. annuities, as the now

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[96] A.P. Usher, *The Early History of Deposit Banking in the Mediterranean*, vol. I: *Structure and Functions of the Early Credit System: and Banking in Catalonia, 1240-1723* (Cambridge, Mass., 1943), pp. 98-9, citing a document in Louis Gilliodts-Van Severen, ed., *Coutume de la ville de Bruges*, Commission Royale d'Histoire (Brussels, 1875), vol. II, no. 127, p. 318. See also Raymond De Roover, *Gresham on Foreign Exchange: An Essay on Early English Mercantilism* (Cambridge, Mass., 1949), pp. 117-52, citing the text of the ordinance of the 1537 Estates General discussed in the following note.

[97] Van der Wee, 'Credit and Banking Systems' (n. 95), p. 326: '...in this way, the various transferring creditors remained jointly responsible for payment'. For the text of the March 1537 ordinance, concerning bills of obligatory only, see C. Laurent, M. J. Lameere, and H. Simont, eds., *Recueil des ordonnances des Pays Bas, deuxième série, 1506 - 1700*, Commission Royale d'Histoire (Brussels, 1907), vol. IV, pp. 15-17, and 34-5. For the text of the 31 October 1541 decree (including bills of exchange), see Van der Wee, *Growth of the Antwerp Market* (n. 66), vol. II, p. 344: 'Ordonnons que doresenavant tous ceulx qui aueront accepté ... quelque lettre de change seront tenus de payer la somme contenue en ycelle en deniers évaluez ... sans que pour lesdits changes ou aultres obligations contractez entre marchans on puist donner en payement aultres obligations par forme d'assignacions, lesquelles le créditeur ne sera tenu daccepter sil ne veult, et en acceptant lassignacion demeurerea neantmoins le premier debteur obligé tant que le marchant sera réalement payé ou effectuellement contente de son due'. See also Usher, *Deposit Banking* (n. 96), pp. 98-9; and De Roover, *Gresham* (n. 96), pp. 117-52, who noted that the 1537 ordinance applied only to letters obligatory and not to bills of exchange, which 'rarely if ever have bearer clauses in them' (evidently unaware of the English examples).

almost universal form of public debt, to third parties. Because *rentes* (*renten*) were permanent and non-redeemable, except when the issuing government arbitrarily chose to repurchase them, they were not true loans (i.e. *mutuum*), and thus they escaped any taint of usury, especially after receiving sanction from the papal bulls of 1425 and 1455. Yet obviously more investors would be willing to purchase *rentes* if they had both the legal right and the ability to sell their *rentes*, i.e. their claims to annuity payments, and thus to recoup their principal (with capital gains or losses), and to do so in an efficient, low-cost secondary market. Such a financial market, and one clearly associated as an integral part of the Brabant Fairs, was provided by the founding of the Antwerp Bourse (*Beurs*) in 1531.[98] The very major role that other renowned sixteenth-century fairs, such as those of Geneva, Besançon, Piacenza, Lanciano, and especially Lyon and Medina del Campo, played in European public finance is too well known to require further elaboration here.[99] The international fairs of early-modern Europe were thus arguably far more important in lowering the transaction costs of international trade, international finance, and government finance than they had been in their supposed heyday of the thirteenth century. Indeed, as the most striking evidence for such a decline in transaction costs in early-modern Europe, or reflection thereof, is the fall in nominal and real interest rates, by one half, from the 1440s to the mid 1550s, despite rational expectations of rising interest rates during the inflation that commenced c. 1515-20, marking the onset of famous Price Revolution era.[100]

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[98] See Van der Wee, 'Monetary, Credit, and Banking Systems' (n. 95), pp. 315-35; and James D. Tracy, *A Financial Revolution in the Habsburg Netherlands: Renten and Renteniers in the County of Holland, 1515-1565* (Berkeley and London,1985), especially pp. 7-27 for 'Forms of Public Debt in Renaissance Europe'; pp. 28-70 for 'Netherlands Finance and the Origins of Provincial *Renten*'; and my favourable review in *The American Historical Review*, 92 (April 1987), 434-35. See also Gilomen, 'Wucher und Wirtschaft' (n. 27), pp. 269-70, 295-96, 299-300.

