

An Empirical History of the United States Postal Savings System*

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Abstract

Using novel data sets on Postal Savings depositor behavior and bank location, we provide a history of the United States Postal Savings System by measuring how depositor behavior changed over time, in response to economic shocks, demographics, and the presence of commercial banks. We describe the system's three distinct phases: pre-1929 Crash, Great Depression until WWII, and WWII through the end of the program. The characteristics of depositors changed over time, from non-farming immigrant populations in the early years towards broad nationwide use of the system after 1930. Throughout the history of the system, individuals changed their behavior following negative economic shocks by relying more heavily on Postal Savings, especially for short-term deposits. Finally, the data indicate that Postal Savings was at least a partial substitute for commercial banks.

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1 Introduction

The United States Postal Savings System was a mainstay at post offices nationwide from 1911 to 1966. The program offered a federally insured savings alternative for people who were either unable or unwilling to use traditional banks. Even after the FDIC was established in 1933, Postal Savings remained popular, with deposits reaching a peak of over \$3 billion in deposits in 1947. Despite its use and longevity, the system has been largely ignored by the economics literature. This paper uses a new, post office-level data set on postal deposits to provide an overview of how the system functioned, of who made use of its services, and of its role in the banking system.

The Postal Savings System allowed individuals to deposit money in any post office that was designated a Postal Savings depository. The program was designed to encourage thrift among people who either did not have large sums to deposit or distrusted the existing banking system. Offices accepted deposits as small as \$1, and allowed people to convert their balances into U.S. Treasury Bonds, neither of which traditional banks were eager to do. Deposits earned 2% in simple interest¹ and were fully insured by the U.S. government, making it the only federally insured savings account available before the establishment of the FDIC.

The relatively small body of literature on Postal Savings includes historical and empirical analysis. The contemporary and historical literature provides anecdotal evidence on

¹Compound interest was introduced in 1954.

how the system was used. Kemmerer (1917) discusses the early years of the system and the demographic makeup of depositors. Sissman (1936) and Sissman (1938) focus on the role of Postal Savings during the late 1920s and early 1930s, including the change in relationship between postal and traditional banks in the early years of the Great Depression. Schewe (1971) provides a thorough historical account of the establishment of the system and aggregate trends in deposits over its lifetime.

The empirical literature focuses on quantifying specific particular aspects attributes or effects of postal savings banks and estimating their effects. Kuwayama (2000) compares the U.S. and Japanese systems using national and state-level data to measure the correlation between postal deposits, interest rates, and the riskiness of banks. She finds that lower interest rates and more bank failures are associated with greater deposits during the 1911-1935 period but that only interest rates are statistically significant after 1936, suggesting a large impact of the FDIC.

Looking more closely at the role of safety in deposits, Davidson and Ramirez (2016) use postal depositories as a measure of “money under the mattress” to test the effect of deposit insurance on depositor behavior. They show that postal savings deposits were higher in places without deposit insurance and that depositors gravitated towards postal savings banks after commercial bank failures more in states without deposit insurance.

O’Hara and Easley (1979) explore the impact of Postal Savings on the savings and loan market around the Great Depression. The authors argue that the system hurt savings and loan institutions by removing funds from the standard banking system. They also show that states with low levels of redeposits of Postal Savings funds into local banks saw higher rates of bank failure.

The previous literature provides fragments of the history of Postal Savings, but not a unified and comprehensive examination of: (1) who used Postal Savings depositories, (2) why they used Postal Savings, and (3) what the relationship was between Postal Savings and the banking system more generally. To answer these questions, we collected post-office level depositor data as well as state-level data on deposit inflow, withdrawals, and reinvestment from 1911 through 1961. We also link the Postal Savings data to city-level information on banks and county-level information on demographic and economic characteristics.

Using county-level data, aggregated up from the post-office level depositor data, we find that before 1930, Postal Savings was heavily used by foreign-born people and was less popular in farming communities and the largest cities. By 1936, the association between demographic characteristics and postal deposits weakened considerably, and the negative

correlation between farming communities and postal deposits disappeared. Urbanization was still positively correlated with deposits, but the correlation was much lower than in earlier period.

At the post office-level, we find two notable results. First, the establishment of a commercial bank, especially a national bank, decreased postal deposits. This result suggests that Postal Savings offered an alternative for banking services for those who lacked access to traditional banks. Second, deposit insurance programs were also negatively correlated with postal deposits, suggesting that distrust of existing banks also played a role in attracting customers to Postal Savings. Postal Savings was not only for the underbanked, and many postal savings customers lived near enough to other banks to make use of them. This implies risk preference was also a factor in savers' choice of banking services.

These data show that people's use of Postal Savings changed throughout its history. In the early years of the program, depositors relied on it for short-term savings, especially during periods of distress or uncertainty in the private bank sector. In later years, depositors began to hold deposits for longer periods, using the system for long-term savings. When other interest rates dropped in the 1940s, the prescribed two-percent interest rate offered by Postal Savings had a relative advantage over savings accounts at commercial banks and even over many securities, leading to a flood of deposits that then slowly trickled out once interest rates increased. With a much smaller immigrant community, the wide availability of good roads and automobiles, and widespread trust in the FDIC, Postal Savings had lost its unique position by the 1950s. However, in its last years the program was holding more money than at any time before the start of the Depression, suggesting that it may still have played a useful role in the U.S. banking system.

2 Data

We constructed post office-level, state-level, and national-level datasets for Postal Savings. Our post office-level dataset includes the annual amount of deposits and number of depositors for all post offices in the United States.² We then matched the post offices listed by name and state to a list of populated places maintained by the U.S. Board on Geographic Names and to the list found in the AniMap 3.0.2 County Boundary Historical Atlas. This allowed us to attach an approximate latitude and longitude to these offices; the locations

²In large cities, post office branches are included in one city-wide total.

were then used for the creation of county-level statistics on Postal Savings.

State-level data provides annual figures for deposit inflow, withdrawals, reinvestment in banks, and conversion to bonds. At the national level, we use monthly deposit data. All postal data comes from annual reports on the operation of the Postal Savings System (Post Office Department, Postal Savings System).

We also constructed a dataset of city-level information on banks from 1913 and 1919 (excluding savings banks), again matched to the above lists in order to attach an approximate latitude and longitude and county-level information on demographic and economic characteristics collected by the U.S. Census Bureau and digitized by Haines (2010).

3 Legislative History

Postal savings systems existed for decades in other countries before the program was instituted in the United States. The first postal savings bank was established in 1861 in the United Kingdom, where deposits were initially limited to £30 a year and accounts capped at £120 (Hamilton, 1902). Deposits earned relatively low interest rates, so as not to compete with traditional banks (Cottrell, 1985). The system proved popular, with 11 of the 21.9 million Britons holding accounts totaling the equivalent of \$781 million in 1908 (National Monetary Commission, 1910). Encouraged by this success, many countries and colonies around the world established postal savings systems with characteristics similar to the U.K.'s system, especially its low interest rates and investment of funds in government bonds.³ When lawmakers spoke in support of the establishment of a U.S. Postal Savings system, they initially highlighted the profitability of international systems. John A. Creswell, the Postmaster General under President Ulysses S. Grant, advocated for a postal bank in his 1871 and 1872 Annual Reports as a way to fund the construction of telegraph lines (Post Office Department, Annual Report, 1871, 1872).

The Panic of 1873 reframed the discussion of postal depositories toward the security offered to savers by the system. In his 1873 report, Creswell emphasized the safety of postal deposits and offered Postal Savings as a solution to the problem of savers hiding their money rather than depositing it in banks (Post Office Department, Annual Report, 1873). In his 1873 Annual Message to Congress, Grant advocated his Postmaster's plan, saying, "...especially do I urge favorable action by Congress on the important recommendations of

³Postal savings was especially popular in British colonies, from the Bahamas to Sierra Leone and Ceylon.

the Postmaster-General for the establishment of United States Postal Savings depositories.”

Instability in the banking sector continued to be central to the arguments made by postal bank advocates. In 1878, Rep. Thomas J. Tipton (R-IL) articulated the need for safety:

“By the establishment of postal savings the people all over the country will be afforded an opportunity to invest their savings with assurance that the principal will be returned with a small interest... The failure of savings banks and consequent loss, especially to the poorer class, makes the demand greater than ever before.... They simply desire a safe depository of their small earnings until the accumulation shall enable them to purchase a lot of ground on which in time they can build a home for themselves and their families.”⁴

Another selling point of Postal Savings was the belief that it would increase money in circulation. Postmaster General James Gary, in an interview with the Los Angeles Times, said:

“Have you ever thought what a dead thing money is when it is not in use? It is the deadest thing in the universe. There are many millions of such dead money in the country. It is hoarded away in stockings, buried under the hearthstones, tucked away behind the rafters and planted here and there in the earth, because the owners have no faith in private savings institutions. They have faith in the government, and they would bring the money out and deposit it in the postal savings banks.”

He also repeated a commonly cited figure number that the system would draw about \$350,000,000 into circulation. The only people who would be hurt by Postal Savings, he argued, were owners of “grogg shops and tobacco stores” (Los Angeles Times (1897)).

The nation’s banking sector consistently opposed Postal Savings. Bankers had considerable political clout and were well organized, especially after the establishment of the American Banking Association (ABA) in 1875.⁵ They argued that Postal Savings would

⁴Congressional Record. 3/11/1878. Page 1680.

⁵In later years, the ABA seemed to support Postal Savings as the lesser of two evils when presented with political pressure for the establishment of deposit insurance. During the 1908 ABA convention, the focus was on the opposition to deposit insurance. Although the ABA continued its formal opposition to the system, its platform offered support of urban postal banks, provided that deposit insurance was not passed.

siphon money out of communities, especially if deposited funds were invested in government bonds. In his 1907 criticism of Postal Savings proposals, Director of the Mint George Roberts quoted the London *Banker's Magazine*: “The branches of the Post-Office Savings-Bank convey all the savings of the district which they receive straight up to the central office in London...it is thus removed from the district in which it originates” (Roberts, 1907).

