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Can Post Offices Increase Access to Financial Services?

A Geographic Investigation of Financial Services Availability

Mathieu Despard, Terri Friedline, & Kevin Refior

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Finally, the quality and accuracy of the research presented in this brief report are the sole responsibilities of the authors, and the aforementioned individuals and organizations do not necessarily agree with the report's findings or conclusions.

About the Authors

Mathieu Despard is an Assistant Professor at the University of Michigan School of Social Work and a faculty associate with the Center on Assets, Education, and Inclusion at The University of Kansas School of Social Welfare and the Center for Social Development at Washington University in St. Louis. He can be contacted by email at mdespard@umich.edu or followed on Twitter @DespardMat.

Terri Friedline is the Faculty Director of Financial Inclusion at the Center on Assets, Education, and Inclusion, a Research Fellow at New America, and an Assistant Professor at The University of Kansas School of Social Welfare. She can be contacted by email at tfriedline@ku.edu or followed on Twitter @TerriFriedline.

Kevin Refior is a joint PhD student in Social Work and Economics at the University of Michigan with an interest in labor economics and social justice.

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Overview

Postal banking through the US Postal Service has been recommended as one option for improving the availability of safe and affordable financial products and services in lower-income and minority communities. Advocates of postal banking suggest that post offices have maintained their presence in communities vacated by banks and credit unions and inundated by alternative financial service (AFS) providers. However, there have been few attempts to analyze data in order to test this assumption. Using financial services and community demographic data for 31,489 zip codes across the US, we compared the concentrations or densities of bank and credit union branches, AFS, and post offices.

Key Findings

- When using the availability of financial services in communities to assess the potential of postal banking, it appears that rural communities could benefit the most where the densities of post offices for every 1,000 people in zip codes are highest.
    - Post office densities are highest in rural communities (0.89), compared to urban (0.04) and town (0.21) zip codes.

- Communities that are banking deserts—zip codes that lack either a bank or a credit union—also have potential to benefit from postal banking; however, these banking deserts are primarily located in rural areas.
    - More than a third (37%) of all zip codes in the US lack either a bank or a credit union—87% of these banking deserts are located in rural zip codes.
    - Post office density in banking deserts is 1.11 per 1,000 people, compared to 0.27 in non-deserts.
    - AFS provider density is only 0.005 in all banking deserts, rising to 0.05 in urban areas; however, AFS density is still far below that of urban areas with at least one bank or credit union (0.12).

- There is evidence that some lower-income communities and communities of color may benefit from postal banking where the density of post office locations is higher on average; however, this evidence is modest given the slight differences in the average densities.
    - Post office densities are higher than bank and credit union and AFS densities in zip codes where half or more of the population is Black or Latino/a. Post office density in zip codes where half or more of the population is Black or Latino/a is 0.32. In comparison, bank and credit union density is 0.26 and AFS density is 0.21.

Introduction

Households' financial health may be affected by variations in the availability and type of financial services in their communities. In lower-income communities, a greater bank branch presence is associated with an increase in mortgage originations and suggests that households living in communities with higher densities of banks may have better opportunities to finance home ownership (Ergungor, 2010). In comparison, branch closures have been found to diminish small business lending and job growth (Nguyen, 2015), suggesting that households living in these communities may have limited opportunities to advance the entrepreneurial pursuits that are needed to drive local economic growth.

> *Households that live in communities underserved by banks and credit unions may struggle to manage their day-to-day lives without access to safe and affordable financial products.*

Consumers may turn to alternative financial service (AFS) providers such as payday lenders and check cashers when banks are unavailable (Barr, 2012). For example, the increased presence of AFS providers in communities is associated with households' more frequent and chronic use of these services (Friedline & Kepple, 2016). AFS providers charge exceptionally high interest rates—322% to 500% (Bertrand & Morse, 2011; Consumer Financial Protection Bureau [CFPB], 2013; Edmiston 2011), unnecessary costs, hidden fees, and prepayment penalties (Wolff, 2015), and often trap consumers in cycles of debt (CFPB, 2013). On average, payday loan customers spend $520 a year on interest (Pew Charitable Trusts, 2012). Therefore, it is unsurprising that households can have difficulty meeting basic needs (Melzer, 2011) and are at risk of bankruptcy (Skiba & Tobacman 2009) when they rely on AFS providers.