[99] See sources cited in n. 85 above, and also Körner, 'Public Credit' (n. 85), pp. 507-38, esp. pp. 514-24; Martin Körner, *Luzerner Staatsfinanzen 1415-1798 : Strukturen, Wachstum, Konjunkturen*, Luzerner historische Veröffentlichungen, Bd. 13 (Luzern: Rex, 1981), pp. 34-50, 301-32; Boyer-Xambeu, Deleplace, Gillard, *Private Money and Public Currencies* (n. 68), pp. 17-42, 66-103.

[100] Van der Wee, *Antwerp Market* (n. 66), vol. I, Appendix 45: Financial Statistics, pp. 525-28; and vol. II, pp. 325-64: from 20-25 percent in 1450 to 9-10 percent in 1550; John Munro, 'Precious Metals and the Origins of the Price Revolution Reconsidered: The *Conjuncture* of Monetary and Real Forces in the European Inflation of the Early to Mid-Sixteenth Century,' in Clara Eugenia Núñez, ed., *Monetary History in Global Perspective, 1500 - 1808*, Proceedings of the 12th International Economic History Congress (Seville, 1998), pp. 35-50.

A Postscript and a Hypothesis: Why International Fairs Flourished better with Overland Trade Routes

There remains, however, one final question to be addressed, if only with some hypotheses: why was overland continental trade, in medieval and early modern Europe, evidently more conducive than maritime trade to the establishment and efflorescence of international fairs? To be sure, this exposition has already stressed the crucial point that arterial overland continental routes, especially those from Venice to Antwerp in the early-modern era, encompassed only 20 percent of the distance for the maritime routes. Furthermore, these routes, or their chief axes, fostered the growth and economic prosperity of a far greater number of towns, both commercial and industrial (metallurgy, textiles), than did the maritime routes, basically in the manner suggested by the Van der Wee thesis. One may also reiterate the related points, established by both Brulez and Van der Wee, that innovations in both marketing and transport along these routes during the early-modern era reduced both transportation and transaction costs along the overland routes to a relatively much greater extent than on the maritime routes.[101] But these points, though well taken, still do not answer the question posed. They are obviously less relevant for the previous era in which international, land-based fairs flourished, unless one were to point to the grave dangers that long-distance maritime commerce via the Atlantic routes posed before the early fourteenth century.

Yet the true answer to the question posed may lie in examining the relative hazards and degrees of certainty in maritime and overland trade. In essence, one may contend that overland continental trade generally provided much greater regularity and dependability than did maritime commerce, at least during times of relative security, thus ensuring not only lower cost transport but greater certainty of *expected* times of arrival at designated points (fairs and towns) along such land routes. Such certainty, especially combined with the postal and marketing innovations of the early-modern era, provided a greater guarantee of the more or less simultaneous confluence of a wide range of international merchants from all or most parts of Europe, at a given time and place, conditions certainly requisite for the most efficient functioning of international fairs. Conversely, maritime trade, especially between north-west Europe and the Mediterranean, was far more

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[101] See above, pp. 27-28.

uncertain in terms of duration and thus arrival times: particularly with dangers from sea-storms, pirates, and corsairs that took ships far off course, and thus far from the greater certainty provided by coastal, land-fall navigation.

Several recent historical studies of European navigation have highlighted what was the crucial problem for long-distance maritime trade before the modern era: all too frequently, ignorance of one's true location at sea. For, while mariners could readily reckon latitude from the sun and the stars, though more easily in the northern hemisphere, they had no reliable method of calculating longitude: not until an obscure English carpenter and clockmaker, John Harrison, developed the first effective chronometer for such long-distance maritime navigation, tested in 1764. Even so, two more decades would pass before his chronometers were finally accepted, even by the British navy.[102] Before then far too many ships, encountering but surviving violent storms or attacks from pirates and corsairs, were so swept off their course that they were literally 'lost at sea' -- and lost for long periods of time.

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[102] See in particular Dava Sobel, *Longitude: The True Story of a Lone Genius Who Solved the Greatest Scientific Problem of His Time* (New York, 1995; republished New York, 1996); William J. H. Andrewes, ed., *The Quest for Longitude: The Proceedings of the Longitude Symposium Harvard University, Cambridge, Massachusetts, November 4-6, 1993* (Cambridge, Mass., Collection of Historical Scientific Instruments, Harvard, 1996), especially Anthony Randall, 'The Timekeeper That Won the Longitude Prize, pp. 235-254; Dava Sobel and William J.H. Andrewes, *The Illustrated Longitude* (London, 1998), pp. 137-77; Michael Kennedy, *The Global Positioning System and GIS* (Ann Arbor, 1996). These works inspired the recent Public Broadcasting System television production: 'Lost at Sea: the Search for Longitude' (October 1998): 'It is known that longitude can be found by comparing a ship's local time to the time at the port of origin. The challenge is finding a clock -- a chronometer -- that can keep time at sea, where temperature-changes, humidity, gravity and a ship's movement affect accuracy.'

