COSTS, CYCLES AND CAUSES OF MIGRATION ACROSS THE NORTH ATLANTIC, 1870–1914

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by Drew Keeling

CONTENTS

1. Introduction p. 3
2. General causes of the “Great Migration” p. 4
3. Economic causes p. 5
4. Supply or Demand: falling fares versus growth of low-skilled jobs p. 6
5. Data sources and quantitative approaches p. 8
6. Trend of transoceanic fares and migration costs p. 13
7. Trend of labor demand in the U.S. and migrant employment p. 14
8. Cyclical fluctuations in production, fares and migration p. 14
9. Implications and conclusions p. 18

FIGURES AND TABLES:

1. Representativeness of Cunard, 1886-1913 pp. 9-12
2. Fares, GDP growth, and Immigration, 1870-1914 p. 13
3. Cyclical patterns, 1884-1913 pp. 15-16
4. Quarterly Comparisons, 1890-1913 p. 17

APPENDIX: Measures to which labor demand was related p. 24

BIBLIOGRAPHY p. 21

ABSTRACT

This paper assesses the relative importance of two potential factors helping to cause increasing European migration to the United States between 1870 and 1914: growing demand for immigrant workers in the fast-developing U.S. economy, and falling costs of travel across the North Atlantic. Steerage fares charged by Britain’s Cunard Line between 1884 and 1913 are the principal basis for measuring changes in travel costs; the pull of the U.S. economy is measured by an adaptation of estimated employment. Migration is measured by second and third class passenger movements. Changes in fares, and in demand for foreign workers, are also looked at as possibly influencing year-to-year fluctuations in migration volumes. The results here show that migration closely tracked short and long term trends in the U.S. economy, especially within cyclically prone employment heavily reliant on immigrant labor. In contrast, travel fares did not change much over the period. Temporary drops in ticket price levels did relatively little to propel migration, which rather tended to also fall during periods of low fares. These results are consistent with other observations. Overall travel costs were already small relative to U.S. earnings by the 1880s. Many more than actually migrated could also have benefitted from doing so, but not unless jobs were available in sufficient numbers.
1. Introduction

Multiple explanations for mass migration across the late nineteenth and early twentieth century North Atlantic have been advanced, by both contemporaries and later historians, but without a definitive consensus being reached concerning which underlying causes were most decisive. There is general agreement that what historians tend to call “chain migration,” and social scientists “positive feedback” or “path dependency,” was crucial. Which mixture of forces got the “snowball” rolling in the first place is still not very clear, however.

This paper examines two hypotheses which received greater emphasis during the historical period than they have since, and are thus ripe for fresh assessment: namely, that long term growth in transatlantic migration during the steamship era can be, at least partly, attributed (firstly) to long term growth in demand for labor in North America, and (secondly) to long term decline in the costs of transatlantic travel. Corollary assertions point to short term fluctuations in labor demand and/or relocation costs as contributory explanations for short term fluctuations in migration volumes.

Econometric precision is not attempted here. The main objective is rather to use new combinations of sources to clearly establish which of these two hypothesized causal factors was the more crucial. A secondary objective is to situate the associated findings within an general understanding of the migration’s long term underpinnings.

Systematic examination of transatlantic passenger fares, calculated from data of Britain’s Cunard Line, illuminates patterns of migration costs over several decades. These cost data are examined here, in conjunction with relevant measures of the U.S. economy and its labor markets, and improved figures on passenger movement, in order to provide a basis for assessing the relative importance of the forces behind the migration.

Cunard was the longest continuously operating North Atlantic passenger shipping line. Its passenger business was outlined in my EHS paper presented at the 2008 conference. Relevant details on fare series calculated from Cunard’s archived voyage data can be found in my article in Business Archives, published later that year.¹ In broad terms, the Cunard fare series can also be seen as an extension of the transatlantic travel cost data developed by John Killick for the earlier sailing ship period (and used in his paper presented at this conference). Information showing that Cunard was

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¹ Keeling, “Abstracts.” Preliminary information from this source, less precise, but still indicative of overall trends can also be found in Harley, Keeling, “Transportation Revolution,” pp. 64-67. For more on Cunard, see Hyde, especially chapters 3 and 4; for a more general discussion of overall North Atlantic migration costs, see for example, Keeling, “Networks.”
generally representative of the overall oceanic passenger transport industry across the pre-World War I North Atlantic is discussed in section 5 below.