Some evidence suggests that lower-income and minority communities are disproportionately underserved by mainstream financial services and that AFS providers filled the voids that were created by bank branch closures (Tempkin & Sawyer, 2004). For example, bank and credit union branches are more often located in higher-income and mostly white communities, while AFS providers are disproportionately located in lower-income and minority communities (Barth, Hilliard, Jahera, & Sun, 2016; Fowler, Cover, & Kleit, 2014; Gallmeyer & Roberts, 2009; Hegerty, 2016; Prager, 2014; Ratcliffe, McKernan, Kalish, & Martin, 2015; Smith, Smith, & Wackes, 2008; Tempkin & Sawyer, 2004). The prevalence of payday lenders and pawnbrokers also increases with county poverty rates, and these establishments are more prevalent in moderately poor (but not very poor) counties (Fowler et al., 2014; Prager, 2014).

The households that live and raise their children in communities underserved by banks and credit unions suffer the consequences of struggling to manage their day-to-day lives without access to safe and affordable financial products. To the extent that banks and credit unions leave or avoid communities where it is difficult to make profits only to be replaced by AFS providers that charge high fees and trap consumers in vicious debt cycles, a third option is missing to ensure that all households have access to safe and affordable financial products and services.

The Potential of Postal Banking

Postal banking has been recommended as a third, public option for disrupting a financial system bifurcated between mainstream and alternative financial services and increasing the availability of financial products and services in underserved communities (Baradaran, 2013, 2015; The Pew Charitable Trusts, 2015; Warren, 2014). Postal banking has a long history in the US, having been implemented with congressional support between 1911 and 1967 (Garon, 2012). During that time, the US Postal Service (USPS) received savings deposits held in accounts at 7,000 to 8,000 offices across the country and, by 1929, households had saved $153 million in postal savings accounts (Garon, 2012; Oxford Economics, 2014; USPS, 2008). Despite their prominence, however, there were some limitations to this early version of postal banking. For example, the USPS did not offer other products and services like small loans, many rural offices did not accept savings deposits, and account holders had to designate just one location for deposits and withdrawals (Garon, 2012). In other words, transactions could only be made at the location where the savings were originally deposited and the USPS's wider network of locations could not be used for transactions. However, postal banking has been credited with providing safe and affordable savings accounts regardless of its early limitations.

> *Postal banking has been recommended as a third, public option for increasing the availability of financial products and services in underserved communities.*

Advocates of postal banking suggest that the USPS is well-poised to offer financial products and services once again (Baradaran, 2015; Warren, 2014). This is because postal workers already support the idea of postal banking, the USPS would be less reliant on charging fees to consumers to make money, and local post offices have developed some degree of trust within their communities. For example, members from the American Postal Workers Union delivered a petition in support of postal banking with 150,000 signatures to the Deputy Postmaster General in December 2015 (APWU, 2015). Advocates suggest that the USPS could likely provide more affordable products and services than AFS providers, such as small loans at low interest rates. Savings accounts could also be offered at lower costs than banks or credit unions since the USPS would be less encumbered by the capitalist business model that shifts costs to customers via expensive and sometimes-hidden fees (APWU, 2015; Baradaran, 2015). Though, it is unclear exactly how these products and services could be offered at more affordable rates.

Moreover, advocates suggest that the USPS enjoys a strong public trust that is not similarly afforded to mainstream financial services (Shim, Serido, & Tang, 2013; Stevenson & Wolfers, 2011). The rationale for postal banking follows that trust is a key ingredient in consumers' decisions to use financial services, and that existing trust could make it easier for the USPS to offer financial services in underserved communities (Kim, Shin, & Lee, 2009). For example, the USPS is regularly listed as one of the top 10 most trusted companies by the Ponemon Institute's (2015) annual study of the most trusted companies for maintaining consumers' privacy.