APPENDIX: Burton v Davy, 1436 and Negotiable 'Bearer' Bills of Exchange

The bill of exchange drawn in Bruges upon a London merchant:

A mon treshonure mestre Elys Davy, mercer, a Loundres, soit doné:

Treshonure sire vous please assavoir que jay resceu yci de John Burton [per manus Thome Hanworth mercatoris, tunc factoris sui] par eschange *xxx l.* [sterling], appaiers a Loundres al avauntdit John ou al portour diceste lettre de paiement le xiiii jours de March' proch[ein] a venir, par cest ma premier et seconde lettre de paiement. Et je vous emprie quil soit bien paie a le jour.

Escript a Bruges le x jour de Decembre [1435], par vostre attourne,

John Audeley, etc.

Principals and Agents:

1. **The Deliverer in Bruges:** Thomas Hanworth, factor of John Burton, merchant of Norwich

2. **The Taker in Bruges:** John Audeley, factor of Elias Davy, London mercer, who receives the equivalent, in Flemish funds (amount not specified), of £30 sterling, and who then [10 December 1435] draws a bill on his master Elias Davy for payment on 14 March 1436.

3. **The Payer in London:** Elias Davy, London mercer, who has evidently accepted the bill for payment and then 'dishonoured' the bill: i.e. refused to pay the bearer on the redemption date.

4. **The Payee in London:** John Burton, or

5. **The 'bearer of this letter':** [*portour diceste lettre de paiement*] John Walden, who launched the suit in the London Mayor's court, with support from the payee, John Burton

Ruling of the London Mayor's Court of 29 November 1436:

Et super hoc quia tam per sacramentum dicti Thome Hanworth qui deliberavit, quam sacramentum precdicti Johannis Audeley, qui recepit denarios predictos per escambium in forma predicta ..; ideo consideratum est per eandem curiam mercatorium juxta legem mercatoriam et consuetudinem predictam in hujusmodi casibus, etc. usitatas et approbatus, quod ilem Elias [Davy] juxta vim, formam, et effectum dicte litere solvat easdem xxx l. prefato supplicanti vel Johanni Walden portitori ejusdem litere, qui loco suo tenetur et habetur in hoc casu, etc., juxta legem mercatoriam et consuetudinem antedictam, etc., et xx s. ultra pro dampnis in hac parte et sustentatis, etc.

Source: Hubert Hall, ed., *Select Cases Concerning the Law Merchant*, Vol. II: *Central Courts, Supplementary, A.D. 1251-1779*, Selden Society Publications, Vol. XLIX (London, 1932), no. 38, pp. 117-19.

Table 1:
EXPORTS OF ENGLISH BROADCLOTHS, 1347/48 to 1548/49

English Broadcloth = 24 yds by 1.75 yds, for cloths of assise: 4 straits and dozens = 1 broadcloth; and 3 kerseys = 1 broadcloth.