Other critics argued that postal depositories (indeed, any federal bank) would be unconstitutional, since the Constitution does not articulate a role for the federal government in establishing banks. When the Postal Savings program was passed, the most convenient solution to this issue was to allow the use of deposits to manage government debt, as was done in other countries. However, since the United States did not have permanent debt, some worried that a postal savings system could quickly exhaust the supply of government bonds. As a 1908 newspaper editorial noted, “the chief objection now advanced against the scheme is the fear that proper investment could not be found for the funds, and that as a result a vast sum would congest in the hands of the Government upon which it could pay no reward to the depositors, and thus it would become a source of danger” (Sacramento Record-Union (1898)).

Between the 1873 and 1910, 46 bills establishing postal savings were proposed to the House of Representatives, while 26 were proposed to the Senate. Of these 72 bills, 48 were proposed by Republicans, 15 by Democrats and 9 by Populists or Independents (Schewe, 1971, Pg. 36). None went to a vote before 1910. Charitable organizations filed dozens of petitions with Congress advocating for the establishment of postal savings. For example, a petition with over 600,000 signatures collected by *The Chicago Record* was presented to Congress in 1898 (Columbus Republican (1898)).

The Panic of 1907 again increased calls for banking reform, and the election of William Howard Taft the following year increased the likelihood of the establishment of postal savings. Taft not only supported postal savings, but was also the governor of the Philippines when a postal savings bank was established there in 1906 (Schewe, 1971, Pg. 59). Upon entering office, Taft immediately began pressuring Congress to establish the program.

The Postal Savings bill was passed on June 9, 1910, with a final vote of 195 to 102 in the House of Representatives, and 59 to 52 in the Senate.⁶ Though the vote was mostly along party lines (with Republicans supporting and Democrats opposing), regional variation in

⁶Congressional Record, 61 Cong. 2 Session,m XLV Part 7. pp 7585-7590, 7700-7702

support was also apparent. House Democrats in New England, East North Central, and Mountain states were more likely to support Postal Savings than those from other states. Only one Senator, a Democrat from Oregon, broke with party lines to support the program.

The final structure of the program shows the compromises legislators made to maintain broad support. To appeal to bankers, most postal deposits were to be re-deposited in local state and national banks, interest rates were kept low (2%) and balances had to be between \$1 and \$500.⁷ Though interest did not begin accruing until the month following the deposit, depositors could withdraw from the system at any time without providing notice.⁸ To appease those who worried that the program was unconstitutional, a portion of postal deposits were invested in national debt and depositors could convert their deposits into bonds, thus placing it under the purview of the federal government. Deposits were completely insured by the federal government, and banks receiving postal deposit funds were required to deposit bonds as security. Even if a bank holding postal deposits closed, Postal Savings customers' accounts with the post office were unaffected.

4 How Was Postal Savings Used Throughout the Years?

The first Postal Savings depositories were established on January 3, 1911, and the system was rolled out over the next two years. Figure 1 shows the overall pattern of deposits over time. From the beginning of the program through 1930, about half a million depositors collectively held between \$50 and \$300 million at postal depositories. The program experienced its first nationwide surge in popularity in 1931-1933. A second (and final) surge in popularity occurred in the 1940s, though in real dollar terms, the 1930s increase was significantly larger. Deposits peaked in 1948, followed by a prolonged decline until the program was finally ended in 1966.

Based on the aggregate data, there were three distinct periods of Postal Savings: 1911-1929, 1930-1941, and 1942-1966. In the rest of this section, we dive deeper into the dynamics and fluctuations of each period.

⁷Since the program was seen as a way to encourage thrift among the poor, proponents believed that it would not be competing with banks anyway.

⁸Banks receiving postal deposits initially paid 2.25% interest, which was increased to 2.5% in 1934. The interest above 2% was to pay for the management of the program.

4.1 A Slow Start: 1911-1929

Between 1911 and 1929, postal deposits were a small part of the total deposits in the banking system; in 1916, \$86 million (\$1.3 billion in 2015 dollars) was deposited at postal depositories, while state and national banks had \$12 billion in deposits (Treasury Department, 1917). Nonetheless, the Postal Savings was widely used, having deposits in the majority of counties.

Figure 2 shows the regional breakdown of Postal Savings usage trends through 1930, with deposits levels deflated to 1913 dollars. The program was most popular in the West and Northeast. The popularity of the program peaked in 1920, then stagnated through the early 1920s. However, after 1925 this stagnation gave way to strong increases everywhere but in the Northeast (which continued its decline). Overall, the large variation between regions indicates that Postal Savings usage responded to region-specific shocks.

A snapshot of the county-level use of Postal Savings can be seen in Figure 4. High per-capita deposits are found in many counties in the Northeast, particularly in the Pittsburgh, PA area, and in the West. Many counties in the South had no deposits, and deposits activity was low in the western part of the Midwest, especially in states with deposit insurance. For states in which Democrats broke party ranks and voted for the establishment of Postal Savings, per-capita deposits were more than twice as high as other states, suggesting that legislative support was influenced by electorate demand for the system.

The Post Office offered the service widely, at more than 13,000 post offices by 1913, and appeared to fill existing geographic gaps in banking services. In 1913, the average depository was 3.66 km from the nearest state bank (state banks were on average 11.8 km from each other), and 10 km from the nearest national bank (which were on average 17.4 km apart). However, many post offices saw no deposits. Seventy percent of fourth class post offices had either \$0 or \$1 on deposit in 1914. That year, 2,473 offices were removed from the list of depositories (Post Office Department, Postal Savings System, 1914), and the Post Office established a review policy to evaluate offices for their inclusion in the list of depositories (Schewe, 1971, Pg 103).

The inconvenient structure of the system likely contributed to the low take-up of the program. People who wanted to see an expanded role for Postal Savings pointed to the \$500 per-person limit⁹ on deposit balances as a deterrent of the system. 30,000 of the 525,000

⁹\$500 in 1911 was the equivalent to \$12,900 in 2015.

depositors in 1915 had reached the \$500 limit.¹⁰ According to one local postmaster, “...if the limit were raised from \$500 to \$1,000 for each depositor, it would increase deposits, as I have had several that would not deposit because they could not deposit over \$500” (Dockery, 1916). This cap was increased to \$1,000 in 1916, and subsequently the real value of the amount on deposit grew by 44% in a year. The cap was again raised to \$2,500 in 1918, though the real value of was virtually unchanged.¹¹

The structure of interest payments also lessened the attractiveness of deposits. The 2% simple interest rate only accrued annually, from the first full month following deposit. This increased the opportunity cost of short-term deposits invested in postal depositories, especially since the average depositor withdrew their funds in less than 12 months. After several years, changes were made to make investment more convenient. The Post Office took several steps to make depositing more appealing. Beginning in 1921, depositors were allowed to transfer funds from one post office to another without losing interest, and starting in 1924, interest was credited on a quarterly basis (Schewe, 1971, Pg. 150).¹²

Despite this unattractive interest rate structure, the volume of deposits and withdrawals suggest substantial short-term holdings, as shown in Figure 3. Through the 1930s, the sum of total withdrawals and deposits was more than 120% of the balance held within the system, indicating large within-year movement into and out of the system. This ratio of withdrawals and deposits to balances was significantly higher than those in savings banks in New York and Massachusetts. The sum of annual withdrawals and deposits was less than one-half of the balances in these two states.¹³ Users of Postal Savings moved their money into and out of the system at a higher rate than depositors at savings banks. Year-end snapshots therefore understate the total amount of money that passed through the system, especially in times of distress. This can be seen in the increase of volume following the 1920-1921 depression and the 1929 Stock Market Crash.

Bond redemption data also indicates that depositors often used Postal Savings for short-term liquidity, rather than as the long-term savings tool designers of the program envisioned. Because deposits could be redeemed for bonds, which paid 2.5% interest, long-term depositors would make more money with bonds than ordinary deposits. As federal

¹⁰Congressional Record, 64th Congress, 1 Sess (1915), LIII, Part 1, p. 615.

¹¹Between 1913 and 1920, the average annual growth of the system was 11.3% in real dollars (24% in nominal dollars).

¹²The reported values in our dataset do not include accrued interest.

¹³*Bradstreet's Weekly*, Volume 44, pp. 203. Annual report of the Board of Commissioners of Savings Banks. Massachusetts, 1915.

bonds, they carried no additional risk. However, bonds never gained popularity in the period for which the data were reported (1912-1935). In any one year, less than 2% of deposits were converted to bonds. Most depositors were willing to forgo higher interest payments in exchange for liquidity.

One group that relied heavily on Postal Savings during this period was foreign-born people, who often used postal money orders to send money abroad. When Postal Savings was being planned, postmasters flooded the federal office with letters claiming that immigrants were using money orders to send money to foreign bank accounts and would use a Postal Savings system if it was offered (Committee on Post-Offices and Post-Roads, 1910). Between 1900 and 1910, the amount of money leaving the United States through postal money orders increased by 438%, while domestic money orders increased by only 133%. Following the establishment of Postal Savings, this increase in outbound transfers stopped. Between 1911 and 1914, when foreign-bound money orders were affected by World War I, domestic money orders increased by 12%, while foreign-bound money orders *decreased* by 6% (Post Office Department, Annual Report, 1920). This suggests that foreign-born people may have used postal depositories instead of sending money abroad. Counterfactually, if foreign-bound money orders had grown at the same rate as domestic money orders over 1911-1914, \$20 million more would have left the banking system each year.

The United States ceased the practice of money orders to many European countries during WWI. The drop in postal money orders over this time corresponded with significant growth in the postal deposits, which increased by 244%. This growth was higher in cities with larger immigrant populations. Among cities with at least 250,000 people in 1910, the five cities with the fastest growth in postal deposits had an average of 32.6% foreign-born residents, while the five cities with the slowest growth had only 19.5%.

