

## **Centralizing Firms and Spreading Markets: The World of International Grain Traders, 1846-1914**

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For economic and business historians, the repeal of the British Corn Laws marks the true beginning of market competition on a global scale. Perhaps this explains the early interest in the history of the grain trade by two pioneers in business history, N. S. B. Gras and A. P. Usher, each of whom wrote a major book on structural change in the internal markets of France and England respectively [25, 66]. Their studies of market integration during the early modern era have been revised, if not replaced, only recently by Steven Kaplan and John Chartres [14, 15, 35]. We also have a fairly solid understanding of the significant intra-European trade carried on both in the northern seas and the Mediterranean before the 19th century. Yet there are relatively few works available on market integration for breadstuffs since 1846 in institutional rather than statistical terms [40, 57].

After 1846 the geographic spread of the grain trade took several generations. In the first half of the 19th century its center lay on an axis that ran from Amsterdam and Antwerp through London. By the 1870s Liverpool, London, and Chicago were the critical markets. Rather than government regulation, it was the diffusion of improved communications and transport that shaped those markets. The mid-19th century business press dubbed it the revolution of "steam and electricity," their shorthand for the diffusion of more and better steamboats and railroads, telegraph lines and transoceanic cables. These innovations changed the speed, scale, and nature of risks in commercial transactions. As the supplies of bread-stuffs for western Europe arrived in ever larger volume from more distant sources, those same innovations induced equivalent changes in marketing methods and institutions.

As the first nation to undergo an "Industrial Revolution," with its accompanying demographic and agricultural changes, Great Britain served as the focal point for both buyers and sellers in the 19th century grain market. Much of the world's effective demand for breadstuffs was concentrated there after 1846, though a century earlier Britain had been a leading exporter. Merchants in southeastern English ports in the 18th century sold their grain to Dutch shippers and warehousemen, since they were close and had for some centuries served as intermediaries for grain and other commodities originating in the Baltic

and its hinterland, sending them on to relieve chronic deficiencies in the western Mediterranean. To be sure, exceptionally poor crops in the early 1740s throughout much of continental Europe made prices unusually attractive for English exporters [3, 4, 33, 34, 48, 49, 51].

Over the next few decades, however, a rising standard of living of a rapidly increasing population in England led to the paradox of both larger per capita consumption of wheat bread and localized shortages and riots. Merchant shippers turned to foreign suppliers in the aftermath of the worst harvest years [55, 62, 65]. At first they used many of the same Dutch connections by which they or their predecessors had previously sold grain. On the eve of the American Revolution they also bought flour from the obstreperous overseas colonies, though the amounts were relatively small [17, 54, 59, 60]. Most of the grain deficits in England were overcome by drawing on other parts of the British Isles, which remained on the whole self-sufficient until after the Napoleonic wars, due to shipments of wheat and oats from the "Celtic fringe" of Wales, Scotland, and Ireland [45, 64].

After the subsistence crisis of 1816-17, the "last" of its kind in much of western Europe, British traders made direct contact with their counterparts in the old Hanse ports. In turn, some merchants in the Baltic sent family members to London, augmenting the traders who already specialized in business with that region [13, 31, 52]. The British government worried about whether grain supplies from those ports would be large enough, and dependable enough, even as the volume from them quadrupled between 1815 and the 1850s. The grain originated in the interior of Prussia, Poland, and Russia, so it did not reach the sea until late fall. Years later British traders still recalled the "terrible passages" over stormy winter seas that the ships experienced, with much attendant worry on the part of both buyers and sellers [6, 47].

The crisis of 1816-17 also revealed the extent of risk and competition in bringing grain to Britain from longer distances, such as the United States. To be sure, much of the flour trade from the "bread colonies" to the main buyers in the Caribbean during the late 18th century had been very speculative; news about prices was always stale even if the flour itself was not. It was no less chancy when a prominent Liverpool firm, Cropper, Benson & Co., sent news on October 14 on their fastest vessel to New York about the harvest failure and its effect on prices. It arrived there on November 11. The firm to whom the vessel was consigned got the first letters, then delayed delivery of the ones for their competitors. Jonathan Ogden, who had flourished as a merchant in New York since migrating from England in the 1790s, suspected something was up and quickly sent an "express" rider to L. Hollingsworth & Sons in Philadelphia, his chief correspondents there and since the Revolution "by threefold" the nation's largest flour dealers. The warning arrived just in time to prevent them from "being speculated upon." Ogden then enjoyed a profitable season of shipping flour to the United Kingdom, but even in that boom year earned more from his

exchange transactions than from merchandising itself. Two years later it no longer paid for American traders to send breadstuffs to Europe. Instead, they had to rely again on the closer Caribbean and Brazilian ports to vent their modest surpluses [29, 47].