From one sack of wool, 4.333 broadcloths could be manufactured

Year Michaelmas	Denizen Exports	Hansard Exports	Other Aliens Exports	TOTAL EXPORTS	London Total	London as % of Total
1348-50	2,246		310	2,556		
1351-55	1,586		335	1,921		
1356-60	7,376	174	1,511	9,061		
1361-65	9,099	1,020	1,598	11,717		
1366-70	10,978	1,310	2,240	14,527		
1371-75	9,102	1,240	1,869	12,211		
1376-80	9,673	1,383	2,586	13,643		
1381-85	13,949	2,800	5,493	22,242		
1386-90	17,192	3,125	5,293	25,610		
1391-95	22,974	6,346	10,205	39,525		
1396-00	23,318	5,646	9,811	38,775		
1401-05	19,450	6,548	8,571	34,570		
1406-10	12,997	6,568	12,181	31,746	14,251	44.89%
1411-15	12,284	4,980	9,919	27,183	14,493	53.31%
1416-20	14,051	5,722	8,205	27,977	12,698	45.39%
1421-25	21,180	6,935	12,160	40,275	16,812	41.74%
1426-30	20,334	5,304	14,768	40,406	17,498	43.30%
1431-35	25,474	4,062	10,492	40,027	17,069	42.64%
1441-45	28,163	11,336	16,957	56,456	23,938	42.40%
1446-50	25,286	9,301	11,259	45,847	14,229	31.04%
1451-55	20,785	8,214	7,701	36,700	16,419	44.74%
1456-60	18,911	10,017	7,562	36,489	16,162	44.29%
1460-65	16,046	8,584	4,371	29,002	16,041	55.31%
1466-70	21,255	5,807	10,386	37,447	20,788	55.51%
1471-75	20,705	3,415	12,417	36,537	23,328	63.85%
1476-80	32,185	8,226	10,030	50,441	34,444	68.29%
1481-85	29,191	13,439	11,568	54,198	36,293	66.96%
1486-90	25,892	13,740	10,373	50,005	35,122	70.24%
1491-95	29,513	15,100	12,332	56,945	35,893	63.03%
1496-00	35,668	17,175	9,740	62,583	42,746	68.30%
1501-05	44,803	17,638	14,830	77,271	46,611	60.32%
1506-10	46,832	16,984	20,987	84,803	52,390	61.78%
1511-15	49,110	21,621	15,861	86,592	62,257	71.90%

Year Michaelmas	Denizen Exports	Hansard Exports	Other Aliens Exports	TOTAL EXPORTS	London Total	London as % of Total
1516-20	51,128	20,411	18,559	90,099	63,084	70.02%
1521-25	48,675	18,457	15,137	82,269	61,854	75.19%
1526-30	56,942	20,402	16,190	93,534	72,350	77.35%
1531-35	53,966	24,274	15,847	94,087	75,503	80.25%
1536-40	61,008	30,747	17,523	109,278	91,731	83.94%
1541-45				118,056	101,550	86.02%
1546-50				135,190	123,780	91.56%
1551-55				126,595	110,888	87.59%

Sources: E.M. Carus Wilson and Olive Coleman, eds., *England's Export Trade, 1275-1547* (Oxford, 1963), pp. 36-119; A.R. Bridbury, *Medieval English Clothmaking: An Economic Survey* (London, 1982), Appendix F, pp. 118-22.

Table 2. Production and Export of Says from the Hondschoote Sayetterie in quinquennials means, 1401-05 to 1596-1600

Year	Hondschoote Drapery Tax Farm in £ parisis 240d per £ parisis	Cloths represented by tax farm 8d per cloth	Hondschoote Cloth Sales: Exports in Single Says*
1401-05	54.80	1,644	
1406-10	78.00	2,340	
1411-15	85.60	2,568	
1416-20	117.60	3,528	
1421-25	152.80	4,584	
1426-30	165.80	4,974	
1431-35	172.00	5,160	
1436-40	176.00	5,280	
1441-45	180.00	5,400	
1446-50	278.00	8,340	
1451-55	345.60	10,368	
1456-60	388.00	11,640	
1461-65	404.00	12,120	
1466-70	435.20	13,056	
1471-75	464.00	13,920	
1476-80	424.00	12,720	
1481-85	455.00	13,650	
1486-90	488.70	14,661	
1491-95	399.95	11,999	
1496-1500	424.00	12,720	
1501-05	588.00	17,640	
1506-10	667.20	20,016	
1511-15	757.60	22,728	
1516-20	980.00	29,400	
1521-25	1,071.60	32,148	
1526-30	1,163.20	34,896	31,583.44
1531-35	1,452.80	43,584	41,184.50
1536-40	1,439.20	43,176	42,761.40
1541-45	1,580.80	47,424	44,547.60
1546-50	1,634.80	49,044	45,453.40
1551-55	2,228.80	66,864	57,387.40
1556-60	2,472.40	74,172	67,026.20
1561-65	2,946.40	88,392	89,699.60
1566-70	2,987.20	89,616	93,057.20
1571-75	2,716.00	81,480	82,772.40
1576-80	2,224.00	66,720	81,550.50

Year	Hondschoote Drapery Tax Farm in £ parisis 240d per £ parisis	Cloths represented by tax farm 8d per cloth	Hondschoote Cloth Sales: Exports in Single Says*
1581-85	384.00	11,520	16,961.20
1586-90	494.00	14,820	12,127.80
1591-95	724.00	21,720	20,039.70