Contemporary accounts attributed the popularity of Postal Savings among immigrants to a desire for security, which could also explain the connection between postal deposits and deposit insurance. Between 1908 and 1920, eight states imposed some kind of deposit insurance systems.¹⁴ Three of these states (Mississippi, North Dakota, South Dakota) implemented deposit insurance after the start of Postal Savings. In the year following the implementation of deposit insurance, postal deposits in these states grew 16.5% less than in other states. The discontinuation of deposit insurance was correlated with even stronger changes in postal deposits. All states with deposit insurance discontinued the

¹⁴The states were Kansas, Mississippi, Nebraska, North Dakota, Oklahoma, South Dakota, Texas, and Washington.

program at some point by 1930, and in the following year, postal deposits in these states grew 50% faster than in other states. The effects were especially strong in the states where deposit insurance was compulsory (Oklahoma, Nebraska, South Dakota, North Dakota, Mississippi, and Texas), where postal deposits grew 100% faster than other states in the year following the end of deposit insurance regimes.

4.2 A Sudden Shift: 1930-1941

The 1929 Crash and ensuing run on commercial banks coincided with a large rise in postal deposits. Between 1930 and 1934, the amount on deposit increased by almost 760% in real dollars (584% in nominal dollars) from \$103 million, to \$887 million (in 1913 dollars).¹⁵ Lawmakers saw this surge in Postal Savings deposits as a flight-to-quality.¹⁶

“While banks were failing all over the country and a veritable avalanche of funds came out of other banks, it was the Postal Savings System that salvaged much of the money withdrawn by the frightened and the timid.”¹⁷

With the economic downturn occurring nationwide, regional variation in deposits decreased considerably. As discussed above, the early years of Postal Savings saw significant regional variation in deposit trends. In contrast, Figure 5 shows regions moving along similar trends, particularly after the establishment of the FDIC in 1933. Figure 6, showing county-level per-capita deposits in 1936, also stands in contrast to Figure 4, which shows the same in 1919. Though the South’s use of the program is still low compared to the rest of the nation, many more southern counties have deposits than did in 1919. The area around Pittsburgh, PA no longer sticks out as having unusually high usage, with Iowa and Nevada now seeing the highest per-capita deposit levels.

The rise in deposits was particularly large in Midwestern states, with per-capita deposits increasing tenfold. This increase in the early 1930s was greatest in places that were hit the hardest by the Depression. Rosenbloom and Sundstrom (1999) show that the drop in employment growth between 1929 and 1933 was smallest in New England and South Atlantic states and largest in Mountain and East South Central states. By 1933, people in

¹⁵Postmaster General Walter F. Brown advocated for raising the cap on deposits from \$2,500 to \$5,000, as he believed that frightened money was being kept out of circulation.

¹⁶The exact dynamics of how Postal Savings operated during the Crash, and how the existence of the system may have impacted banking outcomes, remains to be examined. We hope to tackle this in future work.

¹⁷Rep. Emmanuel Celler (N.Y.). Congressional Record, December 9, 1913, pg. 235

the Mountain and East South Central states held about \$15 per-capita on deposit, while New England and South Atlantic states had one-third as much on deposit. Although deposits in all states grew after the 1929 Crash, they grew the most in states that experienced a more severe depression.

The growth of postal deposits was mostly due to an increase in depositors, instead of existing depositors increasing the size of their deposits. Almost 70% of the growth in the total balance of postal deposits in 1930-1933 is explained by an increase in the number of depositors, with only 30% explained by a growth in the average size of deposits. In the Midwest, where Postal Savings growth was the highest during the period, the growth was almost completely due to an increase in the number of depositors (98.9%). If the 1930-1933 surge in depositors was due to a flight-to-quality, frightened money was more likely to come from new depositors to the system than from existing depositors increasing the amount they held in the system.

Looking just at the balance of postal deposits understates the increased reliance on the program in the early 1930s, as it ignores within-year depositor activity. As Figure 3 shows, the ratio of the sum of withdrawals and deposits to the end-of-year balance spiked in the early 1930s and, despite a gradual decrease, remained relatively high throughout the decade. Between 1928 and 1930, the total balance of deposits (provided by the year-end snapshots) shows a modest 15% growth in the amount held in the system. However, the total amount deposited and withdrawn from the system increased by 55%. Depositors were increasingly relying on Postal Savings for short-term savings during times of financial distress.

With the establishment of the FDIC in 1934, the rapid rise of postal deposits halted, but depositors did not abandon the system, and the Midwest continued to see deposits increase. Driven by growth in Kansas, Wisconsin, Indiana, Illinois and the Dakotas, the Midwest saw real per-capita deposits rise 21% between 1933 and 1940, while the rest of the country averaged a 11% decrease over the same period. These increases in the Midwest may have been due the disproportionately high rate of bank failures: between 1934 and 1939, Wisconsin and North and South Dakota alone accounted for more than one-fifth of all FDIC-reported bank failures.

Along with the establishment of deposit insurance, several reforms to Postal Savings were made. In 1935, the free transfer of deposits between post offices was suspended, and the postmaster began emphasizing the sale of bonds over the promotion of Postal Savings. Postal Savings bonds were discontinued entirely, and the sale of savings bonds was placed

under the direction of the post office.

The 1930s saw the end of large-scale redepositing Postal Savings funds in local banks. Designated banks began to refuse postal savings funds, finding the 2.5% interest requirement too costly (Friedman and Schwartz, 1970). This trend began in the Midwest; by 1935, re-deposits in banks were only 55% of total postal deposits, while in other regions this number was near 100%. By 1939, only 5% of postal savings was re-deposited, with the South redepositing the most (11%).

4.3 Rise and Fall: 1942-1966

Postal deposits reached their peak in the late 1940s. Between 1942 and 1948, deposits grew by 72% (157% in nominal dollars). As shown in Figure 7, percentage growth was highest in the South and lowest in the Northeast, but all regions saw increases of between 44% and 99%. Nonetheless, regional trends continue to be very similar, with a crest in the late 1940s followed by a prolonged decline through the remaining years of the program.

While the growth in Postal Savings following the 1929 Crash was due to new depositors, this increase was caused by an increase in the average size of deposits. About 70% of the growth was due to an increase in the average size of deposits, while 30% was due to an increase in the number of depositors. By 1948, the average postal depositor had \$816 in the system (more than \$8,000 in 2015 purchasing power), suggesting that the system was used by people with above-average incomes. The 1948 *Survey of Consumer Finances* shows that respondents who had money in postal saving had, on average, 6 times as much in other savings accounts and 12 times as much in checking accounts as those who did not have Postal Savings accounts.

While the Postal Savings boom in the early 1930's followed a slew of bank failures, private banks were much safer in the 1940s. However, interest rates now made postal deposits more attractive. The 2% interest rate offered by Postal Savings was designed to ensure that the system did not compete with private banks. But the market interest rates in the late 1940s were extremely low. The prime rate was 2% or lower from 1940-1948, and high-grade municipal bond rates were generally near or below 2% from 1943 to 1947.

Monthly data shows that postal deposits move strongly with interest rates. Figure 8 shows the monthly percentage change in postal deposits alongside the interest rates of an index of yields of high-yield municipal bonds from 1940 until the Post Office stopped

reporting monthly data in 1957.¹⁸ Periods of higher (lower) yields coincide with decreases (increases) in postal deposits. The period of sustained growth of Postal Savings starting in 1942 also had consistently low interest rates for municipal bonds. Overall, the negative correlation between the growth of postal deposits and bond interest rates is strong, about -0.64.

During this period, only a small amount of postal deposits were being re-deposited into local banks (less than \$10 million of more than \$2 billion in total deposits). Without a counter-factual, we cannot say whether this means that Postal Savings customers were using the system instead of depositing in local banks, purchasing government bonds, or hoarding cash, so we do not know what effect the system had on the amount of money in the private banking system.

When interest rates rose again in the late 1940s, money began leaving the Postal Savings System. As rates continued to rise during the 1950s, the flow of money out of Postal Savings quickened. By the mid-1950s, when interest rates on municipal bonds were near 3%, postal deposits were decreasing by 1-2% a month. Although interest rates were also high during the rapid growth of postal deposits during the early 1930s, Postal Savings maintained the advantage of security through federal guarantee. Now having neither the advantage of security nor high interest rates, the system experienced a rapid decline. The widespread use of cars increased access to banks, and immigration had been restricted for many years, removing one core group of Postal Savings constituents.

By 1952, bills were being introduced in Congress for to abolish the program. In 1955, the Congressional Accounting Office recommended its termination, arguing that the expansion and increased security of other savings opportunities made Postal Savings obsolete (Pittsburgh Press (1955)). Postmaster General Arthur Summerfield made the same recommendation in 1957. Several bills were proposed to Congress before a final bill to end the program was passed in 1965 and signed into law in 1966. However, even in its final years, the program was holding more money than at any time in its first decade. In real dollar terms, the amount on deposit in 1964 was 25% more than in 1918, the peak of the pre-Depression years.

¹⁸We express this as the difference between this index rate and the 2% Postal Savings interest rate. Therefore, a negative value means a lower interest rate than postal deposits. Bond data comes from National Bureau of Economic Research (2012).

5 Who Used Postal Savings?

5.1 Demographics

Aggregate data provides an overview of the entire history of Postal Savings, but it cannot tell us much about the demographic characteristics that were most associated with Postal Savings usage or how bank proximity affected demand for postal deposits. These questions are important for several reasons: first, they help us understand who used the program, and follow changes in demographic trends of users over time. Second, they show the role of Postal Savings within a larger banking system.