2. General causes of the “Great Migration” prior to 1914

In several ways, European relocation to America in the decades preceeding the First World War was a typical “mass migration” of the modern era. For example, this “Great Migration” consisted of movements between distinctly identifiable and territorially demarcated political jurisdictions, and along well-known routes. (It was not marked by vague dispersions into thinly charted regions). The participants overwhelmingly pursued economic opportunities in industry and urban services (almost none of them were pastoral nomads, explorers, miners or agricultural settlers). Their flows were relatively large, and relatively quantifiable in volume and other salient characteristics.

These tens of millions of European emigrants were, however, also *atypical* compared to earlier precursors and later successors. Although extensive in scope, and diverse ethnically, this mass movement was almost entirely free of many typically modern complications. The great majority of these migrants did not relocate because they were recruited, or subsidized by governments, or coerced into moving, or compelled to take flight from imminent danger, nor was their relocation organized through contractual obligation or through evasion of policy restrictions against it. It consisted overwhelmingly of voluntary, peaceful, legal, self-selected, and autonomous changes of long term residence, heavily governed by private economic motivations.

Despite the relative size, clarity, and employment-focused origins of this migration, its fundamental causes have been understudied, relative to its economic, social and cultural effects. The causes identified – viz. the pulls of the New World and pushes of the old- *over*-explain the resulting movement. In other words, given that such migration was a legal, widely-known, readily-available, and clearly economically beneficial possibility for tens of millions of Europeans over many decades, a key question begged (and raised perhaps most acutely by Dudley Baines) is why such flows were not larger than they were. At most one or two percent of European sub-populations moved to America per year. Why was it not three, four or five percent?

Replicating “chain migration,” whereby waves of relatives helped each other migrate in succession, are well-explicated and clearly indispensable to any general causal explanation. But they are not quite sufficient. The “snowball effect” itself cannot really account for what starts it rolling or what determines its size, speed, and longevity. The focus here, accordingly, is on what kept the

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2 Baines, p. 28.
movement of Europeans to America going, for many decades, and growing (from about 300 thousand per year in the early 1870s to roughly a million per annum by 1905).

3. Economic causes

It is well-appreciated that North America offered economic opportunity to Europeans facing limited potential at home. A labor-scarce New World beckoned to the excess labor of the Old World, with wage rates well-known to be several times higher. The barrier of the mighty ocean, it seems, must have been nevertheless a powerful countervailing hurdle, albeit significantly reduced in effect by the nineteenth century “transportation revolution.”

While generally plausible, such logic is often presented as if it were a fact, rather than a hypothesis, and is rarely backed up by solid comprehensive data as to the economic import of barriers to movement or comparisons with alternative explanations. One such alternative -that migration was inherently risky and that the associated hazards and uncertainties of it were a greater constraint or inhibition on people choosing to pursue it than were its upfront costs- has been developed elsewhere, but also comes up short as a full explanation for migration growing rapidly over time. Risks of migrating were significant across the period but, in broad and long-run terms, did not change greatly after railroads and steamships became the principal oceanic and overland transport modes (by the 1870s).

When Cunard pioneered continuing regularly-scheduled North Atlantic passenger travel by steamship in 1840, its transits between Liverpool and the northeast United States took about 14 days. With ongoing improvements to ship speed, the first regular steamship service from the more distant port of Bremen, beginning in 1858, also took two weeks. The fastest ship before World War I crossed from Liverpool to New York in 4 ½ days (in 1909), but its slowest contemporaries from eastern Mediterranean ports could take as long as three weeks to bring passengers to Ellis Island. The average decrease in the transatlantic transit time between 1870 and 1914 was less than that indicated by these extreme fast and slow measures, of course, and also because of the increasing proportion of traffic from the more distant Mediterranean ports after the 1890s. Taking into account overland travel (to reach European embarkation ports and inland American destinations) and delays in ports, etc., the reduction in overall migration time between 1870 and 1914 was probably less than two weeks. With most migrant travel by the 1880s being effectively financed by work in the United States (using remittances, prepaid tickets, etc.) and most of the rest using savings from work in Europe, a reduction

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of a few weeks in the lost working time (due to travelling) had a relatively small impact on decisions
to relocate to America or not. Europeans’ work sojourns in the United States were typically measured
in years, even for migrants who did not stay there permanently.6