* A fine narrow say measured 28.0 m (40 ells) by 0.7 m (1 ell), with a finished area of 19.60 m^2, and with a weight of 260.4 grams per sq. metre; a small double say measured 25.725 m (36.75 ells) by 0.875 m (1.25 ells), with a finished area of 22.509 m^2, and with a weight of 322.4 grams per sq. metre. In the 1540s, at the Antwerp market, Hondschoote single says sold for £0.783 to £0.967 *groot* Flemish (15s 8d. to 19s 4d. *groot* Flemish), which represented, in value, 13.42 days's wages to 18.32 days wages for an Antwerp master mason, then earning 12.67d (1540-42) to 14.00d. *groot* per day (from 1543).

Source: Emile Coornaert, *La draperie-sayetterie d'Hondschoote, XIVe-XVIIIe siècles* (Paris, 1930); calculated from Appendix IV, 485-90 (data extracted from: Archives départementales du Nord, Section B. État général, 4068-4236, 17600); Appendix V, 493-95 (data extracted from Stadsarchief Hondschoote, Series GG 53, 54, 70, 38, 398, 82; CC 89, 40-50, 61-82; and HH 12-13). Note: double says are counted as two single says; John Munro, 'Textiles as Articles of Consumption in Flemish Towns, 1330 - 1575,' *Bijdragen tot de geschiedenis*, 81:1-3 (1998), 275-88.

Table 3 **Prices of Flemish and Brabantine Says, Other Light Cloths, and Heavy-Weight Woollens: as Sold in Florence by the Del Bene Company, 1318-23 in Soldi Affiorini of Florence, and in Flemish Shillings Groot Per Canna of Florence (= 3.5 Flemish ells)**

Textile Town	Maximum soldi affiorini	Median soldi affiorini	Maximum Flemish shillings	Median Flemish shillings		Maximum % of Douai Maximum	Median as % of Ypres Median
Says and Other Draps Légers							
Hondschoote	63	52	2.333	1.917		32.81%	41.60%
Arras	50	50	1.833	1.833		26.04%	40.00%
Poperinge	47	43	1.750	1.583		24.48%	34.40%
Ghistelles	24	23	0.917	0.833		12.50%	18.40%
Heavy-Weight Woollens							
Douai	192	177	7.167	6.583		100.00%	141.60%
Brussels	185	154	6.917	5.750		96.35%	123.20%
Mechelen	158	155	5.917	5.750		82.29%	124.00%
Ghent	155	131	5.750	4.917		80.73%	104.80%
Ypres	143	125	5.333	4.667		74.48%	100.00%
Notes							
1 gold florin of Florence = 29 soldi affiorini; 1 florin = 13d groot Flemish							
1 canna of Florence = 4 braccia= 2.452 metres = 3.5 Flemish ells							

Sources: Hidetoshi Hoshino, 'The Rise of the Florentine Woollen Industry in the Fourteenth Century,' in N. B. Harte and K. G. Ponting, eds., *Cloth and Clothing in Medieval Europe* (London, 1983), calculated from Table 11.2, p. 190; Peter Spufford, *Handbook of Medieval Exchange* (London, 1986), tables on pp. 34, 186, 215.

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

Year	Ghent Dicke-dinnen in £ groot	Mechelen Black Rooslaken in £ groot	Hond-schoote Single Says in £ groot	Hond-schoote Double Says in £ groot	No. Days of Mason's Wages to buy one Ghent Dicke-dinnen	No. Days of a Mason's Wages to buy one Hond-schoote Single Say	Antwerp Master Mason's Daily Wage in d groot	Value of Ghent Dicke-dinnen in Antwerp consumer-baskets	Value of Hond-shoote Single Says in Antwerp consumer-baskets	Value of Antwerp Basket of Consuma bles in d. groot Flemish
1535	14.150	10.667			328.660		10.333	12.637		268.730
1536	14.250	10.667			310.910		11.000	11.497		297.470
1537	14.500	11.333			298.280		11.667	13.683		254.330
1538	14.500	11.333	0.967	2.278	274.730	18.320	12.667	11.775	0.785	295.530
1539	15.000	11.333	0.945	2.184	284.200	17.900	12.667	11.984	0.755	300.400
1540	15.000	11.333	0.835	1.961	284.200	15.820	12.667	12.365	0.688	291.130
1541	15.500	11.333	0.879	2.015	293.680	16.650	12.667	13.381	0.759	278.000
1542	14.500	11.333	0.838	2.005	274.730	15.880	12.667	11.853	0.685	293.600
1543	14.000	11.333	0.783	1.775	240.000	13.420	14.000	10.364	0.580	324.200
1544	14.000	11.333	0.908	1.942	240.000	15.570	14.000	9.571	0.621	351.070