Anecdotal evidence provides numerous hypotheses for what groups were most attracted to the program. Contemporary accounts emphasize the popularity of postal deposits among foreign-born people (Kemmerer (1917)). In 1915, the only year for which nativity data on depositors was gathered, the nationwide average for deposits was \$0.6 per person. However, the average for Russian-born people was \$7.31 per person, and it was \$6.48 for Italian-born people, \$5.32 for Hungarian-born, and \$4.54 for Austrian-born. Many immigrants were coming from countries with postal banking systems. They also may have distrusted private banks. Immigrant banks were hit particularly hard by the Panic of 1907:

“There is scarcely a community in the country with an immigrant population of any proportions which has not its record of immigrant-bank failures....Occasionally a national, state, or savings bank closes its doors, but it is seldom the case that the bank’s depositors lose any considerable amount by the failure....Upon the failure of an irresponsible immigrant banker, however, there are seldom any funds or resources to which the creditor may have recourse.”¹⁹

Mining towns, which often contained large numbers of foreign-born people, also saw a high concentration of postal deposits. In 1913, the top ten cities in terms of deposits per-capita were mining towns. While the popularity of Postal Savings in mining communities was influenced by their foreign-born populations, it also may have been a result of geographic isolation. Places with limited access to banks may have had higher demand for Postal Savings.

We know very little about the rural/urban makeup of depositors from the existing history. While early supporters believed the program could bring money out from under

¹⁹Immigration Commission (1916).

the mattress in farming communities, rural bankers initially worried that Postal Savings would draw money out of their communities. However, no existing analysis attempts to determine if the program was more popular in rural communities or urban centers. Farmers may have appreciated the convenience of Postal Savings, or they may have instead put excess funds to other uses, such as by investing in land or equipment.

Whatever the existing narrative of Postal Savings System, no existing analysis explores the demographic characteristics of postal depositors over time. By looking at several years throughout the life of the system, we estimate how much of the cross-sectional variation can be explained by variation in key demographic and economic measures at each point in time. We chose the years 1919, 1929, 1936, and 1939.²⁰ We explore the relationship between postal deposits and banking and demographic characteristics using the following OLS model for each year separately:

$$\ln(\text{Deposits})_c = \beta_0 + \beta_1 \text{NatBank}_c + \beta_2 \text{StateBank}_c + \beta \mathbf{X}_c + \gamma_s + \epsilon_c \quad (1)$$

where $\ln(\text{Deposits})_c$ are the natural log of deposits in a county c ²¹; StateBank_c and NatBank_c are the number of state and national banks, respectively, in a county; γ_s are state fixed effects; and \mathbf{X}_c is a vector of demographic and economic characteristics: the log of population; percent of population living in towns with populations above 2,500; percent of population living in towns with populations above 25,000; percent of the population that is literate (through 1930); the percent of the population that is male; percent of males that are of voting age (21+); percent of population that is white and foreign-born; percent of population that is black; percent of acreage in a county that is farmland; and a measure of the value of farmland (which differs across census years).

Our results, presented in Table 1,²² confirm some of the anecdotal evidence about Postal Savings through 1939. In early years, the system was heavily used by foreign-born people and was unpopular in farming communities. These regressions also show that large cities relied on Postal Savings less than other places — when controlling for population, the rural and large urban areas saw lower total postal deposits use than smaller cities (those with between 2,500 and 25,000 residents). This finding conflicts with the normal narrative, that Postal Savings was most popular in urban areas (especially those with large immigrant

²⁰1919, 1929, and 1939 were years in which census information was collected and 1936 was the final year in which the FDIC collected bank data.

²¹In all regressions, we use real dollars, deflated to 1913 levels.

²²Table 7 shows the results when we drop our bank variables

communities). Finally, economic measures (percent of farmland that is improved and the land value) show that wealthier farming communities consistently used Postal Savings less than less affluent ones.

After 1929, the association between demographic characteristics and postal deposits weakens. The association between foreign-born people and deposits decreases, and the negative correlation with farming communities disappears. At the same time, a negative relationship between deposits and percent of a county’s population that is black appears. Since we do not have a consistent measure of income, the negative correlation may be capturing the relationship between the racial makeup and average income. Overall, the variables explain less of the variation in Postal Savings usage, as seen in the R-Squared, which drops from 0.63 to 0.431. However, one persistent indicator of postal deposits is land value. In all years, the percent of farmland improved and land value per acre are strongly correlated with lower levels of deposits.

5.2 Distance to Banks

Although county-level data allows us to compare numerous demographic characteristics to Postal Savings usage, it is unsuitable to examine the impact of banks on postal deposits. The number of banks in a county is a coarse measure of banking access, especially if individuals would not have traveled to another city for banking services. Using town-level data, we estimate the effect of bank proximity on postal deposits.

Using a full nationwide dataset of state and national banking data for 1913 and 1919, we geocoded postal depositories and banks and measured the distance, in kilometers, to the nearest state and national bank for each year.²³

We first present cross-sectional relationship between bank distance and postal deposits by estimating the following OLS model:

$$\ln(Deposits)_i = \beta_0 + \beta_1 NatBank_i + \beta_2 StateBank_i + \beta \mathbf{X}_c + \gamma_s + \epsilon_i \quad (2)$$

where $\ln(Deposits)_i$ is the natural log of deposits at post office i ²⁴; $NatBank_i$ is a dummy variable taking on the value of one if there is a national bank within a specified distance

²³Postal depositories are only included if they had at least \$1 in deposits in any year from 1913 to 1919. We also exclude any offices that were established after 1913.

²⁴For large cities, the data does not provide separate data on branches, but aggregates to the city level. However, since our banking data is at the town level, this does not lead to imprecision in our estimates.

of the post office with deposits, $StateBank_i$ is a similar dummy variable for state banks. Rather than using a single arbitrary cutoff, we estimate the model using a variety of cutoffs to show the distances at which banks affect postal deposits. \mathbf{X}_c is a vector of county-level Census demographic characteristics described above; and γ_s are state fixed effects.

Tables 2 and 3 show the results for the above equation for thresholds of one kilometer, and every 5 km out to a distance of 25 km.²⁵ In both years, postal deposits are higher in places near national banks. The size of the coefficient is the largest when there is a bank located within 5 km. Figures 9 and 10 show more detail on this smaller range. National banks are located near heavily used postal depositories. Postal deposits are higher in places near state banks in 1919, but lower in 1913 (controlling for proximity to national banks). Of course, none of these coefficients are the result of unbiased estimation strategies, since unobserved demand for banking services will lead to positive biases for the coefficients on our banking variables.

Therefore, we use first-difference specification to control for unobserved place characteristics associated with both bank location and postal deposits:

$$\Delta \ln(Deposits)_{i,t} = \beta_1 \Delta NatBank_{i,t} + \beta_2 \Delta StateBank_{i,t} + \beta \Delta \mathbf{X}_{c,t} + \gamma_r + \epsilon_{i,t} \quad (3)$$

Where $\Delta \ln(Deposits)_i$ is the change in the natural log of postal deposits at office i between 1913 and 1919; $\Delta \mathbf{X}_c$ is the change for a vector of county-level Census demographic characteristics as above; and γ_r are region fixed effects.²⁶ Since three states (MS, ND, and SD) introduced deposit insurance, we also include a dummy variable for the presence of deposit insurance laws.²⁷ As above, $NatBank_i$ and $StateBank_i$ are dummy variables equal to 1 if there is a bank within a specified distance, and 0 otherwise. Therefore $\Delta NatBank_{i,t}$ ($\Delta StateBank_{i,t}$) is equal to 1 if a community did not have a bank nearby in 1913, but had one by 1919 (and -1 if the opposite is true). A negative coefficient means that banks cause a decrease in postal deposits, which is consistent with the hypothesis that Postal Savings served as a substitute for banking in places that do not have close access to banking.

²⁵A person on foot could make a round trip of up to about 8 km in a day. Longer distances would entail an overnight stay.

²⁶We impute values for 1913 by assuming linear changes in demographic variables, and use the 1920 census for 1919 values.

²⁷We therefore use region instead of state dummy variables, since the deposit insurance dummy variable would be co-linear with state fixed effects. When we use state fixed effects the coefficients on bank variables are very similar.

Between 1913 and 1919, the average distance to a state bank for each depository dropped from 3.66 to 2.99 km, and dropped from 10 to 9.32 for the nearest national bank. About 12% of the sample saw the nearest state bank move by more than 1 km between 1913 and 1919, and 14% of the sample saw the nearest national bank move by that much. This increase in the number of banks makes this period well-suited for our purposes. In later years (at least through the mid-1930s) variation in the number of banks came from financial crises, so we would be capturing a flight-to-quality. By the late 1940s the number of banks was fairly stable, and we lack enough variation to estimate any effects.

The results, shown in Table 4, indicate that gaining a bank, especially a national bank, led to a significant decrease in postal deposits. When using a 1 kilometer cutoff, gaining a national bank is associated with a statistically significant 0.372 drop in the log of deposits (31.1%). For state banks, a bank is associated with a 0.139 (13%) drop, and this estimate is not statistically significant. The effect of gaining or losing a bank declines as we move our distance threshold out, as seen in Figure 11. While the estimates for national banks are always significant at the 5% level for thresholds smaller than 10km, the point estimates decrease. A bank that is 10 km away is not accessible for everyday usage, so gaining a bank within that range will be of little use.²⁸ For state banks, we find only a small, statistically insignificant effect.

The most obvious potential source of bias from the first-difference specification is a failure to fully control for unobserved shocks in overall banking demand. However, this would bias our estimates toward zero, leading to an possible underestimate of causal effect, but not to an erroneous conclusion that private banks led to a decrease in postal deposits. The decay in the coefficient as we expand the radius also supports our identification strategy. Any unobserved shocks likely have spatial auto-correlation, meaning that any omitted variable bias in a regression using 1 km as the threshold would likely bias a regression using 10 km. But since we observe the effect of banks on postal deposits diminishing as we move the threshold further away, the confounding, unobserved shock would need to be unique to very small areas (less than 10 km) to be driving our results.