Despite enthusiasm about postal banking, basic questions remain unanswered including whether consumers want to use products and services that are offered by the USPS, the types of products and services the USPS could offer and how they could offer them, or whether post offices are even geographically situated to serve lower-income and minority communities. An untested assumption of postal banking is that post offices may be more geographically available to lower-income and minority communities than banks and credit unions and, therefore, be a safer and more affordable option than AFS providers.

A Geographic Investigation of Financial Services and Post Offices

This brief report investigates the geographic availability of post offices—their concentrations or densities—in comparison to mainstream and alternative financial service providers using data from the US Geological Survey, Federal Deposit Insurance Corporation (FDIC), National Credit Union Administration (NCUA), Esri Business Analyst, and US Census Bureau's American Community Survey (ACS). Zip codes served as a proxy for communities given that zip codes are geographic units defined by the USPS. Also, zip codes are larger commercial activity spaces compared to other geographic units such as census blocks (Crawford, Jilcott Pitts, McGuirt, Keyserling, & Ammerman, 2014). The sample consisted of 31,489 zip codes. Additional information on the data and methods are available in the technical appendix.

We assessed the number of 1) bank and credit union branches; 2) AFS providers; and 3) post offices for every 1,000 people in zip codes, comparing these density measures based on the following community characteristics:

- Regions of the country;
- Urban, town, and rural zip codes;
- Average household income;
- Average household net worth;
- Percentage of households living in poverty; and
- Percentage of Black and Latino households.

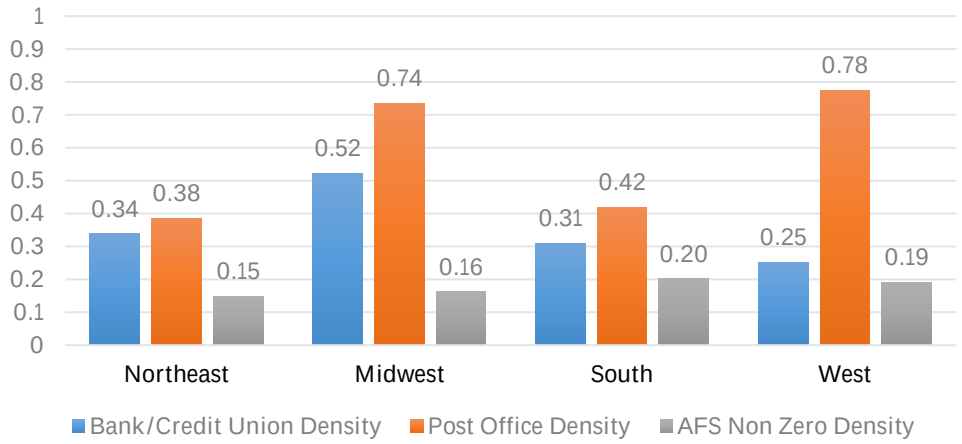
> *There are an average of 0.37 bank and credit union branches and 0.57 post offices for every 1,000 residents in each zip code in the US.*

Overall, there are an average of 0.37 bank and credit union branches and 0.57 post offices for every 1,000 residents in each zip code in the US. There are only 0.05 AFS providers for every 1,000 residents, as only 31% of zip codes in the US have at least one AFS provider. In the analyses that follow, we use an AFS provider density measure only for zip codes with at least one AFS provider (n = 9,772). For this reason, readers are encouraged not to compare AFS provider densities to bank and credit union and post office densities.

Geography

Bank and credit union density is greatest in the Midwest (0.52) and lowest in the West (0.25; see Figure 1). Differences in post office densities by region are more dramatic, as densities in the Midwest (0.74) and West (0.78) are nearly double what they are in the South (0.42) and Northeast (0.38).