In the 1820s London firms with strong ties to intermediaries at Hanse ports were joined at their common meeting place, the newly organized Baltic Exchange, by Greek merchant shippers, whose families had come to dominate trading in cotton from Egypt and grain from the Black Sea. They were then sending vessels with full cargoes of grain from southern Russian ports, especially Odessa, to the United Kingdom, and had introduced there the practice of buying and selling cargoes several times over "to arrive" while still en route to British ports of call. It was a crude form of futures trading but also gave cargo owners a choice of which port in Britain or the continent would make the best final destination [5, 6, 18, 21, 23, 26, 36, 43, 50, 56]. This additional flexibility made Great Britain even more the entrepot for grain traders.

Most business on the "Baltic" in its early years had been in tallow speculations and ship charters. It remained a center for those trades and for maritime insurance, but more so by the 1830s for the merchant shippers who increasingly concentrated on grain transactions. After a cargo arrived in London, they sold smaller lots of wheat to dealers, factors, and millers in the metropolis and its environs on the New Corn Exchange at Mark Lane, the major institution of southern England's internal grain trade. The increasing focus of effective world demand on the United Kingdom also put such merchant shipping firms as Morrison, Cryder & Co., with its major business in the American cotton trade, in a good position to respond to the single major shortage of breadstuffs on the Atlantic coast of the United States. In the winter of 1837 in New York, high bread prices, riotous assaults on the flour stores, and emergency imports from the Baltic gave an Old World flavor to the waterfront [11, 45].

By the "hungry '40s" some larger Liverpool firms in the Irish grain trade, such as recently founded Ross T. Smyth & Co., shifted to steady imports for northern England and Ireland of high grade flour from French millers, who were grinding more and more Russian and Danube wheat brought to Marseilles [9, 42]. Meanwhile, the larger firms in the general transatlantic trade, the Barings, Alexander Brown & Sons, and William E. Dodge, moved briefly in and out of the grain trade to seize any unusual chances for profits [27, 38].

Those British merchants who survived the rash of bankruptcies that overtook many of them in the "Corn Crisis" of 1847, and who could work effectively with the Rallis, Mavrogodartos, and other Greek families with branch offices in both London and Liverpool, found that access to Russian wheat gave them a competitive if tentative edge during the 1850s when one loaf of bread out of every four eaten in Britain was made from foreign wheat. The Crimean war disrupted imports from Russia, with the United States filling much of the gap, but in the late '50s the Black Sea regained the lead. Over the next two decades

the Greek firms in Britain prospered enough to finance not only their own shipments but also to serve as bankers for many of the millers and dealers they served [1, 2, 20].

Meanwhile, the conjunction of liberal land policies, heavier immigration, the diffusion of mechanical reapers, and the opening of the treeless prairies and plains of the Midwest and Pacific Coast led to a jump in American wheat output. In the 1850s production per capita in the United States stood at roughly 5 bushels; by 1880 it had doubled, while consumption held steady at about 4-1/2 bushels. Export booms such as from 1861-63, stimulated by devalued American currency, still alternated with slack times in the grain trade. The major change was that most wheat was sent in bulk rather than flour, in large part due to the evolution during the 1850s and '60s of the "elevator system," with its savings by the mechanical handling of grain and its use of standardized grades for grain, backed by inspectors working for the grain exchanges. Shortly after the Civil War, the system also became the basis for the introduction of modern futures trading [39, 41, 68].

Reliable telegraph and cable connections from terminal markets in the American grain regions to both Atlantic and Pacific ports and to Great Britain enhanced the use of the new system. From its introduction in 1840 to the linkage of a world-wide network in the 1870s, traders in virtually every major center gained more and better access to vital information about harvest prospects and about prices in both the grain exporting and importing regions. By the 1870s they also had special codes for sending offers and receiving acceptances cheaply. At the same time, rapidly improved transport over consolidated rail networks added another consequential change, similar to the earlier elimination in London of Dutch connections. In the United States traders were by-passing a string of intermediaries at transshipment points so that fewer stood between farmers and the major ports.

For a full generation many traders at Chicago, Minneapolis, and Kansas City had relied on the large receivers, or "fobbers," at New York, who brought grain from the Midwest and sold it "free on board," for financing and shipping services. It also took until the 1870s for the "fobbers" to overcome the objections of British-based import houses, who sold their shipments on a "c.i.f." basis, including charges for the cost of the grain, insurance, and freight, to the new elevator system. Some never capitulated, believing that their traditional skills in judging the quality of any cargo or lot would be lost, and with them much of their competitive edge. David Bingham, a major British grain exporter at New York, insisted on buying and selling his wheat parcels with its "identity preserved" [16, 58].

Until the late 1860s merchants in both European ports and on the Atlantic seaboard negotiated on the basis of individual samples of a parcel or cargo, often sent ahead of the shipment by the fastest means available. This method remained the basis of the cargo trade in Black Sea wheat and persists in many transactions

to this day. Under the elevator system warehouse receipts simply indicated the amount and grade of the stored grain; they were generalized, negotiable documents. They were fungible [32, 53].