The fact that national banks have a much larger negative effect on postal deposits should not be surprising. National banks were generally larger, more regulated, and less likely to fail than state banks. Moreover, national banks were required to join the Federal Reserve in 1914, which allowed them to access nationwide check clearing and the discount

²⁸We would still expect a small effect, since some communities that gain a bank within 10 km also gain a bank within 1 km.

window. To the extent that individuals put deposits in Postal Savings accounts due to their government guarantee, they might have been more likely to trust those same deposits to a national bank rather than a state bank.

Our results are not being driven by bank closures. We verify this by eliminating the few instances during this period in which a community loses a bank. The coefficient on bank proximity for national banks becomes even stronger, indicating that depositors are especially reactive to the establishment of a bank. If we attempt to instead identify only off of bank closures (by instead dropping places that gained banks), the coefficient is closer to zero, though still negative and not significant at the 10% level. This could be due to the small number of bank failures or the fact that depositors were not always paid in full following bank liquidations, leaving them less money to deposit into Postal Savings.

The effect of bank proximity also differed with deposit insurance. We test this by interacting the independent variable of interest with a dummy variable equal to 1 if a state had deposit insurance.²⁹ As seen in Table 5, the coefficient on the interaction terms in rows 1 and 3 indicate that the effect of having a bank nearby was large and significant (when using a threshold of 1 km) in states without deposit insurance, while no effect is observed in states with deposit insurance.³⁰ One way to interpret this result is that deposit insurance depressed demand for Postal Savings overall, leaving less opportunity for bank location to affect depositor behavior.

Finally, Table 6 shows the effects of bank proximity by region.³¹ The effect is largest in the Northeast, where having a national bank near is associated with about a 40% drop, and smallest in the Midwest, where a 20% statistically insignificant drop is seen. In the Midwest, the effect of state banks is especially large, resulting in a 36% drop in postal deposits. In the rest of the country, only national banks are associated with a decrease in deposits, while the coefficients on state bank proximity is positive (though not significantly different than zero).

²⁹For this analysis, we dropped Mississippi, North Dakota, and South Dakota, as they had changes in the deposit insurance regimes over this period.

³⁰The states with deposit insurance for this period were: Texas, Oklahoma, Kansas, and Nebraska. Washington had a voluntary deposit insurance system.

³¹For convenience, we measure proximity to a bank at 5 km, though our results are robust to alternate measures.

6 Conclusion

Throughout its history, the United States Postal Savings System served several different functions. For the first several decades of service, at least up to the establishment of the FDIC, demand for Postal Savings was associated with a lack of access to safe banking opportunities. Gaining a bank nearby significantly decreased postal deposits, as did the establishment of state deposit insurance systems. Additionally, the Postal Savings system was especially popular for foreign-born populations, who were purportedly distrustful of commercial banks.

Although postal deposits decreased when banks moved into an area, the effect is small enough that other factors were also driving deposits. Using the point estimates found in Table 4, we estimate that if every post office gained a national bank within 1 km, total postal deposits would decrease by about 10%. This change is small compared to the changes in deposits when state deposit insurance programs were put in place (about a 16% decrease) or when those programs were dissolved (50% increase). This suggests that convenience and proximity of banking alternatives influenced postal deposits, but that the demand for safety was especially strong.

In later years, especially once the probability of bank failures became diminishingly small, the appeal of Postal Savings depended primarily on the interest rates offered by other savings mechanisms. Though the 2% return offered by Postal Savings was relatively low in 1911 when the system was established, by the 1940s, it was higher than most bond interest rates with no corresponding increase in risk. We also see a shift in the demographics of Postal Savings customers, as the system became more popular in the Midwest and the West, and in farming communities.

This history also raises several questions to be answered through further research. Did Postal Savings increase the amount of money in circulation or simply draw money that would have otherwise been in banks? How did the re-deposit mechanism affect banks, both during times of crisis and in later years of the program when high interest rates made the practice of re-depositing impracticable for banks? Finally, the evidence provided here suggests that Postal Savings offered a safe haven for scared deposits, especially before the establishment of the FDIC. A full study of the role of the Postal Savings System during the Great Depression could yield valuable insights.

Bibliography

- Columbus Republican (1898). Dec. 30, 1898.
- Committee on Post-Offices and Post-Roads (1910). *Postal Savings Depositories*. GPO, Washington, DC.
- Cottrell, P. (1985). *Investment Banking in England 1856-1881 (RLE Banking & Finance): Volume One*. Routledge, Abingdon, U.K.
- Davidson, L. and Ramirez, C. D. (2016). Does Deposit Insurance Promote Financial Depth? Evidence from the Postal Savings System During the 1920s. GMU Working Paper in Economics No. 16-37.
- Dockery, A. (1916). *The United States Postal System. Statement of Hon. Alexander M. Dockery, Third Assistant Postmaster General Before the Subcommittee of the Joint Committee on Rural Credits Relative to the Proposal to Invest Postal Savings Deposits in Federal Farm-Loan Bonds*. Government Printing Office, Washington, D.C.
- Friedman, M. and Schwartz, A. J. (1970). *Monetary Statistics of the United States: Estimates, Sources, Methods*. Columbia University Press, New York.
- Haines, M. R. (2010). Historical, Demographic, Economic, and Social Data: The United States, 1790-2002 [Computer file].
- Hamilton, J. H. (1902). *Savings and Savings Institutions*. The Macmillan Company, New York.
- Immigration Commission, T. (1916). *Immigrant Banks. 61st Congression. 2nd Session. Document 381*. Government Printing Office, Washington, D.C.
- Kemmerer, E. (1917). Six Years of Postal Savings in the United States. *The American Economic Review*, 7(1):46–90.
- Kuwayama, P. H. (2000). Postal Banking in the United States and Japan: a Comparative Analysis. *Monetary and Economic Studies*, 18(1).
- Los Angeles Times (1897). Oct. 24, 1897.

- National Bureau of Economic Research (2012). Index of Yields of High Grade Municipal Bonds for United States [M13023USM156NNBR].
- National Monetary Commission (1910). *Notes on the Postal Savings-Bank Systems of the Leading Countries*. Government Printing Office, Washington, D.C.
- O'Hara, M. and Easley, D. (1979). The Postal Savings System in the Depression. *The Journal of Economic History*, 39(3):741–753.
- Pittsburgh Press (1955). Feb 9, 1955.
- Post Office Department. *Annual Report of the Postmaster General*. GPO, various issues, Washington, DC.
- Post Office Department. *Operations of the Postal Savings System*. GPO, various issues, Washington, DC.
- Roberts, G. E. (1907). Objections to a Postal Savings-Bank. *The North American Review*, 184(609):364–370.
- Rosenbloom, J. L. and Sundstrom, W. A. (1999). The Sources of Regional Variation in the Severity of the Great Depression: Evidence from U.S. Manufacturing, 1919-1937. *The Journal of Economic History*, 59(3):714–747.
- Sacramento Record-Union (1898). Feb. 4, 1898.
- Schewe, D. B. (1971). A History of the Postal Savings System in America, 1910-1970. Ph.D. Dissertation, Department of History, The Ohio State University.
- Sissman, L. (1936). Development of the Postal Savings System. *Journal of the American Statistical Association*, 31(196):708–718.
- Sissman, L. (1938). The Postal Savings System and the Banks. *Southern Economic Journal*, 31(3):339–351.
- Treasury Department (1917). *Annual Report of the Comptroller of the Currency*. Government Printing Office, Washington, D.C.

