

Wegge, Simone; Anbinder, Tyler; Ó Gráda, Cormac

Working Paper

Immigrants and savers: A rich new database on the Irish in 1850s New York

UCD Centre for Economic Research Working Paper Series, No. WP17/07

Provided in Cooperation with:

UCD School of Economics, University College Dublin (UCD)

Suggested Citation: Wegge, Simone; Anbinder, Tyler; Ó Gráda, Cormac (2017) : Immigrants and savers: A rich new database on the Irish in 1850s New York, UCD Centre for Economic Research Working Paper Series, No. WP17/07, University College Dublin, UCD School of Economics, Dublin

This Version is available at:

<https://hdl.handle.net/10419/175486>

Standard-Nutzungsbedingungen:

Die Dokumente auf EconStor dürfen zu eigenen wissenschaftlichen Zwecken und zum Privatgebrauch gespeichert und kopiert werden.

Sie dürfen die Dokumente nicht für öffentliche oder kommerzielle Zwecke vervielfältigen, öffentlich ausstellen, öffentlich zugänglich machen, vertreiben oder anderweitig nutzen.

Sofern die Verfasser die Dokumente unter Open-Content-Lizenzen (insbesondere CC-Lizenzen) zur Verfügung gestellt haben sollten, gelten abweichend von diesen Nutzungsbedingungen die in der dort genannten Lizenz gewährten Nutzungsrechte.

Terms of use:

Documents in EconStor may be saved and copied for your personal and scholarly purposes.

You are not to copy documents for public or commercial purposes, to exhibit the documents publicly, to make them publicly available on the internet, or to distribute or otherwise use the documents in public.

If the documents have been made available under an Open Content Licence (especially Creative Commons Licences), you may exercise further usage rights as specified in the indicated licence.

UCD CENTRE FOR ECONOMIC RESEARCH

WORKING PAPER SERIES

2017

**Immigrants and Savers:
A Rich New Database on the Irish in 1850s New York**

Simone Wegge, City University of New York
Tyler Anbinder, George Washington University
Cormac Ó Gráda, University College, Dublin

WP17/07

April 2017

**UCD SCHOOL OF ECONOMICS
UNIVERSITY COLLEGE DUBLIN
BELFIELD DUBLIN 4**

**Immigrants and Savers:
A Rich New Database on the Irish in 1850s New York**

**Simone Wegge
College of Staten Island and City University of New York Graduate Center**

**Tyler Anbinder
George Washington University**

**Cormac Ó Gráda
University College, Dublin**

Abstract: We describe a new dataset created from the first 18,000 savings accounts opened (from 1850 to 1858) at the Emigrant Industrial Savings Bank in New York City. The bank was founded by Irish Americans and most of its depositors in its first decade of operations were recent Irish immigrants. The data offer a unique window on both savings behavior by the poor and not-so-poor in antebellum New York and on how emigrants who came primarily from rural parts of Ireland adapted to urban life. They also contain much that is new on the regional origins of mid-nineteenth century Irish immigrants and on their settlement patterns in New York.

Keywords: savings behavior, Irish immigration, social mobility, New York

Introduction

In this paper, we describe a new dataset created from the first 18,000 accounts held in the Emigrant Industrial Savings Bank (EISB), which began accepting deposits in New York City on September 30, 1850. The savings data have been linked, where possible, to U.S. passenger records and to U.S. census data to produce a rich dataset with a wealth of information about the depositors, including the specifics of their savings behavior, precise birthplace and place of residence in the United States, and some of their vital and demographic characteristics. In addition to telling us more about savings behavior in the past, these data should improve scholars' understanding of Americans' (and especially immigrants') savings behavior, immigrant adaptation and socio-economic mobility in the mid-nineteenth century United States.

A large majority of EISB depositors were immigrants, mostly recent arrivals from Ireland in the aftermath of the Great Famine that began in 1846. These Irish-born depositors were clearly not a random sample of all Irish immigrants arriving in the United States, but the eight thousand or so who landed from 1846 to 1854 and subsequently opened EISB accounts come fairly close to representing a cross-section of the New York's Famine immigrants, with a slight underrepresentation of unskilled workers, a slight overrepresentation of business owners, and a significant overrepresentation of peddlers (compare Ó Gráda 2001, 239). Moreover, the birth county distribution of the EISB account-holders arriving during the Famine is very similar to that of all Irish immigrants arriving in New

York from 1846 to 1854 (comparing data in Anbinder and McCaffrey 2015 with those in the database; see too (Ó Gráda 2001, 233-34).

Many intriguing details about these account-holders can be gleaned from the database. For example, account-holder 2057, forty year-old Timothy Leary, a native of Killarney in Country Kerry, arrived in New York City on the *Washington* in March 1852 with his thirty-five year-old wife Ellen Touhy, also from Killarney. They lived with their four children at 20 Roosevelt Street in the heavily Irish Fourth Ward near the East River waterfront. We know their children's, their siblings', and their parents' names and where they were living, if still alive; we know that Timothy and Ellen opened a joint account at the EISB on 10 May 1852, and that they closed it on 8 May 1855. Leary made his living as a peddler; he and Ellen deposited \$24 (a sum that would have taken a common laborer in the northeastern U.S. at least a month to earn at the time) on the day they opened their account, but their balance had grown to \$314.39 by 27 January 1854. There was \$299.09 still on deposit when they closed their account in May 1855. Timothy Leary's only sibling, a sister, lived in Ireland in 1852, but Ellen had a brother and sister in New York—neither seems to have had accounts at the EISB (compare Carothers and Casey 2014; Clarke 2014; Padian 2016).

The appeal of such data to genealogists will be obvious (see Rich 2001; Casey 2013). Given the wealth of information that the EISB archive provides on birthplace in Ireland and residence in New York City, however, the database can also enrich the academic literature on Irish and Irish-American history on several fronts. They can add much that is new about which Irish emigrated to the U.S.,

where they came from in Ireland, where they settled, and how they adapted to life in their new homes. While most of the Irish in the database arrived in 1847 or later, the information on those who arrived before the Great Famine is especially precious, as scholars have heretofore had almost no hard data on where pre-Famine Irish immigrants originated. Pre-Famine immigrants were, of course, likely to be older than the more recent arrivals when they opened their Emigrant Bank accounts, but it remains to be seen whether their saving patterns differed from those of the Famine immigrants for other reasons too. For example, one can compare depositors born after 1820 and arriving before 1846 with those born after 1820 but arriving at the height of the Famine, in 1847 or 1848. The latter, not surprisingly, made smaller opening deposits than the former, and the earlier emigrants accumulated slightly more on average.

The EISB data offer an antidote to traditional stereotypes of the Irish Famine immigrant as mired in poverty in the slums of Five Points and other impoverished immigrant enclaves across North America. It suggests that even the poorest immigrants were keen to save and often able to accumulate substantial sums—even those who had recently arrived virtually penniless from the remotest corners of Ireland were able to do so far more often than one would expect. While these findings are not necessarily surprising (see Anbinder 2012), preliminary analysis of the spatial dimensions of these data through GIS mapping adds important new dimensions to our understanding of the Famine immigration and its financial implications. Mapping the depositors by Irish parish of birth over the course of the pre-Famine and Famine years reveals some expected variation but

also surprising continuity in the regional origins of emigrants. Both the number of Irish emigrants leaving for New York and their ability to save once they got there varied not only from Irish county to county, but also varied enormously even within each county. Our findings also suggest that social networks probably played an even more important role in the Irish emigration experience, and in particular their ability to save, than scholars have previously appreciated.