At the same time, disputes over the quality of delivered grain and contract language were also plaguing traders in Liverpool and London, which served as both an importing and distribution center and as an entrepot for imports to all of western Europe. The greater scale of the trade, and Britain's position in it for much grain coming from distant areas such as India and Australia, made the customary understandings about arbitration procedures and contracts unworkable. In 1878 the international traders in London, including members from Germany, France, and the Low Countries as well as the Baltic, Hungary, the Mediterranean, and the United States, founded the London Corn Trade Association. They used it to standardize shipping documents for each major exporting nation and to clarify arbitration procedures [10, 37, 63]. They were delayed in that task by a dispute with the Liverpool Corn Trade Association, since the mid-1850s representing all elements of the business at that port. Liverpool wanted their new, rational grain measure for imports from California, the hundred pound cental, to be the single British measure. By the late 1870s California was sending about half the bulk grain shipments that left the United States and accounted for much of Liverpool's receipts. London traders bought many grains from diverse sources, had no use for the idea, and squelched it [7, 19].

London traders also fought the growing practice of New Yorkers, whose Produce Exchange had adopted in 1869 the midwestern elevator system, of putting clauses in their bills of lading that the certificate of inspection they enclosed was final evidence of the grain's quality. The LCTA objected that they had no voice in defining the grades and could lose heavily if the documents noted a better grade than actually arrived [7, 61]. Instead, in 1879 the LCTA sent its proposed American contract, then bargained over the matter until they compromised in the mid-1880s [24]. For the rest of the century and beyond, sales of grain from the Atlantic and Gulf ports, including Canada, involved contracts that recognized standard grades, the only exception to otherwise universal adoption of "f.a.q." methods of grading, which relied on samples representing "fair average quality" of each crop, each year [12].

The American victory may have been obtained because of the larger role of the United States as the most dependable supplier of breadstuffs for Europe. By the mid-1870s, for example, the volume of American wheat had overtaken that of Russia in sales to Britain, accounting for about half of that nation's imports. In turn, imports then provided about half of Britain's consumption. Then came the harvest failures of the late 1870s, which made North American supplies even more critical. From 1880 to 1895 the United States and Canada provided between 55 and 60 percent of Britain's imports of wheat and flour, or three of every four loaves of bread. Russia provided less than 20 percent, India and Argentina a bit

over 11 percent each, in their best years before 1900. Not until the opening of the century did the new suppliers, Canada, Argentina, and Australia, obtain a major share of the market and join the ranks of nations and regions in what we recently have called a "dependency trap" due to excessive reliance on staple exports [67].

Some older British and continental trading firms made easy adjustments to changing, more numerous sources and to greater competitive pressures. Ocean transport costs per bushel or barrel, whether in steamships or in the sailing vessels that continued major roles in long distance trade into the new century, declined even faster than grain prices. The futures markets, by shifting some of the risks of carrying an inventory to speculators, also "democratized" the business according to one German scholar, permitting "mushroom" brokers and dealers, as one shipper called them, to carve out special market niches. Importing flour, again a major component of the trade, became a separate field of concentration, although chance meetings between Seth Taylor, London's leading miller, and Charles Pillsbury, a frequent visitor to the United Kingdom, on the floor of the London Corn Exchange would keep all traders buzzing for weeks [7, 24].

Some larger merchant shippers clung to their unique advantages in long distance trade, such as a large scale of operation and the ability to sustain risks over a long time. In Karachi, Odessa, Sydney, and San Francisco, several of them had also financed growers and local merchants in the interior. By 1900 new firms east of the Rockies, such as J. Rosenbaum & Sons, Sawyer & Wallace, Gill & Fisher, and Bartlett, Frazier, were exporting on through bills of lading from primary markets of the spring and winter wheat belts direct to Europe. This centralized the market further and eliminated not only the old "fobbers" but also the European buyers at the seaboard as the interior traders sought to protect their growing fixed capital in line elevators and giant terminal facilities. Whether it was Ralli & Co., which in the 1850s had sent an agent to New Orleans to assure cotton purchases, then moved him to New York for more than a decade, or the Rathbones and Bingham of Liverpool, by the end of the century the general merchant shipping firms had left the field to the new, integrated grain firms which operated in several widely scattered locales at once [7, 9].

For some glimpses into their new, often rather secretive world, re-shaped by heavy investments in capital-intensive processing plants, we can only look to a few sources. Among the lighter ones are the recollections of the actor John Houseman and the public relations master Edward Bernays, who as young men worked for Fribourg and Louis Dreyfus & Co., respectively. We also have the insights provided by Harry Fornari of Bunge and Born, who combined his training as an historian with his career as a grain firm executive, as well as several recent journalistic accounts and careful economic studies [8, 22, 30, 44]. A major new analysis of the challenges and responses encountered in the twentieth century at the firm level also will come from Wayne Broehl, the distinguished chair of this session. I can hardly wait.

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