7 Figures and Tables

Figure 1: National use of the Postal Savings System

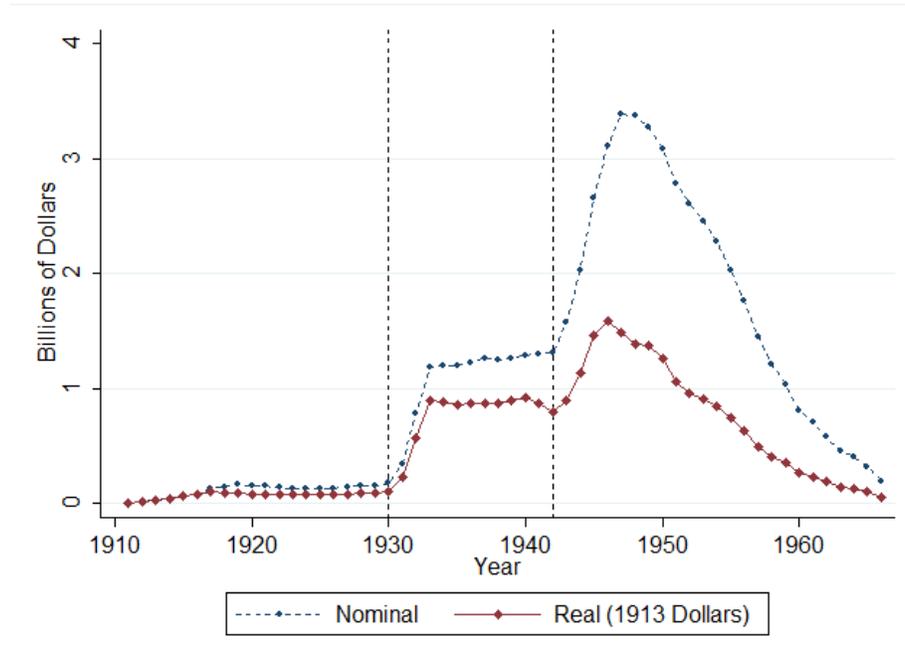


Figure 2: Deposits per Capita by Region 1911-1930

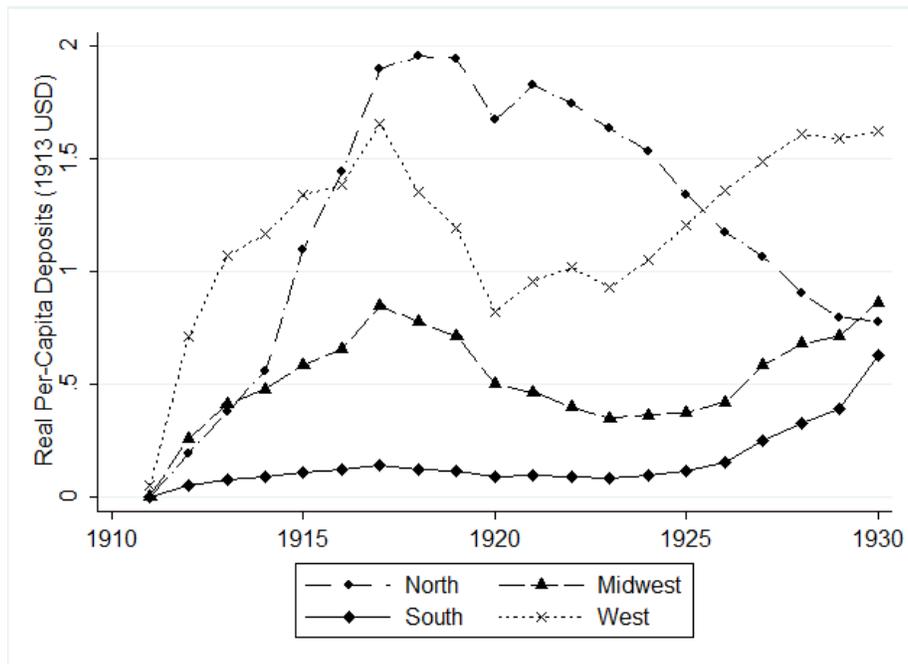


Figure 3: Yearly Activity in the Postal Savings System

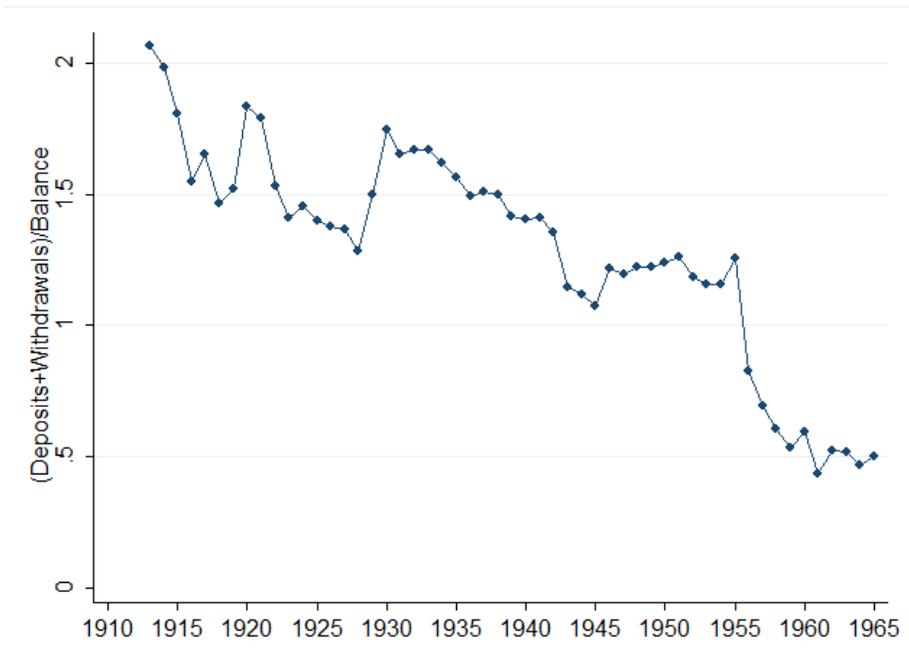


Figure 4: Deposits per Capita 1919

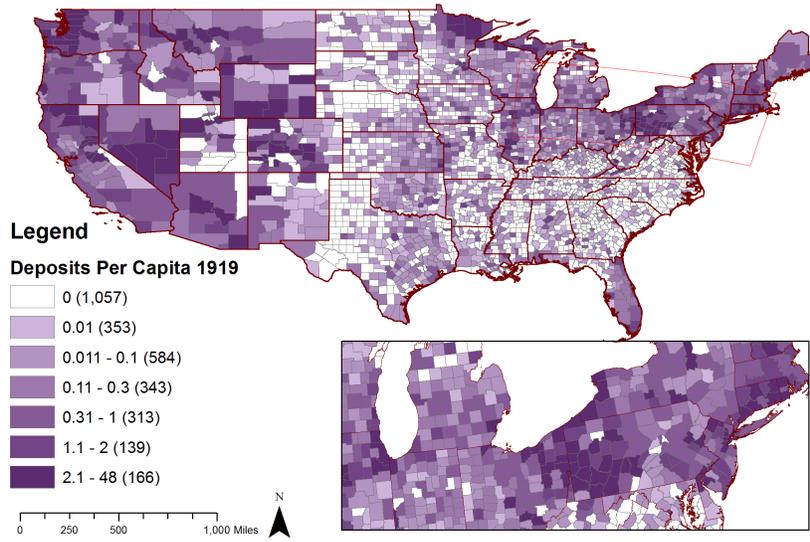


Figure 5: Deposits per Capita by Region 1930-1940

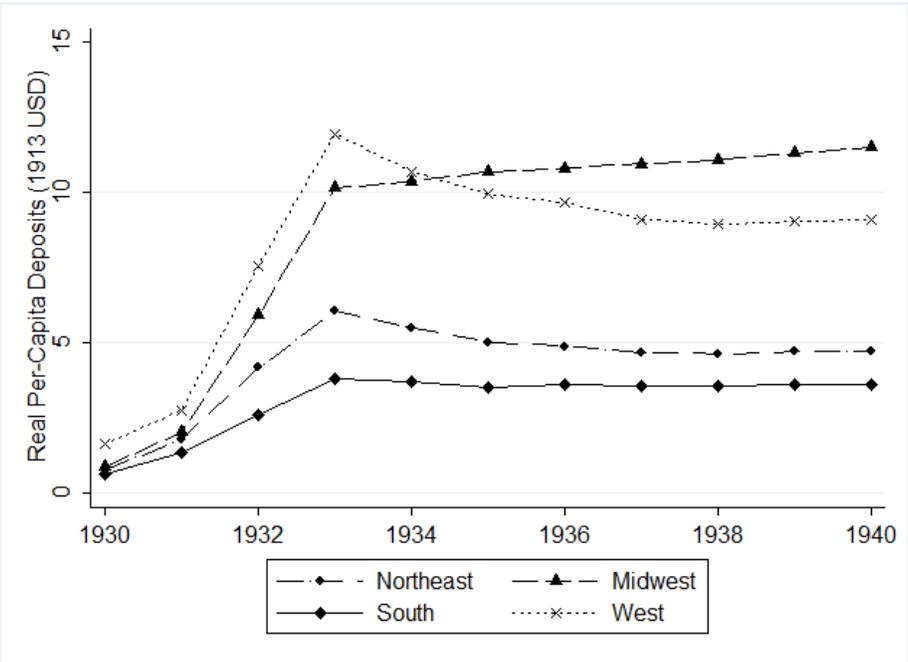


Figure 6: Deposits per Capita 1936

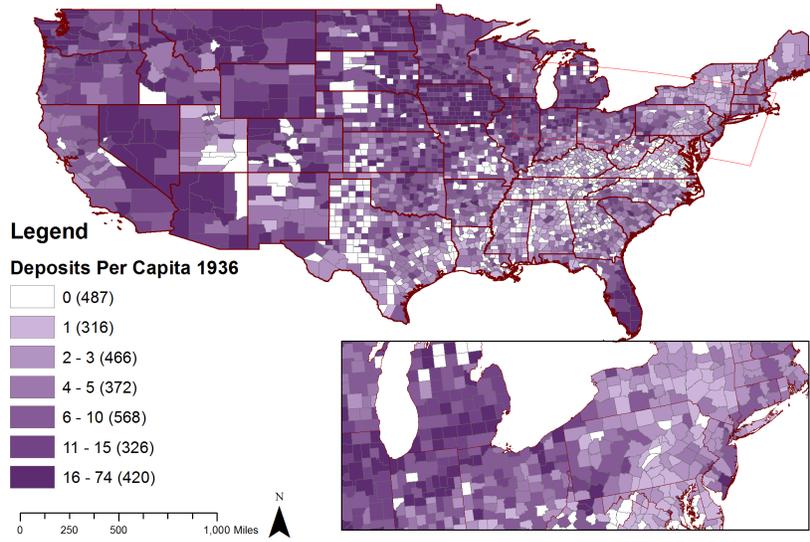


Figure 7: Deposits per Capita by Region 1941-1966

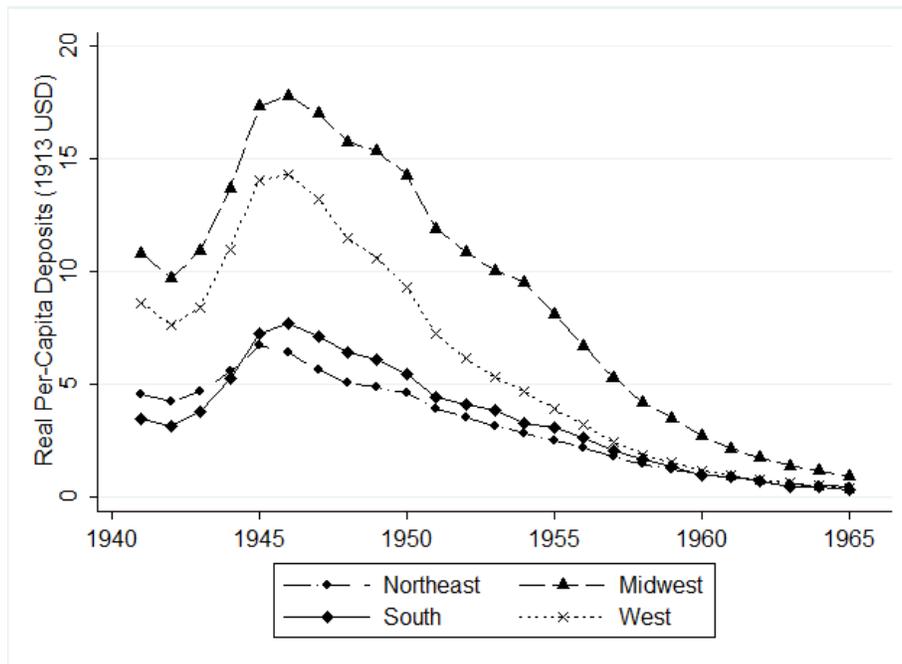


Figure 8: Use of the Postal Savings System and Bond Prices

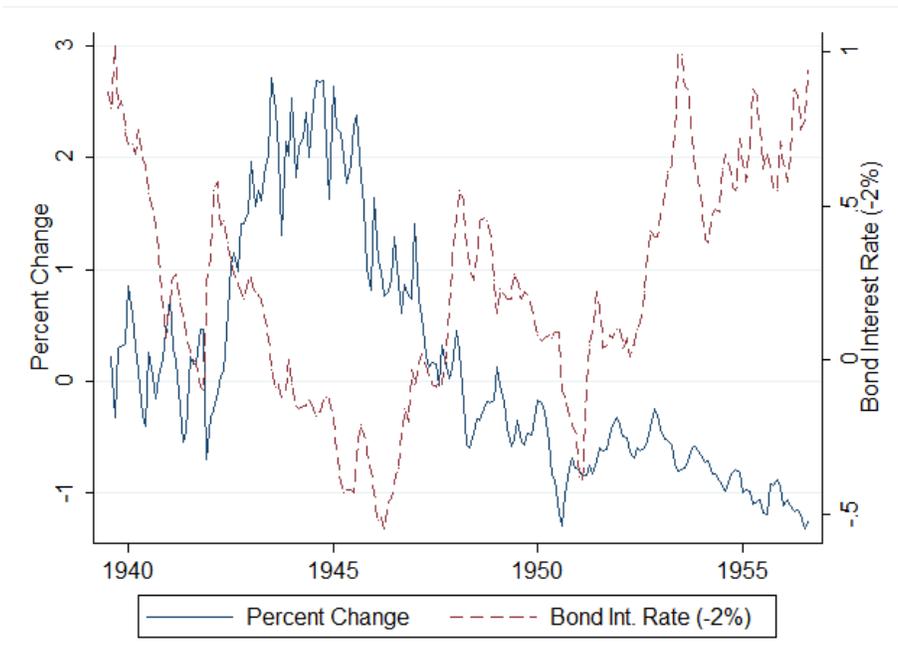


Figure 9: National Bank Distance vs. Log Postal Savings Deposits in 1913

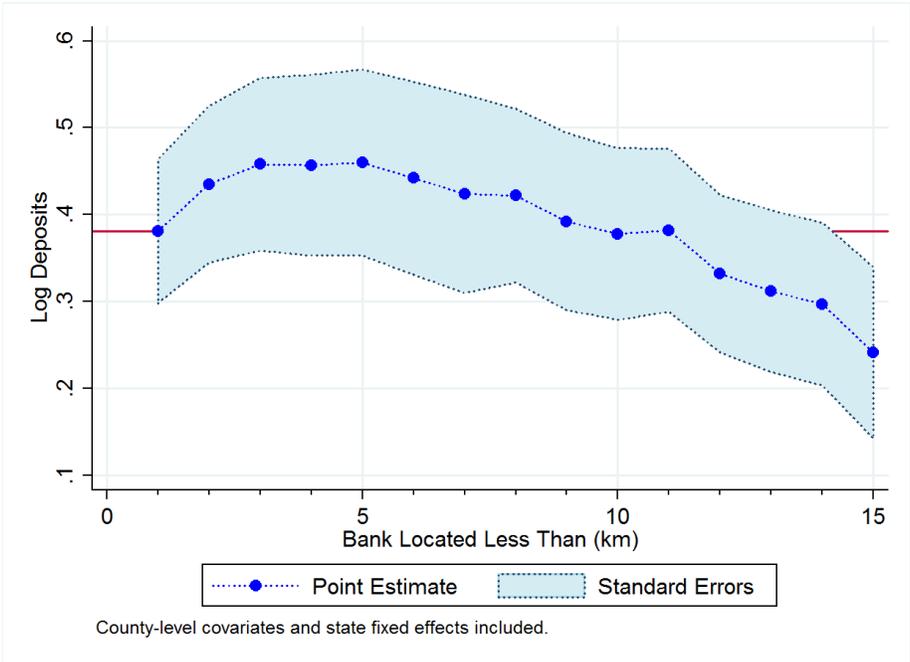


Figure 10: National Bank Distance vs. Log Postal Savings Deposits in 1919

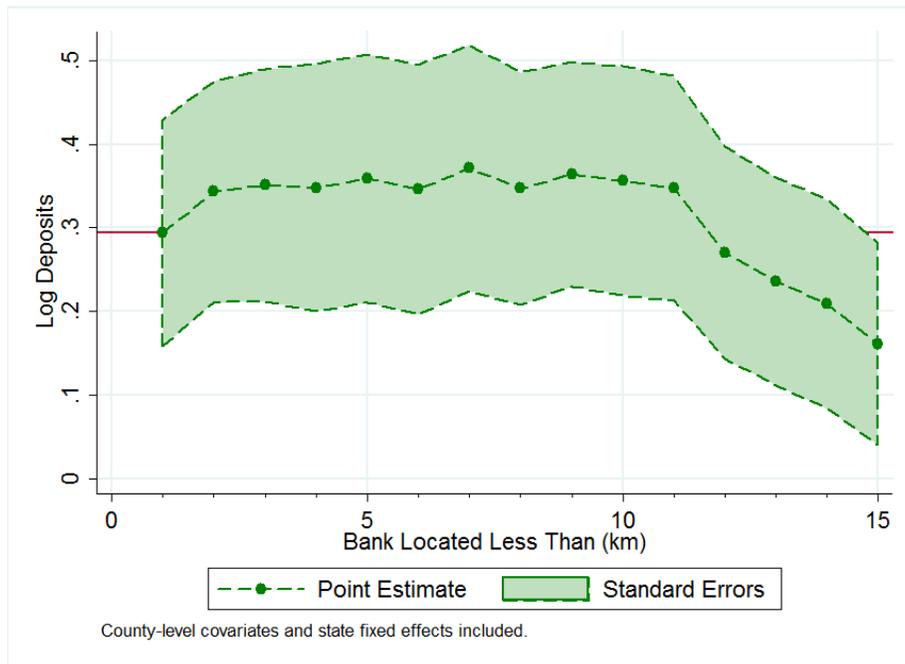


Figure 11: Change in Bank Distance vs. Change in Log Postal Savings Deposits

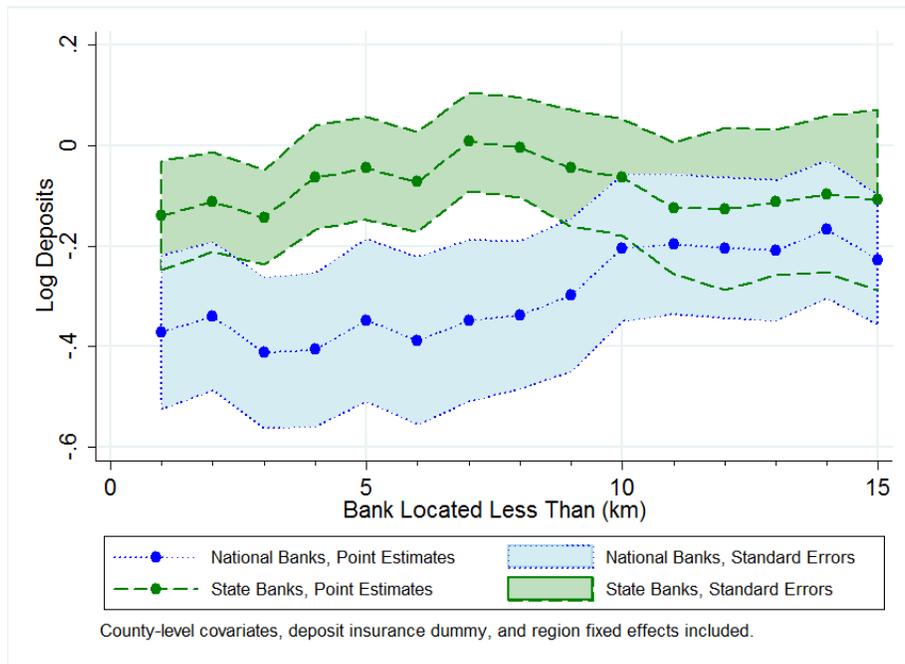


Table 1: Cross-Section Regressions

VARIABLES	Dependent Variable: Log of Postal Savings Deposits (1913 USD)				
	(1) 1913	(2) 1919	(3) 1929	(4) 1936	(5) 1939
# of State Banks	-0.0242*** (0.00818)	-0.0206* (0.0119)	-0.0296*** (0.00966)	-0.0564*** (0.0199)	-
# of Nat. Banks	-0.00815 (0.0108)	-0.00402 (0.0202)	0.00910 (0.0260)	-0.0274 (0.0218)	-
Log(Population)	1.927*** (0.117)	2.079*** (0.151)	2.331*** (0.156)	1.912*** (0.176)	1.778*** (0.150)