Describing the Data

Savings banks were established in the early part of the nineteenth century in Scotland, Ireland, England and the U.S.¹ The first American savings banks were set up in 1816 in Boston and Philadelphia; the Bank for Savings in the City of New York followed in 1819 (Olmstead 1976; Ó Gráda, 2001). Six more savings banks were chartered in New York before the Emigrant Industrial Savings Bank opened in 1850, and the EISB was one of twelve to begin operations in the city in that decade. Classic accounts of the early history of savings banks and their depositors in the U.S. include Payne and Davis (1956), Fishlow (1961), Olmstead (1976), and Alter, Goldin, and Rotella (1994).

Prominent members of the Irish Emigrant Society established the EISB with the express goal of helping immigrants, especially Irish immigrants. Its founders, mostly wealthy patrons of the Irish Emigrant Society, took on the dual challenge of helping Irish immigrants adapt to their new lives in New York City

and running a successful bank on a philanthropic basis. The bank began accepting deposits on the last day of September, 1850, directly behind City Hall at 51 Chambers Street in Manhattan, and the bank's extant depositor records go back to that date. We collected data on all depositors who opened accounts from September 1850 through October 2, 1858; the ledgers listing deposits and withdrawals for accounts opened after that date have been lost. For the 18,000 accounts opened in those first eight years, however, we have records of each deposit, withdrawal, and interest payments through 1869. Casey (2006) has thoroughly described the founding of the bank. While Irish Americans and Irish immigrants held accounts at other savings institutions, leaders of the Irish Emigrant Society worried about their possible mistreatment at other banks due to anti-immigrant and anti-Catholic prejudice. The society also had experience of funneling remittances back to Ireland, giving it some expertise in the handling of large sums of money (Casey 2006, 306; Ó Gráda 2001, 229; Shiels, 2015).

The EISB records from the 1850s, comprising information on the first 18,000 account holders, became available to the public in 1995, and since then scholars have published several valuable studies based on subsets of these records. Ó Gráda and White (2003) used a sample of accounts to study two 'runs' on the bank during the panics of 1854 and 1857. By comparing the characteristics of those who closed their accounts to those who did not, they were able to show that the first panic was caused mainly by poorer depositors, while the second was led by wealthier account holders. Kelly and Ó Gráda (2000) used another sample of account holders to identify how family networks transmitted information about

the bank. Their samples consisted of all closed accounts and a one-in-ten sample of accounts not closed during the panics.

More comprehensive works on the savings of EISB customers include those of Ó Gráda (2001), which provides an overview of bank depositors, Ó Gráda and White (2003), which analyzes bank panics in the 1850s (a 7% sample), and Anbinder (2012), who studied 900 depositors (a 5% sample) randomly selected from the bank's first 18,000 accounts.² The new database, which includes biographical and savings data from all 18,000 accounts for which deposit and withdrawal information is available, is far more robust. It is not only fourteen to twenty times larger than the datasets used in previous studies, but it is also the first to be linked to census and passenger ship data. This enhanced database can be used to uncover patterns in savings and migration behavior not previously detectable in smaller samples. The new dataset reveals, for example, that more than a quarter of the Irish-born peddlers with accounts at the EISB came from just one of Ireland's thirty-two counties, Donegal. Furthermore, the size of the new database allows users to discover that a quarter of those Donegal peddlers came from just three of the county's fifty-two civil parishes, and that immigrants from those contiguous Donegal parishes clustered in four distinct Manhattan enclaves within the Seventh, Fourteenth, and Seventeenth Wards. None of these findings were evident in the 5% sample.

Among the bank's still extant early records are the minutes of their board meetings and lists of mortgage loans and bond investments. The most important for our purposes, however, are the Deposit-Account Ledgers and the Test Books,

scans of which are available on Ancestry.com.³ When a customer opened a savings account, the bank recorded personal information about the depositor in its “Test Books,” so called because they were used to test the identity of people who appeared at the bank asking to withdraw money. The Deposit-Account Ledgers record deposits, withdrawals, and interest payments for each account at the bank. The test books of the bank have generated a lode of detailed personal information about each depositor for the database, including exceedingly detailed information on their townland, civil parish, and county of birth in Ireland, the name of the ship that brought them to America, the date it arrived, and their ports of embarkation and debarkation.

We also searched for the depositors in other historical sources, including ship manifests, census records, death registers, and newspaper news and obituary accounts. As a result, we have added to the bank data variables such as year of birth, marital status, occupation, and place of residence in 1850, 1855, 1860, and 1870. We did not have the resources to research thoroughly each of the 15,700 unique depositors, but we were able to search for additional information on 79% of the 10,800 Irish-born bank customers. We found information (including occupation and address) from 1860 or later for 27% of those for whom we searched (and 24% of all Irish-born depositors, allowing us to judge the extent to which changes in occupation, place of residence, or marital status may have contributed to the depositors’ ability (or inability) to save. For the depositors from the Irish province of Ulster, we have also added our best guess as to whether each one was a Catholic or a Protestant, basing our inference on their surnames and

given names (and how often those names in those counties were listed as Protestant or Catholic in the 1901 and 1911 Irish censuses). Finally, we have also created a “Transactions Database” containing every deposit, withdrawal, and interest payment (and the date of these transactions) made in 20% of the 18,000 accounts for which the deposit ledgers are extant. We have already made much of the data publicly available at Harvard’s Dataverse website.⁴ In due course, the entire database will be placed there.

Constructing the Dataset

While all banks in the 1850s requested personal information from customers when they opened accounts, the EISB collected much more than most, perhaps due to its connections with the Irish Emigrant Society and its interest in assisting recent immigrants. In addition to recording the name and address of depositors and their occupations, the Emigrant’s secretaries also asked customers to provide their exact place of birth, the names of their parents (including mother’s maiden name) and their whereabouts, the depositors’ date of arrival in the United States, the name of the ship that carried them to America, their port of departure and arrival, the name of their spouse (including wife’s maiden name), the names and whereabouts of their siblings, and the names of their children. All this information is recorded in the test books and our transcription of this information appears in the Depositor File. The information was not uniformly recorded for all accounts, as some bank employees demanded more information from depositors than others.⁵ As a result, we have information on one subset of

variables for just about every depositor, like account activity and place of birth, but the information on a different subset of variables (such as name of mother and name of spouse) is incomplete.

For the Irish-born depositors, our student workers spent hundreds of hours researching the depositors' places of birth, making the spelling of place names consistent (using an 1861 guide to Irish place names), and coding the names of civil parishes in which their birthplaces were located (*General Alphabetical Index* 1861). Because we have the correct civil parish of birth for 90% of the Irish depositors (in this period Ireland had over 2,400 civil parishes, distributed across thirty-two counties), place of birth is now a key variable, as it will help provide new perspectives on the relationship between place of origin in Ireland and occupation, residence in New York, and savings behavior.

We have devoted a great deal of attention to determining the representativeness of our dataset of Irish depositors. Reassuringly, the proportion of depositors who arrived in the U.S. before the onset of the Famine in 1846 (about 25%) matches almost precisely the proportion of the city's Irish-born population that immigrated pre-Famine. In other areas, such as occupation, the depositors match the city's overall population fairly closely but less so than for date of arrival. For example, while 43% of the city's Irish immigrants in 1855 held menial jobs such as day laborer that required no training, only 39% of the bank's depositors worked at such jobs (see Table 1). Other questions, such as whether or not the bank's customers represent a cross-section of the city's Irish

immigrants in terms of birthplace within Ireland, are difficult to answer due to lack of data.