Wage differentials propelled millions of “huddled masses” towards Statue of Liberty whose
inscription welcomed them. Living costs were also higher in America, but less than proportionately,
so that the differential in potential savings exceeded that of wages. Again, however, these differences
did not change greatly over the decades over the decades, and to the extent they did, the trend was
towards a convergence or narrowing of the wage gap. Yet migration, despite cyclical ups and downs,
continued its powerful secular rise over the half century between the Civil War and the Great War.7

The chief economic pull,8 meanwhile, remained jobs being made widely available within the
rapidly growing U.S. economy. These jobs required low-skills and hard work, and paid wages that
were modest by U.S. terms, but high by European norms. The jobs were thus well-suited for millions
of young Europeans, and their growing availability was partly, if not largely, a response to that long
term source of labor. The would-be overseas Europeans, however, were typically at or near the start
of their working lives and thus needed time to accumulate savings, and/or family assistance, in order
to pay for a long distance physical relocation.9

4. Supply or Demand: falling fares versus growth of low-skilled jobs

Massive and growing migration by steamship across the North Atlantic was recognized as a
powerful phenomenon in its own day. Two leading alternative explanations for it were advanced by
contemporaries in the United States, the prime destination of the relocation: firstly, that the move had
become less arduous and less expensive since the days of sailing ships, and secondly, that the inflow
of imported labor was an integral, if not essential, component of the remarkable industrially-based
growth that was making the country the world’s leading economic power. Although neither
exhaustive nor necessarily exclusive, these two explanations have been also incorporated into the
analyses of later historians but without comparative evaluation there either.

In its wide-ranging 1911 survey, the U.S. Congress’s “Immigration Commission” found that
migration from Europe was “almost entirely attributable to economic causes.” With “few exceptions,”
the commissioners said, “the emigrant of today is essentially a seller of labor seeking a more

6 Bonsor, pp. 74, 510, 1873, Ellis Island Archive, STLI-23741, "Steamship Arrivals, 1906," Keeling,
8 Regarding the limited extent of immigration resulting from persuasion of steamship agents, or
fostered in order to help break strikes, etc. see for example, Rosenbloom, Looking, pp. 167-72,
9 Wright, pp. 216, 233-40, 246-47.
favorable market”, i.e. in the United States where the “reward of labor is much greater” than in Europe. The Commission did not specifically opine on the role of travel costs, perhaps because a predecessor commission ten years’ earlier had accepted, without objection, the suggestion of a testifying steamship line representative that fare levels had been increasing over time and with little effect on migration volumes.\textsuperscript{10}

A leading critic of that 1911 Commission went still further in 1912, determining that “demand for labor within the last twenty years has outrun the growth of population” and that employers often found it necessary to hire immigrants or delay their companies’ advancement. The critic, Issac Hourwich, quoted yet another government investigation that pointed out a railroad executive’s complaint about work being “delayed…by the inability to get workmen. This is true not only of railroads but of industries along our lines.” Hourwich concluded that “demand for labor determines the character, as well as the volume of immigration.”\textsuperscript{11} Although less categorical, economic historian Joshua Rosenbloom adhered to this view from the perspective of a century later;

The process of European settlement…[in America] is in essence a labor market phenomenon… Labor scarcity raised labor productivity [enabling] a higher living standard than [in Europe, although] exploiting these advantages required the parallel development of new labor market institutions.”\textsuperscript{12}

Assertions about the causal role of declining travel costs were also prevalent both a century ago and more recently. In 1908, Prescott Hall declared that

The sea formerly acted as a sieve, now the meshes let through every species of voyager...The general tendency of steerage rates in recent times has been to become lower, and this could hardly be otherwise...the immigrant is cheapest kind of cargo to carry, for he loads and unloads himself and his baggage.

John Lewis Gaddis made similar attributions in 1997, namely that “cheap steamship fares greatly increased the flow of emigrants from Russia to the United States” between during 1880s and World War I.\textsuperscript{13}

Travel costs and demand for immigrant labor have also both been seen as important determinants of short term fluctuations in migration volumes. The role of labor demand, for instance, becomes particularly conspicuous by its relative absence during major recessions when the economy of the migrant-destination region goes into reverse. Amidst the cyclical downturn of the mid-1890s, Joseph Senner wrote that

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\textsuperscript{10} Dillingham, vol. 4, p. 53, Industrial Commission, p. 104, 108. In his testimony, North German Lloyd representative Gustav Schwab stated his view that immigration depended “absolutely and entirely” upon “the condition of the labor market, agriculture, and business generally” in the United States.