Percent Urban	0.0120*** (0.00361)	0.0344*** (0.00454)	0.0405*** (0.00365)	0.0326*** (0.00373)	0.0335*** (0.00446)
Percent Urban 25K+	-0.0237*** (0.00281)	-0.0237*** (0.00456)	-0.0372*** (0.00442)	-0.0290*** (0.00423)	-0.0305*** (0.00415)
Literacy Rate	0.0477*** (0.0136)	0.0369* (0.0190)	0.0447*** (0.0164)	-	-
Percent Male	-0.0633 (0.0383)	0.0432 (0.0669)	-0.0209 (0.0709)	-0.144** (0.0656)	-0.162** (0.0629)
Percent Voting Age (of Males)	0.165*** (0.0165)	0.175*** (0.0187)	0.163*** (0.0320)	0.158*** (0.0424)	0.163*** (0.0481)
Percent White Foreign-Born	0.0367*** (0.0104)	0.0731*** (0.0186)	0.0959*** (0.0293)	0.0376* (0.0199)	0.0121 (0.0244)
Percent Black	-0.00131 (0.00723)	-0.000498 (0.00969)	0.00135 (0.00768)	-0.0226*** (0.00754)	-0.0225*** (0.00742)
Percent Farmland	-0.00838*** (0.00295)	-0.00876* (0.00488)	-0.0139*** (0.00489)	0.00282 (0.00281)	0.00321 (0.00312)
Percent of Farmland Improved	-0.00515 (0.00431)	-0.0140*** (0.00453)	-	-	-
Log Land Value Per Acre	-	-	-0.554*** (0.113)	-0.127** (0.0496)	-0.0993*** (0.0323)
Constant	-22.07*** (2.380)	-30.54*** (4.026)	-27.87*** (3.867)	-7.699* (4.543)	-4.900 (4.060)
State fixed effects absorbed.					
Observations	2,681	2,681	2,668	2,668	2,689
R-squared	0.630	0.655	0.523	0.457	0.431

Standard errors clustered by state in parentheses.