[Table 1 here]

Occupational identity, something we have for 85% of the savers in the Depositor File, allows for insight into how these depositors earned a living.⁶ We have recorded many aspects of a depositor's occupation, providing an IPUMS code for the initial occupation recorded and classifying occupations into a broad set of 24 categories.⁷ When available, we also recorded employment histories: for 34% of the savers, we know if they changed their occupation after they opened their first EISB account, based on tracking them in U.S. census records or city directories. For a sizable fraction of this 34%, we know if they changed jobs a second time or more. These data should prove highly useful in describing occupational mobility for this group of savers. For some depositors, often for those for whom we have employment histories, we also have information on their home address over several decades, from which one can see how much these savers moved around.

What the EISB Records Can Tell Us about Savings, Migration and the Social Mobility of the Irish Depositors at the EISB

In addition to the wealth of detailed data on savings behavior, this new dataset also offers an opportunity to study several other interesting questions

about mid-nineteenth century migration, networks, and economic mobility. In this section we present an overview of the EISB depositors and then focus on the Irish-born depositors to explain how these new data can contribute to different historical literatures.

Almost 95% of the bank's depositors were immigrants. We know the birthplaces of 89% of them, as shown in Table 2. A large majority had been born in Ireland, but immigrants from twenty-five other countries were among its depositors. A significant number came from a German state (7.5%), from England (3.5%) or Scotland (1.5%). In a city in which in 1855 about half of the population had been born in the U.S., only 5% of account-holders were native-born. Still, the non-Irish savers are numerous enough in the database to enable us to compare the savings patterns of Irish, the British, the German, and native-born account holders. On this point, it is perhaps surprising to find that while Irish immigrants in the mid- and late 1850s opened accounts sooner after landing than those arriving in 1851 and 1852, non-Irish immigrants opened their accounts more promptly than the Irish throughout.

[Table 2 here]

A majority of account holders were men, but the relatively high proportion of women (two-fifths) is a fair reflection of the female share in Irish immigration to the U.S. at this time.

The year of arrival of the 81.5% of depositors for whom we have that information is given in Table 3. More than 30% of all depositors arrived in one of these three years: 1849, 1850, and 1851.

[Table 3 here]

Savings Behavior

Better understanding of how individuals did or did not save sheds important light on how immigrants fared in their new homeland. Of course, the amount of money an immigrant had on deposit at a savings bank does not tell us everything about their economic circumstances. EISB depositors might have had significant debts (to grocers, to saloonkeepers, to landlords) that would not be reflected in their savings account balances. On the other hand, the bank's customers could have had *more* money than their bank accounts indicate. EISB depositors could have kept some of their savings at home. They also may have had accounts at other banks, either for diversification of risk (in an era before deposit insurance) or because of the state-mandated \$500 limit on deposits (see Olmstead 1976: 62-65). This regulation was not strictly enforced—some depositors had balances well above the limit; others evaded it by opening multiple accounts that each held \$500. Some of them even owned real estate. Thus, the immigrants' bank balances only tell us a part of their economic story.

These caveats aside, this new dataset does allow scholars to analyze how New York's antebellum Irish immigrants tried to save, both in terms of how much

they accumulated and the frequency with which they made transactions at the bank. Tables 4A and 4B show statistical distributions for the initial deposit in an Irish immigrant's first account along with the highest amount on deposit at any point in time across all accounts an individual owned. Our preliminary results show that the Irish-born depositors saved considerable sums, with initial deposits averaging \$126 and the highest balance achieved averaging \$382.⁸ The median initial deposit was \$60 and the median sum accumulated \$190. Nearly four in five accounts at the EISB were individual accounts. Cumulative savings were higher in joint accounts, as evident from Table 3B, where the median high balance was \$320 compared to \$156 for individual accounts.

Figure 1 shows the average opening balance for the Irish-born for select Manhattan wards and is delineated further by whether an immigrant arrived in the pre-Famine era (before 1846) or in the Famine era (1846 and after). There are stark differences between the opening balances of each group in almost every ward, with the pre-Famine immigrants in a completely different financial status in the early 1850s than the Famine immigrants. Wards 20 and 22 seem to have attracted the better off from both groups.⁹

[Figure 1 here]

Here, Figure 1 offers a flavor of what maps produced in GIS (geographic information systems) mapping can reveal about the link between residency patterns in New York City and savings behavior. Our project uses GIS mapping to shed light on issues such as whether or not depositors with similar savings behavior were clustered by place of residence in New York City, by parish of

origin in Ireland, or other characteristics. Maps will also be useful for assessing how much distance to the bank (and to competing banks) affected savings behavior and for measuring depositors' geographic mobility within New York City over time.

[Tables 4A and 4B here]

For the Irish born, the correlation between the size of the opening deposit in the first account and the highest balance across all accounts is +0.458 or +45.8%, while for all depositors this correlation is only +0.197 or +19.7%. It remains to be seen why these two numbers are so different.¹⁰ Other aspects of depositor behavior being studied include the seasonality of account openings and closures and of deposits and withdrawals, the number of transactions, the duration of accounts, and the influence of proximity to the bank on such behavior. Account ownership is also of interest, and the dataset indicates how many accounts were jointly held or held by a single person, and with respect to joint accounts, what the common relationships were between the joint owners. The role of women, in terms of how many women opened joint accounts, how much they saved, and how many single women held accounts, is particularly interesting. It is clear, for example, that women accumulated somewhat less than men on average and that the lag between arrival and opening an account was greater in the case of female than male immigrants. As Anbinder (2008: 86) has noted, the EISB depositors tended to be more “conservative” than depositors at the largest savings bank of

New York City at the time, in that fewer married women had accounts in their names alone at the Emigrant Bank compared to the city's largest savings institution, the New York Bank for Savings.

People save for a variety of reasons (compare Hurst *et al.* 2010; Mody, Ohnsorge, and Sandri 2012). Preliminary analysis of the EISB database suggests that some saved regularly, engaging in frequent bank transactions, while others simply deposited a substantial initial sum—perhaps a nest egg or an emergency fund—and let it sit, possibly motivated by the generous return on savings. (For most of the 1850s, the bank paid a 6% annual rate of interest.) The spike in withdrawals in early January and July betrays the sensitivity of depositors to these interest payments, which were credited only for funds still on deposit on the final day of June and December. Many depositors also regularly withdrew interest without touching their capital. An earlier study based on a very small number of account holders in the Sixth Ward found that most account holders did not use the EISB to accumulate substantial savings, because very often the last withdrawal was either smaller or nearly identical to the original deposit (Ó Gráda 2001: 241). Another feature worth investigating is the savings behavior of non-Irish account holders, who perhaps would not have had the same loyalty to the EISB as the Irish. Preliminary analysis suggests they were more prone than Irish savers to “coupon clipping,” placing very large amounts in the bank solely for the purpose of collecting the generous interest payments the bank offered (compare Ó Gráda 2003: 41-42).

For the most part, one can only speculate about what depositors did with the money they saved. We have been able to find about a quarter of the 10,800 Irish-born depositors in U.S. census records from 1860 or later, and the information from the 1860 and 1870 censuses on property accumulation can be used to supplement the stories one can glean from the savings accumulation. How did the value of real and “personal” estate provided to census takers in 1860 compare to the amount saved at EISB? To what extent was the bank used as a vehicle for accumulation or were depositors merely interested in the half-yearly dividend? Of related interest are those who withdrew their savings just before the bi-annual interest payments became due, i.e. in the final week or two of June or December. Such withdrawals were presumably prompted by some unforeseen event or an emergency: and those who closed their accounts in such circumstances may have differed from those who did not.