\textsuperscript{11} Hourwich, pp. 84-85, 102.

\textsuperscript{12} Rosenbloom, “Labor Market.”

\textsuperscript{13} Hall, pp. 23-24, Gaddis, p. 3
immigration has practically come to a standstill...in these times of forced depression... our foreign-born residents are... engaged in the hardest struggle for life... their letters to the old fatherland are [filled with] tales of woe... Not even the enactment of the sternest statute could be more restrictive of immigration than these natural regulators of the ebb and flow in the tide of aliens.”

Looking back at the pre-World War I period, Timothy Hatton and Jeffery Williamson concluded in 1998 that “…much of the fluctuation in emigration, especially net emigration, can be explained by the short-run impact of business cycles and long swings on labor markets.” “Unemployment rates,” they wrote, “mattered more than wages.”

Short term effects on migration have also been attributed to changes in transatlantic passage prices. In its annual report for 1904, as “cutthroat” fare reductions were occurring on the Britain-U.S. route, the U.S. Bureau of Immigration quoted an official saying that “in direct proportion as the rate is reduced, the number of people is increased who can buy tickets... The rate war has resulted in a large increase in emigration.” Four decades, later, leading migration historian Marcus Hanson generalized that

Rate wars determined the extent and character of American immigration in certain years; and the peace terms which closed these wars had more influence upon the movement in succeeding years than any contemporary American legislation.

5. Data sources and quantitative approaches

In seeking to evaluate the relative importance of travel costs and employer demand in shaping U.S. immigration flows before 1914, note must be taken of the statistical limitations hampering such evaluation in the past. Rectification of these statistical deficiencies then makes possible the analysis that follows here below.

Within the limited prior historiography concerning migration costs, the key absence of any “consistent and long-term series of fares” was noted already thirty years ago by J.D. Gould. The Cunard series used here fills that gap. There are no direct data on the demand for immigrant labor; several series can serve as proxies, however. Official U.S. immigration statistics do exist, for the period, but are inconsistent and incomplete, and shipping line passenger statistics are mostly used here instead.

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14 Senner, pp. 494-95, Hatton and Williamson, pp. 67,74
16 Gould, p. 611. A time series of first cabin fares starting in 1852 is developed in Weiss, et. al, p. 43, but these are published rates, not actual average fares paid, and very few migrants travelled in first cabin. Annual U.S. immigration levels are given in Historical Statistics of the United States.
Figure 1a Steerage Fares, Cunard vs others, 1901-13
(adjusted for route distance)

NOTES: These lines carried about half of all migrants to America during 1901-13
European migration to U.S., 1901-13 was about 40% of 1815-1914

Sources: Keeling,"Capacity," ARCN
Westward immigration from Europe, as measured in U.S. immigration authority statistics, excludes most repeat migration after 1905, and most of the volumes eastward back to Europe. To avoid such inconsistencies and incompleteness, I use second and steerage flow data (available from shipping sources, starting in 1898). Before 1898, second class figures are generally unavailable—so I use steerage only instead—but the fraction of migrants in that class then was less than ten percent (after 1900, it rose, going to over twenty percent by 1913).\footnote{Based on analysis used for Keeling, \textquoteleft Repeat,\textquoteright p. 184.} Cunard steerage volumes (available on a quarterly basis from 1883), are used here as a basis for converting the pre-1898 eastward steerage figures from fiscal year to calendar year measures.

The transatlantic oceanic fare amounted to only about half of the total cost of migrating in this period, but it was the greatest common denominator of the physical relocation, the one irreducible barrier faced by all migrants.\footnote{Fares relative to total migration costs, based on the data used in Keeling \textquoteleft Networks,\textquoteright pp. 168-70. Two exceptions to the universality of the oceanic fares—deserting seamen and stowaways—amounted to well below 1\% of all immigrants. See, for example, BI Annual Report for 1909, tables XX and XXI (p. 88); comparable data is presented in corresponding BI annual reports for most years between 1905 and 1914.} The Cunard fare data are reliable, consistent, complete, and representative. They were derived by dividing revenue in steerage class by adult equivalent passengers, both of which were carefully and consistently recorded in the company’s Voyage Abstracts, for every voyage (westward to and eastward from) the United States, after 1882.\footnote{Keeling, \textquoteleft Abstracts,\textquoteright pp. 16-22.} These Cunard steerage fares are closely correlated with those of other major North Atlantic passenger lines (see figures 1a and 1b), and with Cunard’s second class fares (see figure 1c). Cunard’s overall business is also shown, by table 1d, to be representative of North Atlantic passenger shipping, generally.