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 groot (gros)

b. Ghent woollens (dickedinnen): 30 ells by 9.5 quarter ells, made from English March (Shropshire and Herefordshire) and Cotswolds wools.

c. Mechelen woollens (Rooslaken): 30 ells by 10 quarter ells (March wools), prices converted from *pond groot* Brabant into *pond groot* Flemish

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.

Table 5 Imports into and Exports from the Brabant Fairs c. 1560, in millions of Carolus gulden of 40d. groot Flemish

	IMPORTS					EXPORTS	
Commodity	**Value in gulden**	**Percent of Total Specified**	**Percent of Estimated Total**		**Commodity**	**Value in gulden**	**Percent of Total**
Textile Products					**Textile Products**		
Silks: Italian fabrics and raw	4.000	21.62%	17.78%		Says, worsteds, serges	2.500	15.63%
Woollens: English	3.240	17.51%	14.40%		Linens	2.500	15.63%
Fustians: German	0.240	1.30%	1.07%		Woollens: Netherlander	1.400	8.75%
Wools: Spanish*	1.250	6.76%	5.56%		Woollens: English (finished)	3.120	19.50%
Wools: English	0.500	2.70%	2.22%		Fustians: German	0.240	1.50%
Woad: French	0.400	2.16%	1.78%		Silks: re-exports	0.500	3.13%
Alum: Italian	0.140	0.76%	0.62%		Tapestries	0.700	4.38%
Alum: Spanish	0.100	0.54%	0.44%		Other Textile Exports	0.600	3.75%
Cochineal: Spanish-American	0.225	1.22%	1.00%				
Sub-total textile products	**10.095**	**54.57%**	**44.87%**		**Sub-total textile products**	**11.560**	**72.25%**
Foodstuffs					**Other Exports**	**4.440**	**27.75%**
Grains: Baltic	3.000	16.22%	13.33%				
Spices: Portuguese-Asian	2.000	10.81%	8.89%				
Sugar: Portuguese	0.250	1.35%	1.11%				
Wines: French	1.150	6.22%	5.11%				
Wines: Rhenish	0.720	3.89%	3.20%				
Wines: Italian	0.250	1.35%	1.11%				
Wines: Spanish & Portuguese	0.250	1.35%	1.11%				
Salt: French	0.250	1.35%	1.11%				
Salt: Spanish	0.175	0.95%	0.78%				
Olive Oil: Spanish & Portuguese	0.200	1.08%	0.89%				

	IMPORTS					EXPORTS	
Commodity	**Value in gulden**	**Percent of Total Specified**	**Percent of Estimated Total**		**Commodity**	**Value in gulden**	**Percent of Total**
Sub-total foodstuffs	8.245	44.57%	36.64%				
Other: Copper: German	0.160	0.86%	0.71%				
Total of Specified Commodities	18.500	100.00%	82.22%				
Estimated Other Commodities	4.000		17.78%				
GRAND TOTALS	**22.500**		**100.00%**			**16.000**	**100.00%**

***** Spanish *merino* wools imported into the Habsburg Low Countries chiefly via Bruges

Source: Wilfrid Brulez, 'Le commerce international des Pays-Bas au XVIe siècle: essai d'appreciation quantitative,' *Revue belge de philologie et d'histoire*, 46 (1968), 1205-21, based upon Ludovico Guicciardini, *Description de la cité d'Anvers, 1560*, trans. François de Belleforest, 1582; published in Antwerp, 1920); reissued in English translation as: Wilfrid Brulez, 'The Balance of Trade in the Netherlands in the Middle of the Sixteenth Century', *Acta Historiae Neerlandica*, 4 (1970), 20-48; Jan De Vries and Ad Van der Woude, *The First Modern Economy: Success, Failure, and Perseverance of the Dutch Economy, 1500 - 1815* (Cambridge, 1996), Table 9.1, p. 360.