How people reacted in times of financial stress can affect savings behavior. The EISB data come from accounts opened in the 1850s, a decade of significant ups and downs in the economy of the U.S. The impact of the financial panics of 1854 and 1857 on the EISB has been studied previously (Kelly and Ó Gráda 2000; Ó Gráda and White 2003; Ó Gráda 2009); scholars can now revisit these episodes with our much bigger and richer dataset. This task will involve re-examining the patterns of withdrawals and account closings during these two periods and at the outset of the Civil War, when our dataset reveals a third, albeit smaller, rush to close accounts. In addition, scholars can examine how long it took depositors to react to the panics and how long it took for normal deposit and

withdrawal patterns to resume. Our 20% sample of every savings account transaction made at the bank will enable scholars to study depositor behavior in detail. Not only are our data on account histories richer: we also have more precise, GIS-linked data on place of origin in Ireland and residence in New York, which will enrich our analysis of the spatial dimension of these panics.

Economic crises can have a path-dependent effect on the way individuals or their children behave after the fact and how they subsequently think about risk-taking and saving. In our own time, we have witnessed the savings rates in the U.S. shooting up in 2009 after the financial crises of 2008, a year marked by large decreases in the personal wealth of many Americans (Mody, Ohnsorge, and Sandri, 2012). New research shows that the children of the Great Depression of the 1930s were less likely to engage in risky financial behavior when they became adults, purchasing homes earlier in life, holding more equity in their homes and starting fewer businesses (McGuire, 2016). The trends in deposits and new accounts opened in the wake of the panics of 1854 and 1857 may prove interesting in this regard.

Finally, potential links between other personal characteristics described in the dataset and depositor behavior are worth analyzing. These include country and county of origin, literacy, date of arrival in the United States, marital status, and family size.

Occupations, Saving, and Mobility

The EISB data describe how savings differed by occupation, marital status, gender, nationality, place of origin in Ireland, and place of residence in New York City. We provide several measures of savings behavior such as the sizes of the opening deposit and final withdrawal, the maximum sum on deposit, and the number of transactions. This permits us to address not only issues already familiar in the literature (compare Alter, Goldin, and Rotella 1994), but also quirkier questions such as which savers were more likely to close their accounts before interest payments were due; how did savings behavior differ by place of birth; and what sorts of occupations did “big savers” have? (We define “big savers” as those who increased their initial deposit by a factor of twenty.)¹¹ On this last question, for example, our preliminary findings are in some ways predictable (doctors, lawyers, and saloon keepers saved more than most other depositors) and in others quite surprising (we find that peddlers and porters also accumulated far more than the typical depositor). In fact, the Irish-born “big savers” included 64 female domestic workers, 40 laborers, 33 clerks, 20 porters, and 20 shoemakers.

We were able to trace the location and occupation of more than a quarter of the Irish-born depositors in 1860 or later. How typical the traced depositors were of account holders as a whole is a moot point—and one that bedevils nominal linkage exercises more generally (Ferrie and Long 2013). Still, scholars can use this data to further our understanding of American economic mobility during the 1850s and 1860s (compare Thernstrom 1964; Ferrie 1999).¹² Some may wonder if those who accumulated large sums in the EISB were more likely

than others to move? Was there a link between immigrants' saving histories and their subsequent upward (or downward) occupational mobility? Hitherto scholars of migration and mobility history who wrestle with these questions have focused largely on census data. Subject to the standard caveat about survival bias, the information in our dataset will add a new dimension to this literature.

Irish Immigration over Time

Of the Irish immigrants who opened accounts at the EISB in the 1850s, almost 80% had emigrated during or in the wake of the Great Famine, as one can see from Table 3. The EISB was by no means the biggest savings bank in New York in the 1850s (Olmstead 1976: 157-61), but it was not one of the smallest either. Its location on Chambers Street in Lower Manhattan placed it within walking distance of Five Points, where many Irish immigrants resided and near other wards like the Fourth, Seventh, and Fourteenth where the Irish were particularly numerous.

The detail provided on Irish immigrants in the EISB data is unparalleled. Not only can it help us understand their adaptation to post-Famine life in New York City, it can also shed new light on their origins and family circumstances in Ireland, down to county, civil parish, and even sub-parish (or townland) level. Such detailed data were not collected in Ireland, and the U.S. passenger records do not contain specific Irish origin data on a consistent basis. The data in the EISB archive are unique in this respect, and thus enrich Irish and Irish-American demographic and economic history. With further study of the depositors' New

York City residence patterns, and other variables from the EISB accounts, scholars can analyze who emigrated together and who settled together in New York City. We have already used this data to map the parish origins of the bank's Irish depositors. Figure 2 displays the Irish civil (as opposed to Roman Catholic) parish origins of EISB depositors who arrived in the U.S. in the pre-Famine era, and Figure 3 does the same for those who arrived in 1846 or later. The results are striking and unparalleled in their detail (compare e.g. Cousens 1965). Many of the parishes that were "hotbeds" of emigration in the earlier period remained so during the Famine, while a few experienced less emigration in the latter period. Migration, as reflected in these data, was highly clustered. The maps highlight the diversity of parish migration histories. If the EISB depositors are reasonably representative of Irish emigrants in general, these two maps provide a strikingly new and richer perspective on Irish emigration in the mid-nineteenth century.

[Figures 2 and 3 here]

Tables 5 and 6 illustrate how the emigration experience over time varied markedly across Ireland. In Table 5, which describes the pattern in six counties (out of thirty-two), one third or more of all depositors from the counties of Cavan and Sligo had left before the Great Famine, a much higher share than in the other four counties. By contrast, the percentage of emigration that occurred during the Famine was much higher for savers from Cork (46.8), Dublin (50.7), Galway (45.8) and Kilkenny (61.4) than from Cavan (31.9) and Sligo (34.4). The cross-

county variation, which requires further study, was a product of both established migration patterns and the severity of the Famine.

[Table 5 here]

Table 6 groups clusters of Irish counties by the year of arrival of EISB depositors. The first two columns represent counties, mainly in the province of Ulster, where trans-Atlantic emigration from Ireland was especially significant before the Great Famine. The second represents clusters where this was not the case. Note too from the last two rows that post-1845 emigration was much more common in the counties represented in the last two columns.

[Table 6 here]

Social Networks

Linking savings account information to U.S. ship passenger records and census records provides an opportunity to capture the social networks that existed between immigrants. It is likely that family members and friends and neighbors influenced each other in various ways. For example, depositors who lived close to each other or had similar occupations may have saved in similar ways. Initial results show that the ability to save was similar among individuals living in the same neighborhoods. Table 7 captures the ability to save as defined by the highest

amount on deposit divided by an individual's initial deposit and distinguishes this by ward of residence in New York.

[Table 7 here]

The coefficient of variation (CV) is a measure of how dispersed data are. Here the CV of "ability to save" is much higher for all Irish-born (6.171) than in each individual ward, particularly in the First Ward (2.356). Thus Irish-born depositors in the same ward saved in similar ways.¹³ Note too, the unsurprising finding that inhabitants of the (low income and heavily Irish) Sixth Ward were more homogeneous in their savings habits than Irish depositors as a whole.