Demand for immigrant employees is essentially assumed here to be relative to the overall “derived demand” for labor in the non-farm sector. For purposes of examining short-run fluctuations, however, adjustment is made to reflect the well-known tendency of migrants to be over-represented in cyclical industries and to be in marginal employ (“last hired, first fired”). The non-farm workforce data series starts only 1890; other proxies are used for earlier years.\footnote{See the Appendix below.}
Figure 1b  Quarterly Westbound Steerage Fares, 1903-13

Figure 1c  Cunard Westbound Fares: Steerage and Second Class

Source: Keeling, "Networks," pp. 164-67

Table 1d  Cunard versus competitors, 1890-1913

Steamers, passengers arriving at and departing New York, Boston, Philadelphia, Baltimore from Europe (1890 New York only)

<table>
<thead>
<tr>
<th></th>
<th>Cunard</th>
<th>&quot;BIG 4&quot;</th>
<th>ALL</th>
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<tbody>
<tr>
<td><strong>AVERAGE VESSEL SIZE (GROSS TONS, '000s)</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1890</td>
<td>6.9</td>
<td>5.1</td>
<td></td>
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<tr>
<td>1900</td>
<td>11.0</td>
<td>8.0</td>
<td>7.2</td>
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<tr>
<td>1913</td>
<td>18.3</td>
<td>14.1</td>
<td>12.3</td>
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<tr>
<td><strong>GROSS TONS / PASSENGER BERTH</strong></td>
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<td></td>
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<tr>
<td>1890</td>
<td>5.1</td>
<td>4.2</td>
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</tr>
<tr>
<td>1900</td>
<td>6.8</td>
<td>6.2</td>
<td>5.8</td>
</tr>
<tr>
<td>1913</td>
<td>7.8</td>
<td>7.7</td>
<td>6.9</td>
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<tr>
<td><strong>AVERAGE VESSEL SPEED (KNOTS)</strong></td>
<td></td>
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<tr>
<td>1890</td>
<td>16.2</td>
<td>15.0</td>
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</tr>
<tr>
<td>1900</td>
<td>17.9</td>
<td>16.3</td>
<td>15.3</td>
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<td>1913</td>
<td>18.3</td>
<td>16.6</td>
<td>16.2</td>
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<tr>
<td><strong>AVERAGE VESSEL AGE (YEARS)</strong></td>
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<tr>
<td>1890</td>
<td>8.7</td>
<td>8.1</td>
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<tr>
<td>1900</td>
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<td>9.5</td>
<td>11.1</td>
</tr>
<tr>
<td>1913</td>
<td>8.8</td>
<td>11.8</td>
<td>10.4</td>
</tr>
<tr>
<td><strong>MARKET SHARE OF PASSENGERS BETWEEN EUROPE AND USA</strong></td>
<td></td>
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</tr>
<tr>
<td>1890</td>
<td>8%</td>
<td>49%</td>
<td></td>
</tr>
<tr>
<td>1900</td>
<td>7%</td>
<td>57%</td>
<td></td>
</tr>
<tr>
<td>1913</td>
<td>12%</td>
<td>66%</td>
<td></td>
</tr>
<tr>
<td><strong>2ND &amp; 3RD CLASS AS % ALL PASSENGERS CARRIED</strong></td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>1900</td>
<td>78%</td>
<td>82%</td>
<td>85%</td>
</tr>
<tr>
<td>1907</td>
<td>90%</td>
<td>89%</td>
<td>92%</td>
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<tr>
<td>1913</td>
<td>85%</td>
<td>88%</td>
<td>91%</td>
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</table>

**NOTES:** The averages in this table are weighted by the number of voyages per vessel. "Big 4" = Cunard, White Star, HAPAG, NDL. During 1890-1914 they brought over half of all migrants arriving in the United States from Europe.

**SOURCES:** Bonsor, North Atlantic Seaway, Lloyd's Register, ARCN, PCR
6. Trend of Transoceanic Fares and Migration Costs

The basic causal comparison over the period is presented in Figure 2. The trend lines there clearly show that it is mythical to speak about migration being spurred by declining fares. Despite some interim ups and downs, fares changed little over the period. There was not even much change in the fare relative to U.S. wages (which rose, and which were effectively the principal means by which fare costs were financed). Fares without deflating by wages or consumer prices are used in subsequent figures, because deflating makes little difference to the basic trendless behavior of ticket prices over these four and half decades.