*** p<0.01, ** p<0.05, * p<0.1

Appendix Table 7 shows all years without the banking variables.

Table 2: Bank Proximity: 1913

Threshold	Dependant Variable Log Real Postal Savings Deposits (1913 USD)					
	(1) < 1 km	(2) < 5 km	(3) < 10 km	(4) < 15 km	(5) < 20 km	(6) < 25 km
Nat Bank Dummy	0.381*** (0.0829)	0.460*** (0.107)	0.378*** (0.0987)	0.241** (0.0986)	0.140 (0.0926)	0.0873 (0.0908)
State Bank Dummy	-0.0208 (0.0875)	0.0220 (0.0768)	-0.208*** (0.0733)	-0.347*** (0.0937)	-0.495*** (0.124)	-0.406** (0.153)
County level controls not shown, state fixed effects absorbed.						
Observations	8,275	8,275	8,275	8,275	8,275	8,275
R-squared	0.352	0.353	0.352	0.350	0.350	0.349

Standard errors clustered by state in parentheses.

*** p<0.01, ** p<0.05, * p<0.1

See Figure 9 for more details. See Figure 10 for more details.

Table 3: Bank Proximity: 1919

	Dependant Variable Log Real Postal Savings Deposits (1913 USD)					
Threshold	(1) < 1 km	(2) < 5 km	(3) < 10 km	(4) < 15 km	(5) < 20 km	(6) < 25 km
Nat Bank Dummy	0.294** (0.135)	0.359** (0.148)	0.356** (0.137)	0.161 (0.121)	0.0397 (0.123)	-0.00361 (0.121)
State Bank Dummy	0.300*** (0.0902)	0.337*** (0.0923)	0.178 (0.126)	0.0544 (0.122)	-0.0303 (0.142)	-0.0646 (0.219)
County level controls not shown, state fixed effects absorbed.						
Observations	8,275	8,275	8,275	8,275	8,275	8,275
R-squared	0.458	0.458	0.457	0.456	0.456	0.456

Standard errors clustered by state in parentheses.

*** p<0.01, ** p<0.05, * p<0.1

Table 4: Change in Bank Proximity

Dependent Variable: Change in Log of Real Postal Savings Deposits (1913 USD)						
	(1)	(2)	(3)	(4)	(5)	(6)
VARIABLES	$\Delta <$ 1 km	$\Delta <$ 5 km	$\Delta <$ 10 km	$\Delta <$ 15 km	$\Delta <$ 20 km	$\Delta <$ 25 km
Δ Nat. Banks	-0.372** (0.153)	-0.348** (0.162)	-0.204 (0.146)	-0.228* (0.129)	-0.129 (0.156)	0.0145 (0.181)
Δ State Banks	-0.139 (0.108)	-0.0450 (0.102)	-0.0628 (0.116)	-0.108 (0.180)	0.194 (0.311)	-0.121 (0.382)
Δ Deposit Insurance	-0.305 (0.202)	-0.300 (0.203)	-0.300 (0.204)	-0.301 (0.205)	-0.301 (0.205)	-0.301 (0.209)
County level controls not shown, region fixed effects absorbed						
Observations	8,274	8,274	8,274	8,274	8,274	8,274
R-squared	0.100	0.100	0.099	0.099	0.099	0.099

Standard errors clustered by state in parentheses

*** p<0.01, ** p<0.05, * p<0.1

See Figure 11 for more details.

Table 5: Differential Effects

VARIABLES	Dependent Variable: Change in Log of Postal Savings Deposits					
	(1)	(2)	(3)	(4)	(5)	(6)
	$\Delta <$ 1 km	$\Delta <$ 5 km	$\Delta <$ 10 km	$\Delta <$ 15 km	$\Delta <$ 20 km	$\Delta <$ 25 km
Δ Nat. Banks*No Deposit Insurance	-0.420*** (0.148)	-0.386** (0.155)	-0.185 (0.141)	-0.269* (0.135)	-0.0390 (0.146)	0.0684 (0.199)
Δ Nat. Banks*Deposit Insurance	0.0774 (0.269)	-0.0103 (0.234)	-0.135 (0.175)	-0.256 (0.170)	-0.298 (0.467)	-0.0956 (0.459)
Δ State Banks*No Deposit Insurance	-0.269** (0.124)	-0.150 (0.117)	-0.202 (0.135)	-0.261 (0.217)	0.0242 (0.336)	-0.153 (0.382)
Δ State Banks*Deposit Insurance	0.0948 (0.157)	0.125 (0.172)	0.248 (0.184)	0.259 (0.167)	0.620*** (0.148)	0.190 (0.199)
County level controls not shown, state fixed effects absorbed.						
Observations	7,910	7,910	7,910	7,910	7,910	7,910
R-squared	0.136	0.135	0.135	0.135	0.135	0.134

Standard errors clustered by state in parentheses.

*** p<0.01, ** p<0.05, * p<0.1

Note: ND, SD, MS omitted.

Table 6: Effects By Region

Dependent Variable: Change in Log of Real Postal Savings Deposits (1913 USD)				
	(1)	(2)	(3)	(4)
	$\Delta <$	$\Delta <$	$\Delta <$	$\Delta <$
	5 km	5 km	5 km	5 km
VARIABLES	Northeast	Midwest	South	West
Δ Nat. Banks	-0.471*	-0.218	-0.275	-0.278
	(0.229)	(0.220)	(0.310)	(0.230)
Δ State Banks	0.0637	-0.440***	-0.000427	0.174
	(0.156)	(0.129)	(0.188)	(0.31)
County level controls not shown, state fixed effects absorbed.				
Observations	1,656	3,651	1,908	1,059
R-squared	0.178	0.069	0.058	0.061
Standard errors clustered by state in parentheses.				
*** p<0.01, ** p<0.05, * p<0.1				
Means				
	Northeast	Midwest	South	West
Nat Bank Dist 1913	5.098	11.68	16.30	22.08
	(8.343)	(13.84)	(19.18)	(31.40)
Nat Bank Dist 1919	4.953	11.11	14.02	19.69
	(8.162)	(13.18)	(16.44)	(32.03)

Table 7: Appendix Cross-Section Regressions

Dependent Variable: Log of Real Postal Savings Deposits (1913 USD)					
VARIABLES	(1) 1913	(2) 1919	(3) 1929	(4) 1936	(5) 1939
Log(Population)	1.783*** (0.125)	1.834*** (0.145)	2.160*** (0.152)	1.740*** (0.145)	1.778*** (0.150)
Percent Urban	0.0127*** (0.00409)	0.0360*** (0.00470)	0.0414*** (0.00344)	0.0345*** (0.00388)	0.0335*** (0.00446)
Percent Urban 25K+	-0.0247*** (0.00280)	-0.0223*** (0.00484)	-0.0341*** (0.00636)	-0.0294*** (0.00425)	-0.0305*** (0.00415)
Literacy Rate	0.0479*** (0.0126)	0.0344* (0.0187)	0.0477*** (0.0169)	-	-
Percent Male	-0.0519 (0.0385)	0.0481 (0.0674)	-0.0145 (0.0723)	-0.135** (0.0644)	-0.162** (0.0629)
Percent Voting Age (of Males)	0.164*** (0.0156)	0.178*** (0.0184)	0.152*** (0.0325)	0.147*** (0.0401)	0.163*** (0.0481)
Percent White Foreign-Born	0.0358*** (0.00974)	0.0701*** (0.0172)	0.0844*** (0.0282)	0.0304 (0.0201)	0.0121 (0.0244)
Percent Black	-0.000605 (0.00701)	-0.000393 (0.00982)	0.00322 (0.00817)	-0.0225*** (0.00738)	-0.0225*** (0.00742)
Percent Farmland	-0.00838*** (0.00283)	-0.00922* (0.00489)	-0.0144*** (0.00476)	0.00266 (0.00287)	0.00321 (0.00312)
Percent of Farmland Improved	-0.00448 (0.00461)	-0.0133*** (0.00485)	-0.513*** (0.104)	-	-
Log Land Value Per Acre	-	-	-	-0.140*** (0.0504)	-0.0993*** (0.0323)
Constant	-21.41*** (2.521)	-28.49*** (4.110)	-26.40*** (3.707)	-6.233 (4.261)	-4.900 (4.060)
State fixed effects absorbed.					
Observations	2,703	2,703	2,693	2,683	2,689
R-squared	0.630	0.654	0.522	0.456	0.431

Standard errors clustered by state in parentheses.

*** p<0.01, ** p<0.05, * p<0.1