The highly detailed information in the database on residence in both Ireland and New York invites further analysis of the role of networks in the panics of 1854 and 1857. Kelly and Ó Gráda (2000) relied on samples of depositors and on county-level data in their analysis of "market contagion"; now data are available on the townland of origin and street address in New York of most Irish deposit-holders, along with analogous data on non-Irish savers. There are other possible networks that may have mattered, such as the relationships between people from the same community of origin or between kinfolk or among those who traveled together on the same ships.

Conclusion

The EISB data offer an extraordinary opportunity to study immigrants and their savings behavior in mid-nineteenth century New York. The impact of variables such as date of immigration, occupation, marital status, number of children, birthplace, familial and other networks, and neighborhood of residence on savings can be studied to an extent, we believe, that has never before been possible. In this paper, we have provided some initial results that demonstrate the value of the EISB dataset. We demonstrate that the Irish Famine immigrants saved, and that they saved a lot, with a median increase of 111% from the initial deposit. The EISB database offers an antidote to more traditional stereotypes of the Irish Famine immigrant to New York as mired in poverty. It suggests that even the poorest immigrants, including those who had recently arrived from the remotest corners of Ireland, were keen to save and often able to save substantial sums. A significant proportion of the largest savers were unskilled workers, and many were women. Moreover, there was a significant correlation between place of birth in Ireland and savings patterns in New York. There is also a correlation between occupation and savings, though not always in the ways one would have imagined. These data should provide rewarding research opportunities to economists and historians for years to come.

Table 1

**Occupations of the Emigrant Bank's Irish-Born Male Depositors
And Those of New York's Overall Irish-Born Male Population**

	Irish-Born EISB Depositors, 1850-1858	All NYC Irish Immigrants, 1855
Professionals	0.4%	0.4%
Business Owners	9%	8%
Lower-Status White Collar	7%	5%
Petty Entrepreneurs	5%	2%
Artisans	37%	41%
Unskilled Workers	39%	43%
Difficult to Classify	2%	1%

Source: For the bank's depositors, see Anbinder, Ó Gráda, and Wegge, "Emigrant Savings Bank Data Depositor File." For all Irish immigrants in 1855, see Robert Ernst, *Immigrant Life In New York City, 1825-1863* (1949; Syracuse, 1994), 214-18.

Table 2
Nation of Origin

Nation of Birth	Percentage of Depositors
Ireland	69.0 %
German states	7.6
United States	5.4
England	3.5
Scotland	1.6
Canada	0.4
Elsewhere	2.0
Unknown	10.5
Number of Depositors	15,707

Source: EISB Depositor File

Table 3
Year of Arrival in the U.S.
EISB Depositors

Period	All Depositors, in per cent	Irish-born only, in per cent
Before 1821	0.7 %	0.8 %
1821-30	2.5	2.6
1831-40	9.3	9.1
1841-45	8.7	8.8
1846	3.5	3.7
1847	5.7	6.2
1848	7.4	7.6
1849	9.7	10.0
1850	11.0	10.9
1851	15.3	15.9
1852	9.7	9.5
1853	7.2	6.8
1854	4.7	4.1
1855	1.6	1.5
1856-66	2.9	2.6
Number	12,816	10,432

Source: EISB Depositor File

Table 4A**Opening Balance in First Account*****EISB Depositors, Irish-born Only**

Amount in U.S. \$	Individual & Joint Accounts Average of \$126 Median of \$60		Individual Accounts only Average of \$122 Median of \$56		Joint Accounts only Average of \$143 Median of \$100	
	Number	Percent	Number	Percent	Number	Percent
Less than \$10	371	3.4 %	342	4.1 %	29	1.2 %
\$10 to \$19	816	7.5	726	8.7	90	3.6
\$20 to \$29	1,307	12.1	1,088	13.0	219	8.8
\$30 to \$49	1,551	14.3	1,257	15.0	294	11.9
\$50 to \$74	1,910	17.6	1,440	17.2	470	19.0
\$75 to \$99	579	5.3	445	5.3	134	5.4
\$100 to \$149	1,786	16.5	1,245	14.9	539	21.8
\$150 to \$199	569	5.3	421	5.0	148	6.0
\$200 to \$299	781	7.2	519	6.2	262	10.6
\$300 to \$499	693	6.4	511	6.1	182	7.4
\$500 to \$749	282	2.6	207	2.5	75	3.0
\$750 to \$999	81	0.7	63	0.8	18	0.7
\$1,000 to \$1,499	69	0.6	57	0.7	12	0.5
\$1,500 to \$1,999	17	0.2	17	0.2	0	0.0
\$2,000 or more	22	0.2	19	0.2	3	0.1
Number	10,834	100.0 %	8,357	100.0 %	2,475	100.0 %

Source: EISB Depositor File

* The Opening Balance is the opening balance in the first account a depositor owned. The statistics above cover both individual accounts (accounts owned by one person) as well as those held jointly (usually by two persons and often a married couple).

Table 4B**Highest Balance across all Accounts*****EISB Depositors, Irish-born Only**

Amount in U.S. \$	Individual & Joint Accounts Average of \$382 Median of \$190		Individual Accounts only Average of \$ 356 Median of \$ 156		Joint Accounts only Average of \$ 473 Median of \$ 320	
	Number	Per cent	Number	Per cent	Number	Per cent
Less than \$10	95	0.9 %	92	1.1 %	3	0.1 %
\$10 to \$19	292	2.7	279	3.3	13	0.5
\$20 to \$29	488	4.5	458	5.5	30	1.2
\$30 to \$49	789	7.3	716	8.6	73	2.9
\$50 to \$74	1,137	10.5	957	11.5	180	7.3
\$75 to \$99	601	5.5	496	5.9	105	4.2
\$100 to \$149	1,309	12.1	1,037	12.4	272	11.0
\$150 to \$199	787	7.3	608	7.3	179	7.2
\$200 to \$299	1,090	10.1	787	9.4	303	12.2
\$300 to \$499	1,536	14.2	1,063	12.7	473	19.1
\$500 to \$749	1,402	12.9	944	11.3	458	18.5
\$750 to \$999	455	4.2	315	3.8	139	5.6
\$1,000 to \$1,499	465	4.3	308	3.7	157	6.3
\$1,500 to \$1,999	156	1.4	116	1.4	39	1.6
\$2,000 or more	233	2.2	182	2.2	51	2.1
Number	10,835	100.0%	8,358	100.0 %	2,475	100.0 %

Source: EISB Depositor File

*The Highest Balance is the highest amount on deposit in all accounts on any one day. The statistics above cover both individual accounts (accounts owned by one person) as well as those held jointly (usually by two persons and often a married couple).