The nineteenth “transportation revolution” is by no means disproved by these results, but two less-well-appreciated aspects of it are underscored. Firstly, in terms of passenger travel, the most revolutionary part of the transformation came with the conversion from sail to steam, which took place with the advent of the second generation of steamships—with metal hulls, screw propellers, and compound engines—and which drastically cut transit times and improved the health and safety of transatlantic travel, nearly all of which had basically occurred already by 1870. Secondly, in contrast to the shipment of inanimate cargos where lack of damage was the only real on-board consideration, companies competed for passengers on travel quality more than on price. Dramatic improvements to shipping continued after 1870—note, for instance, that average vessel size more than tripled—but the associated cost efficiencies were mainly directed into space (tons) per passenger (see table 1d) and other enhancements to travel accommodations and amenities. Shipping lines were able to afford these improvements.
improvements with the help of somewhat more effective cartels towards the end of the period, but probably also because executives realized that, by the 1880s, migrant travel was not very sensitive to fare reductions (the total cost barrier was already down to the level of a few weeks or months worth of savings from work in America). This final point is explicated further in section 7 below.

7. Trend of Labor Demand in the U.S. and Migrant Employment

Figure 2 shows a quite different result with respect to labor demand. Immigration and U.S. GDP both expanded considerably over the period. One way to explain why GDP grew even more than immigration did, is to consider both in relation to the more than doubling of the U.S. population between 1870 and 1914. Immigration grew somewhat more slowly than population (in the early twentieth century peak year, 1907, per capita immigration to America was still well below that of the “potato famine” years of the early 1850s). Gross product grew faster than population (per capita real GDP doubled between 1870 and 1910).

U.S. economic growth was broadly-based. Immigration was fairly clearly both a response and a contribution to this long term dynamism, but was more narrowly concentrated on certain industrial and urban sectors. By twenty-first century standards, nineteenth century America had a high natural birth rate, shared by its immigrant population, but by the early 1900s, a third of arriving second and steerage class passengers eventually later re-settled back in Europe. While this feature resulted in an undeniable notable net benefit to the dependency ratio of the U.S. population, it also reflected a sharing of overall impacts from the “Great Migration” between the Old and New worlds.

8. Cyclical Fluctuations in Production, Fares and Migration

Might this migration have increased even faster, if fares had fallen instead of being roughly flat between 1870 and 1914? After all, even if migration costs were small relative to expectable benefits, and often readily financeable within kinship networks (e.g. prepaid tickets send to Europe from U.S. relatives), at least some Europeans must have been on the margin of moving versus not moving to America. For them, the fare level would have been at least one factor important to their decision-making.

Figure 3a  Adjusted Non-Farm Employment, Fares, 2nd and 3rd Class Westbound, 1884-1913
(indexed at 1884=1)

Sources: See Figure 2, and Appendix
Figure 3b  Adjusted Non-Farm Employment, Fares, *NET* 2nd and 3rd Class Westbound, 1884-1913
( indexed at 1884 = 1 )

Sources: Net 2nd & 3rd based on eastbound from PCR (for 1898-1913), Keeling, "Repeat," pp, 176-80 (for 1884-97), for rest: see figure 3a
## Table 4  Quarterly Comparisons

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<th>Average Recession Quarter</th>
<th>Recession / Non-Recession</th>
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<td><strong>Passengers</strong></td>
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<td></td>
<td></td>
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<tr>
<td>West</td>
<td>7.3</td>
<td>6.4</td>
<td>-13%</td>
</tr>
<tr>
<td>East</td>
<td>3.3</td>
<td>4.7</td>
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</tr>
<tr>
<td><strong>Fares</strong></td>
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<tr>
<td>West</td>
<td>£4.3</td>
<td>£4.0</td>
<td>-6%</td>
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<tr>
<td>East</td>
<td>£4.9</td>
<td>£4.7</td>
<td>-4%</td>
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<table>
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<tr>
<th></th>
<th>Average Low-Fare and Non-Recession Quarter</th>
<th>Average All Other Quarter</th>
<th>Low-Fare and Non-Recession / All Other</th>
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<tr>
<td><strong>Passengers</strong></td>
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<tr>
<td>West</td>
<td>5.4</td>
<td>7.2</td>
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<td>East</td>
<td>2.8</td>
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<td>-26%</td>
</tr>
<tr>
<td><strong>Fares</strong></td>
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<tr>
<td>West</td>
<td>£2.7</td>
<td>£4.7</td>
<td>-43%</td>
</tr>
<tr>
<td>East</td>
<td>£2.7</td>
<td>£4.8</td>
<td>-43%</td>
</tr>
</tbody>
</table>