Table 5
Year of Arrival to the U.S.
by Irish County of Birth (Six Irish Counties Only)
EISB Depositors

Period	Cavan	Cork	Dublin	Galway	Kilkenny	Sligo	Total Irish-born
Before							
1821	1.6 %	0.5 %	0.6 %	0.0 %	1.1 %	3.0 %	0.8 %
1821-30	2.2	1.8	2.1	0.2	0.8	6.4	2.6
1831-40	14.8	7.3	6.4	5.4	3.9	14.4	9.1
1841-45	13.2	8.4	8.5	12.2	5.9	10.6	8.8
1846	5.9	3.1	2.5	5.4	2.0	4.5	3.7
1847	9.2	5.8	5.8	5.4	4.8	9.1	6.2
1848	8.2	7.7	9.6	8.2	7.3	4.9	7.6
1849	6.6	9.2	10.2	12.0	12.7	8.3	10.0
1850	8.1	11.7	10.4	9.4	18.0	6.4	10.9
1851	11.2	15.1	19.1	15.0	20.3	14.0	15.9
1852	6.0	10.8	11.0	9.4	10.4	5.7	9.5
1853	5.7	7.9	5.6	6.2	7.0	5.7	6.8
1854	3.8	5.2	4.0	7.5	1.7	3.8	4.1
1855	1.8	2.1	1.5	1.5	1.1	0.8	1.5
1856-66	2.2	3.5	2.7	2.1	2.8	2.3	2.6
Number	546	1,267	481	466	355	264	10,432

Source: EISB Depositor File

Table 6
Year of Arrival to the U.S. by Irish County of Birth

EISB Depositors

Year	Cavan, Derry, Donegal, Tyrone, Longford, Sligo	Antrim, Armagh, Down, Fermanagh, Monaghan	Clare, Cork, Kerry, Limerick, Tipperary, Waterford	Carlow, Kilkenny
Before 1840	22.0 %	14.1 %	7.0 %	6.4 %
1840-45	14.8	12.5	6.5	6.1
1846-47	12.5	10.5	8.1	6.8
1848-49	14.8	18.8	17.5	19.7
1850-51	18.1	22.9	32.1	38.4
1852-53	11.9	14.7	18.7	16.9
After 1853	6.0	6.4	10.2	5.7
Pre-1846 [%]	36.8	26.7	13.4	12.5
Post-1845[%]	63.2	73.3	86.6	87.5

Source: EISB Depositor File

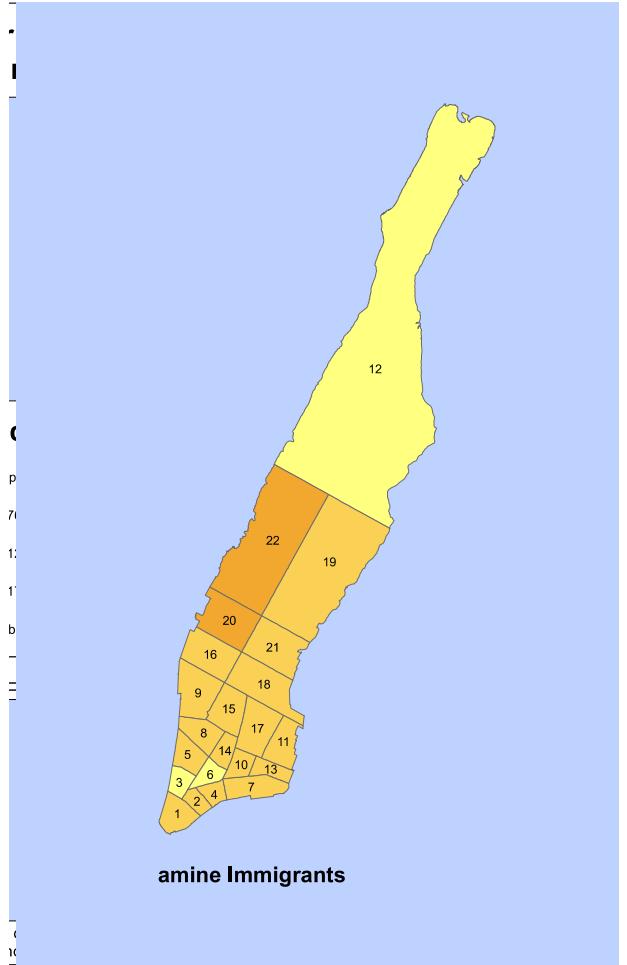
Table 7
Ability to Save
By Ward

EISB Depositor Savings by Ward of Residence in New York, Irish-born only

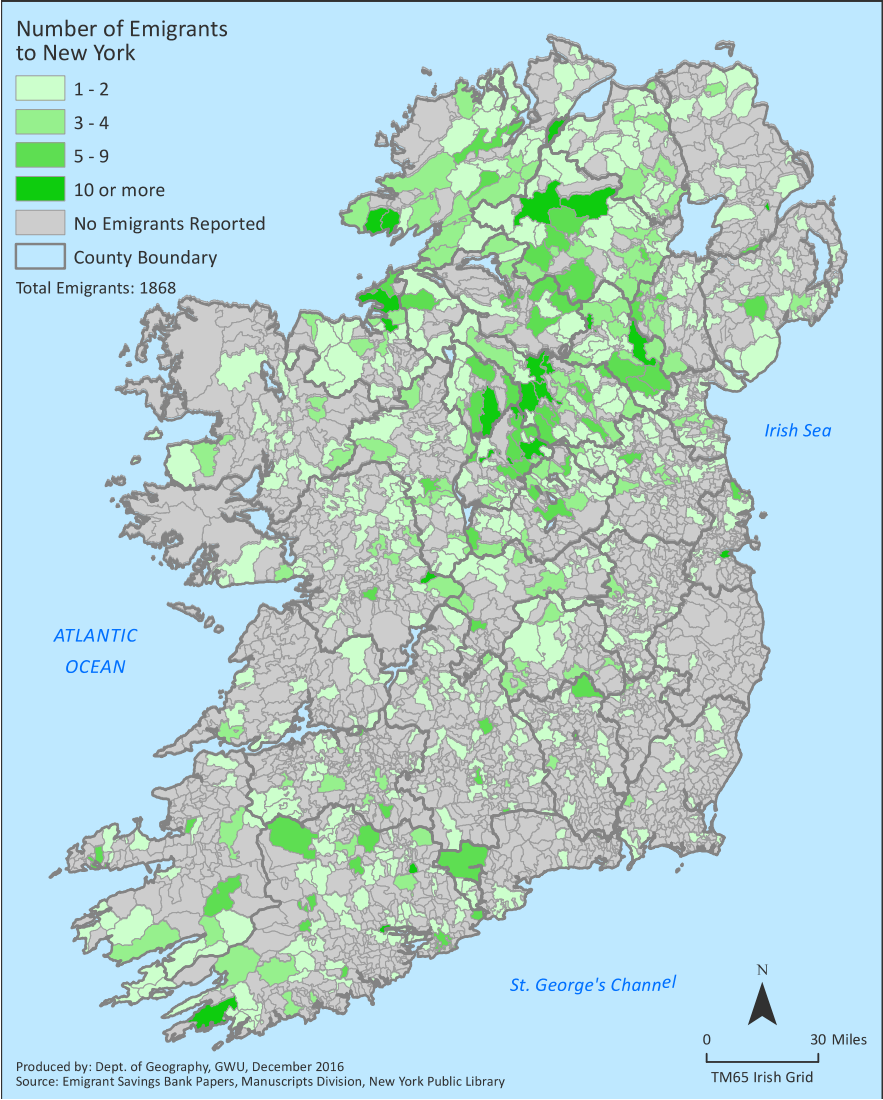
	Ward 1	Ward 4	Ward 5	Ward 6	Ward 7	Ward 14	Total Irish-born, (All Wards)
Median High Balance	\$177	\$178	\$172	\$160	\$180	\$210	\$190
Average Increase [%]	398	649	654	486	400	638	535
Median Increase [%]	95	135	143	132	121	136	111
Standard Deviation	938.3	2,950.0	1,978.6	1,682.9	795.9	2,463.3	3,305.6
Coefficient of Variation	2.356	4.542	3.026	3.458	1.989	3.861	6.171
Number	529	966	325	1,087	653	488	10,848

Source: EISB Depositor File. The ability to save is measured by dividing the highest amount on deposit in all accounts on any one day by the initial deposit in an individual's first account.