**Sources and Notes:** Quarterly average Cunard passengers (in '000s) and fares, on Liverpool-New York route, from Keeing, "Abstracts," pp. 24-33. Recession Quarters: 1887 (I,IV), 1891 (I-III), 1893 (II) - 1994 (III), 1895 (III) - 1997 (I), 1900(IV) - 1901 (III), 1903 (III) - 1904 (III), 1907 (IV) - 1908 (III), 1910 (IV) - 1912 (I), 1913 (IV) - 1914 (III), per Bratt and Jerome. Fares, passengers for recession quarters measured with 1 quarter lag. Low-fare-and-non-recession quarters: 1885 (I-II), 1890 (III-IV), 1891 (I,IV), 1894 (IV) - 1895 (II), 1904 (IV)
A look at cyclical trends of migrant volumes and fares, however, suggests at most a minor role played by such “tipping points.” In figure 3a, migration can be clearly seen moving in close cyclical correlation with labor demand (tracked here not by real GDP but by a cyclically amplified measure of the gainfully employed non-farm population: see also the Appendix, below). The fluctuations of fares correlate less closely, but more significantly, they do correlate positively (not negatively, as might be expected). The biggest drops in ticket prices were during the recession years 1894, 1895, 1904 and 1908 when migration volume also dropped. While each such recession had some specific dynamics of its own, the general pattern is evidently one of falling migration leading to falling fares, and not one of falling fare fares leading to rising migration.

Figure 3b shows an even stronger correlation of net migration with the business cycle. This reflects increases in eastward, “return,” migration accentuating the effect of decreases in (westward) immigration during recessions. One could logically suppose that some of this increased eastward movement was motivated by reduced fares, for example, during the recessions of 1894, 1904 and 1911. (Note in Figure 3-b, that although generally a bit higher, the eastward fares fluctuated year-to-year in correlation with the pattern of westward fares). There is evidence of this for the 1904 episode, but it was more an exception than part of a pattern. In table 4, quarterly fare and passenger flows allow a more precise identification of low-fare periods and recession periods. That table indicates that, in general, during non-recessionary periods (when there was no particular employment-related reason to go back to Europe) lower than normal eastward fares—when they occurred—were not associated with higher return migration back to Europe.

9. Implications and Conclusions

Although the interpretation of these measurements here is tentative, they are fairly unambiguous for the 1870-1914 period. Over both the two to ten year business cycle (measured “peak” to “peak”) and the longer term, indicators of the U.S. economy, particularly employment in the sectors reliant on immigrant labor, were strongly correlated with gross and net flows of migrants to the United States. Fluctuations in the travel fares paid by those migrants, in sharp contrast, had very little influence on such flows.

These results are highly consistent with many other observations, for instance, that the late nineteenth and early twentieth century United States, especially its urban and industrial northeast, possessed an extensive and dynamic economy, with open, flexible and mobile markets for the sorts of low-skilled temporary but abundant jobs well-suited to young, hard-working and frugal immigrant

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24 Keeling, “Fare War”
25 See, for example, Jerome, pp. 59-66.
The costs of reaching America, amounting to but a few weeks worth of U.S. wages by the late 1800s, were clearly readily affordable and financeable by a multiple of the large volumes which actually did relocate to pursue such opportunities. Limits on available jobs, and the uncertain risks of their disappearing during recessions were more important operative constraints against which the risk-reducing functions of chain migration networks were undoubtedly helpful.

While not surprising, these results are not very apparent within the prevailing historiography, probably partly due to a heavy emphasis there on examining the effects of migration, to the relative neglect of its causes. The one powerful point of consensus in the existing historical literature concerns the salient importance of kinship and community networks. But, one might get the impression that any random cause might have set the great life-cycles of self-replicating, path dependent mass migration in motion. Counterfactually, this is probably correct. In actual fact, however, it was indeed the powerful pull of U.S. jobs, not cheaper transport, or the even high wages which acted as the most powerful catalyst. This, at least, is quite evidently the case for the decades between the U.S. Civil War and the First World War.