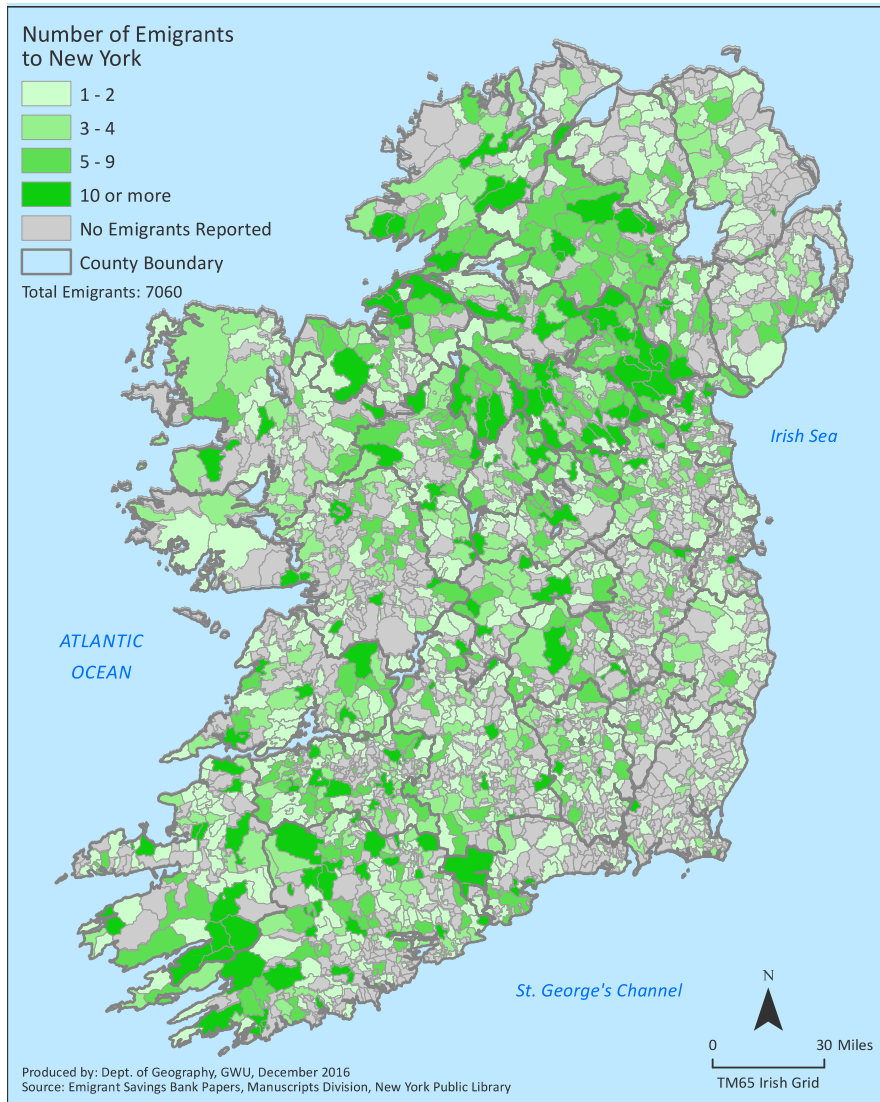
Pre-famine Immigrants



Emigrant Parish of Origin: Pre 1846



ost 1845



References

Alter, G., C. Goldin, and E. Rotella. 1994. The Savings of Ordinary Americans: The Philadelphia Saving Fund Society in the Mid-Nineteenth Century. *Journal of Economic History* 54: 735-67.

Anbinder, T. 2008. Saving Grace: The Emigrant Savings Bank and Its Depositors. In *Catholics in New York: Society, Culture, and Politics, 1808-1946*, edited by T. Golway, 83-94. New York: Fordham University Press.

Anbinder, T. 2012. Moving Beyond 'Rags to Riches': New York's Irish Famine Immigrants and their Surprising Savings Accounts. *Journal of American History* 99: 741-70.

Anbinder, T. 2016. *City of Dreams: The 400-Year Epic History of Immigrant New York*. New York: Houghton Mifflin Harcourt.

Anbinder, T. and H. McCaffrey. 2015. Which Irish Men and Women Immigrated to the United States During the Great Famine Migration of 1846–54? *Irish Historical Studies* 39: 620-42

Carothers, A. and M. R. Casey. 2014. 'From Killybegs to Mulberry Street'
[available at: http://www.nyuirish.net/ethnicvillage/mulberry-street/donegal_in_new_york/from-killybegs-to-mulberry-street/]

Casey, M. R. 2006. Refractive History: Memory and the Founders of the Emigrants Savings Bank. In *Making the Irish American: History and Heritage of the Irish*, edited by Lee, J.J. and M. Casey, 302-31. New York: New York University Press.

Casey, M. R. 2013. Emigrant as Historian: Records, Banking, and Irish-American Scholarship. *American Journal of Irish Studies* 10: 145-63.

Clarke, Joseph F. 2014. 'Boarding House at 38 Mulberry Street [available at: <http://www.nyuirish.net/ethnicvillage/mulberry-street/38-mulberry-street/>]

Cousens, S. H. 1965. The Regional Variation in Emigration from Ireland between 1821 and 1841 Transactions of the Institute of British Geographers, No. 37: 15-30.

Ferrie, J. 1999. *Yankeys Now: Immigrants in the Antebellum United States, 1840-1860*. New York: Oxford University Press.

Ferrie, J. and J. Long. 2013. Intergenerational Occupational Mobility in Britain and the U.S. since 1850. *American Economic Review* 103: 1109-37.

Fishlow, A. 1961. The Trustee Savings Banks, 1817-1861. *Journal of Economic History* 21: 26-40.

General Alphabetical Index to the Townlands and Towns, Parishes and Baronies of Ireland. 1861. Dublin: Alexander Thom.

Guinnane, T. 2002. Delegated Monitors, Large and Small: Germany's Banking System 1800-1914. *Journal of Economic Literature* 40: 73-124.

Hatton, T. J. and J. G. Williamson. 1998. *The Age of Mass Migration. Causes and Economic Impact*. New York: Oxford University Press.

Hurst, E., A. Lusardi, A. Kennickell and F. Torralba. 2010. The Importance of Business Owners in Assessing the Size of Precautionary Savings. *Review of Economics and Statistics* 92: 61-69.

Kelly, M. and C. Ó Gráda. 2000. Market Contagion: Evidence from the Panics of 1854 and 1857. *The American Economic Review* 90: 1110-24.

Margo, Robert. 2000. *Wages and Labor Markets in the United States, 1820-1860*. Chicago: University of Chicago Press.

McGuire, E. 2016. Estimating the Impact of Local Conditions during the Great Depression on Asset Preferences in Adulthood. Working paper, University of Arizona, presented at the Economic History Association meetings September 17, 2016. URL: <http://eh.net/eha/wp-content/uploads/2016/08/McGuire.pdf>.

Mody, A., F. Ohnsorge, and D. Sandri. 2012. Precautionary Savings in the Great Recession. *IMF Economic Review* 60: 114–38.

Ó Gráda, C. 1999. *Black '47 and Beyond: the Great Irish Famine in History, Economy and Memory*. Princeton: Princeton University Press.

Ó Gráda, C. 2001. The Famine, the New York Irish, and their Bank. In *Contributions to the History of Economic Thought, Essays in Honor of R.D.C. Black*, edited by A.E. Murphy and R. Prendergast. New York: Routledge, pp. 227-248.

Ó Gráda, C. 2003. Savings banks as an institutional import: the case of nineteenth century Ireland. *Financial History Review* 10: 31-55.