That last caveat is also important, however. The cataclysm of the 1860s was the most notable partial exception to an otherwise long and largely unbroken century of relatively stability across an increasingly prosperous Atlantic Basin marked by mostly open borders and unfettered mass migration. Although their volume was considerably reduced compared to the prior half decade, nearly half a million European immigrants nonetheless came to the United States during the Civil War. The resurgence of migration following the war has to be seen largely as a continuation of the four decades of long term secular growth in the antebellum period.

This thus raises the question of the ways in which the findings reached here for 1870-1914 might apply or not apply to earlier decades. As a concluding extension, a few brief observations are therefore appended.

The Civil War was also coincident with the turning point from sail to steam. Notwithstanding some continuities across the whole century of relative peace between Waterloo and Sarajevo, therefore, a general presumption should be that labor demand was less a significant determinant of migration in the more rural and less industrial pre-1860 U.S. economy, than after 1865, while costs of travel weighed more heavily upon those contemplating a crossing of considerably longer and less certain duration by sailing vessel. Existing and ongoing historical studies, including those of John Killick concerning the Cope Line, offer support for such views.

The shipping industry was much less concentrated during the sail era, the potential for price-influencing cartels was much less, and there was a long-term downward trend in fares (of the kind

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26 James and Thomas, pp. 595, 981-82.
28 Note, as in reflected in Figure 2, real wages did not change greatly in this period.
29 See Killick, pp. 74-76, 86-87, also Cohn, pp. 60-69.
widely, but erroneously presumed to have significantly continued after 1870). Travel costs generally, and fares in particular, were also higher relative to expected rewards of migration, and journeys were of a length that more strongly encouraged one-way rather than circular (and often cyclically-timed) movements.

A clearly relatively stronger role for travel cost reductions in “kick-starting” mass migration before 1870, and especially before 1855, is nonetheless not the same as conclusive proof of such cost reductions being the dominant catalyst. Multiple trends comingled contemporaneously.

In the early to mid-nineteenth century, the New World slave trade, and later slavery itself, were abolished and the indentured servitude or “redemptioner” systems replaced by “free labor” reliant on a transatlantic market for low-skilled labor. This coincided roughly with a noticeable secular decline in steerage fares between 1815 and the 1840s, and the possibility of some interactive reinforcement between declining travel costs and growing demand for wage labor warrants further scrutiny. The conversion from sailing to steam, between the mid 1850s and mid 1870s, moreover, produced no lasting fare declines (indeed, as noted already, the eventually more concentrated shipping industry eventually became better adept at collusive agreements designed to inhibit “cutthroat” rate competition). The sail-to-steam shift did, however, reduce the time and uncertainty of the North Atlantic passage, helping encourage short term long-distance relocation within that labor market, which also expanded along with long term growth of the United States economy. Growing labor demand played a key role throughout the 19th century, in other words, whereas the contributing impact of lower travel costs came mainly before 1870.30

The perhaps clearest and most fundamental conclusion here is also the simplest. Migration historians have long lamented the difficulties associated with limitations on applicable quantitative statistics. The historiography has at times been seen as mired in a “swamp” of “intractable” fragmentation and inconsistency, against which the preferred remedy has tended heavily towards creative detours, while direct drainage has long been largely abandoned.31 Nearly unregulated voluntary mass migration across the North Atlantic on steamships was also noteworthy, however, for being legal, long-lived and transparent. New and newly combined data sources resulting from that longevity and transparency can be significant to historical understanding.

The well-entrenched, if typically implicit, assumption that mass migration to Ellis Island being double that of a generation earlier and quadruple that of two generations earlier must somehow be connected to some kind of roughly equal and opposite reduction in travel costs is quite erroneous, for the simple reason that a careful examination available statistical information shows that nothing like any such great cost reduction actually occurred.32 Some non-negligible “leg work” is needed to

31 Thistlethwaite, p. 23, Kamphoefner, p. 305.
develop such quantitative information, but the essential insight required is uncomplicated. 99 percent of these tens of millions of migrants were paying customers of a sophisticated, yet legal, transparent, consistent, and heavily documented travel service along a relative small number of routes. Even the small fraction of such documentation that still exists can provide important historical information. This not the first, nor will it be the last, instance where historiography stands in need of revision due to newly assembled time series of relevant data.

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SECONDARY SOURCES


Appendix: Measures to which demand for immigrant labor was related, 1884-1913
(indexed at 1884 = 1)