Ó Gráda, C. 2009. Financial Panic, Famine and Contagion: Ireland in the 1840s and 1850s. *Irish Economic and Social History* 35: 21-36.

Ó Gráda, C. and E. White. 2003. The Panics of 1854 and 1857: A View from the Emigrants Industrial Savings Bank. *Journal of Economic History* 63: 213-40.

Olmstead, A. L. 1976. *New York City Mutual Savings Banks, 1819-1861*. Chapel Hill: University of North Carolina Press.

Padian, P. F. 2016. 'From Lissonuffy to New York' [available at: <http://www.nyuirish.net/ethnicvillage/from-lissonuffy-to-new-york/>].

Payne, P. L. and L. E. Davis. 1956. *The Savings Bank of Baltimore, 1818-1866: A Historical and Analytical Study*. Baltimore: The Johns Hopkins Press.

Rich, K. J. 2001-2010. *Irish Immigrants of the Emigrant Industrial Savings Bank*, vols. 1-3. New York: the author.

Shiels, Damian. 2015. ““As Good a Chance to Escape as Any Other”: A Cork Soldier’s Aid to His Family in Ireland, 1864.” *Irish in the American Civil War*, March 27 [available at: <https://irishamericancivilwar.com/2015/03/27/as-good-a-chance-to-escape-as-any-other-a-cork-soldiers-aid-to-his-family-in-ireland-1864/>].

Thernstrom, S. 1964. *Poverty and Progress. Social Mobility in a Nineteenth Century City*. Cambridge, MA: Harvard University Press.

¹ They are related to a more general trend across Europe in the late eighteenth century, which gained steam after the end of the Napoleonic Wars. The first savings bank in Germany, for example, opened its doors in 1778 in Hamburg (Guinnane, 2002, 84).

² The database based on the 5% sample, labelled “Revised JAH data,” can be found at <https://dataverse.harvard.edu/dataset.xhtml?persistentId=hdl:1902.1/18051>.

³ The original documents are held in the New York Public Library. Rich (2001-2010) has transcribed some of the data in the Test Books.

⁴ Data from the project is available as “Emigrant Savings Bank Depositor Data” at <https://dataverse.harvard.edu/dataverse/anbinder>

⁵ It is clear from the handwriting that several bank employees entered information into the Test Books, but a single employee recorded the information for about half of the accounts.

⁶ Occupation is missing for 14.8% of the depositors. For another 5%, the test books specified that the depositor had no occupation (as distinct from the information being missing). For the remainder, the occupation is specified.

⁷ We used the earliest available IPUMS (USA) occupation codes, those IPUMS uses for the 1850 to 1900 IPUMS samples. More information is available here: <https://usa.ipums.org/usa/volii/occ1880.shtml> (accessed August 6, 2016).

⁸ Individual accounts are those owned by one person, while joint accounts had two or more owners.

⁹ For an overview of New York City in this period see Anbinder (2016: 129-88). For more on the sixth ward of New York City, see Ó Gráda (1999, 114-21).

¹⁰ It may well be that there was a cultural aspect to savings behavior, but the possibility that non-Irish savers were more inclined to have other accounts in other savings banks cannot be ruled out.

¹¹ A total of 569 individuals in the Depositor File make up this group.

¹² Many who settled in the U.S. at this time were able to earn higher wages than they had been able to in Ireland, and some were able to help family members

there make the overseas journey as well. By the 1880s, within some ethnic groups, up to 50% of immigrants arriving in the U.S. were traveling on pre-paid tickets (Hatton and Williamson, 1998, 14).

¹³ The statistical distribution of depositors in Ward 1, for example, with a smaller CV number, means that most depositors in this ward saved similar amounts. A higher CV number shows that the ability to save was more dissimilar across depositors. The CV measure allows one to compare variability across different populations; the Sharpe ratio in finance is essentially a CV and is used to compare the variability of returns across all different types of asset classes.

UCD CENTRE FOR ECONOMIC RESEARCH – RECENT WORKING PAPERS

- [WP16/04](#) Kevin Denny and Cormac Ó Gráda: 'Immigration, Asylum, and Gender: Ireland and Beyond' June 2016
- [WP16/05](#) Cormac Ó Gráda: 'What's in an Irish Surname? - Connollys and Others a Century Ago' June 2016
- [WP16/06](#) David Madden: 'Child and Adolescent Obesity in Ireland: A Longitudinal Perspective' August 2016
- [WP16/07](#) Kevin Denny and Patricia Franken: 'Self-reported health in good times and in bad: Ireland in the 21st century' August 2016
- [WP16/08](#) Ronald B Davies, Iulia Siedschlag and Zuzanna Studnicka: 'The Impact of Taxes on the Extensive and Intensive Margins of FDI' August 2016
- [WP16/09](#) Karl Whelan: 'Banking Union and the ECB as Lender of Last Resort' August 2016
- [WP16/10](#) David Madden: 'The Base of Party Political Support in Ireland: A New Approach' August 2016
- [WP16/11](#) Stelios Bekiros, Roberta Cardani, Alessia Paccagnini and Stefania Villa: 'Dealing with Financial Instability under a DSGE modeling approach with Banking Intermediation: a predictability analysis versus TVP-VARs' August 2016
- [WP16/12](#) Alice Albonico, Alessia Paccagnini and Patrizio Tirelli: 'In search of the Euro area fiscal stance' August 2016
- [WP16/13](#) Ivan Pastine: 'On Nash Equilibria in Speculative Attack Models' September 2016
- [WP16/14](#) Ronald B Davies and Rodolphe Desbordes: 'The Impact of Everything But Arms on EU Relative Labour Demand' September 2016
- [WP16/15](#) Ronald B Davies, T Huw Edwards and Arman Mazhikeyev: 'The Impact of Special Economic Zones on Electricity Intensity of Firms' October 2016
- [WP16/16](#) David Madden: 'Childhood Obesity and Maternal Education in Ireland' November 2016
- [WP16/17](#) Stijn van Weezel: 'Communal violence in the Horn of Africa following the 1998 El Niño' December 2016
- [WP16/18](#) Stijn van Weezel: 'Short term effects of drought on communal conflict in Nigeria' December 2016
- [WP16/19](#) Sarah La Monaca and Lisa Ryan: 'Solar PV where the sun doesn't shine: Estimating the economic impacts of support schemes for residential PV with detailed net demand profiling' December 2016
- [WP16/20](#) Kevin O'Rourke: 'Independent Ireland in Comparative Perspective' December 2016
- [WP17/01](#) Roberta Cardani, Alessia Paccagnini and Stelios Bekiros: 'The Effectiveness of Forward Guidance in an Estimated DSGE Model for the Euro Area: the Role of Expectations' January 2017
- [WP17/02](#) Doireann Fitzgerald, Stefanie Haller and Yaniv Yedid-Levi: 'How Exporters Grow' January 2017
- [WP17/03](#) Igor Bagayev and Ronald B Davies: 'The Infant Industry Argument: Tariffs, NTMs and Innovation' January 2017
- [WP17/04](#) Igor Bagayev and Ronald B Davies: 'Non-homothetic Preferences, Income Distribution, and the Burden of NTMs' February 2017
- [WP17/05](#) Igor Bagayev and Ronald B Davies: 'The Impact of Protection on Observed Productivity Distributions' February 2017
- [WP17/06](#) Igor Bagayev, Ronald B Davies, Panos Hatzipanayotou, Panos Konstantinou and Marie Rau: 'Non-Tariff Barriers, Enforcement, and Revenues: The Use of Anti-Dumping as a Revenue Generating Trade Policy' March 2017