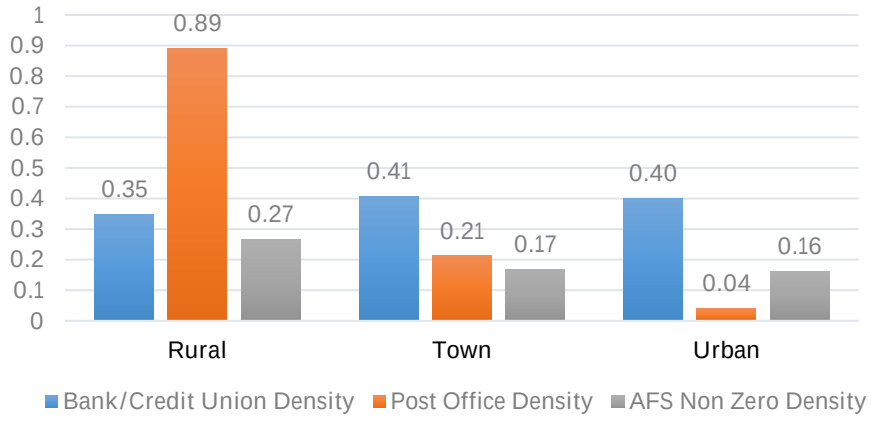
Figure 1: Financial Service and Post Office Densities by Region



Note: AFS Non Zero density sample is comprised of zip codes with at least one AFS provider (*n* = 9,772).

Post office density is much higher in rural (0.89) compared to urban (0.04) and town (0.21) zip codes (see Figure 2). AFS densities follow this same pattern, but not as dramatically, while banks and credit union densities are similar for urban, rural, and town zip codes.

Figure 2: Financial Service and Post Office Densities by Geography



Note: AFS Non Zero density sample is comprised of zip codes with at least one AFS provider (*n* = 9,772).

Banking Deserts

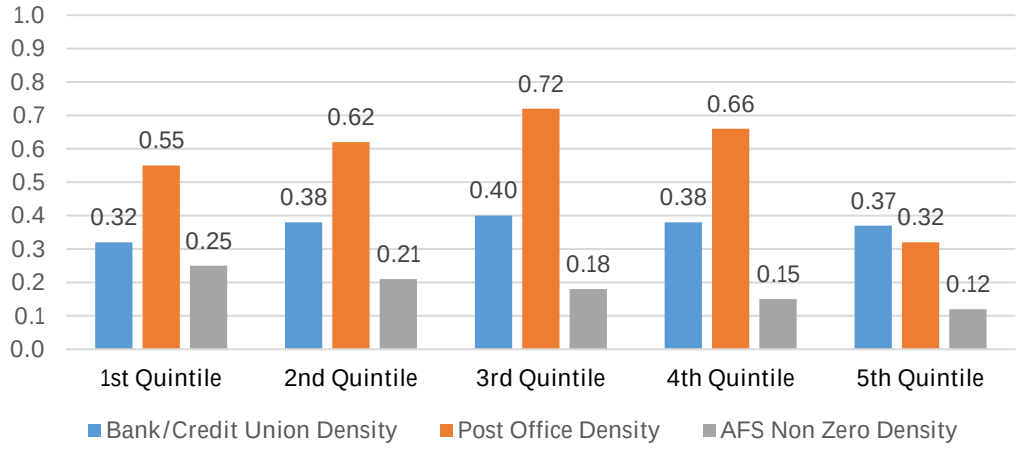
> *Thirty-seven percent of zip codes are banking deserts, which means they do not have either a bank or credit union. And, 87% of banking deserts are located in rural zip codes.*

More than a third (37%) of all zip codes in the US lack either a bank or a credit union—87% of these banking deserts are located in rural zip codes. Post office density in banking deserts is 1.11 per 1,000 people, compared to 0.27 in non-deserts[1]. AFS density is only 0.005 in all banking deserts, rising to 0.05 in urban areas, though still far below AFS density in urban areas with at least one bank or credit union (0.12).

Income, Net Worth, and Poverty

As seen in Figures 3 and 4, both bank and credit union density and post office density follow a similar pattern when organized by household income and net worth quintiles. The first and fifth quintiles have the lowest densities for both banks and credit unions and post offices, while the middle quantiles, 2-4, have the highest densities. However, AFS densities are highest in the lowest income and net worth quintiles and decline steadily cross the remaining quintiles.

Figure 3: Financial Service and Post Office Densities by Average Household Income



Note: AFS Non Zero density sample is comprised of zip codes with at least one AFS provider (*n* = 9,772).

Average Household Income Quintile	Bank/Credit Union Density	Post Office Density

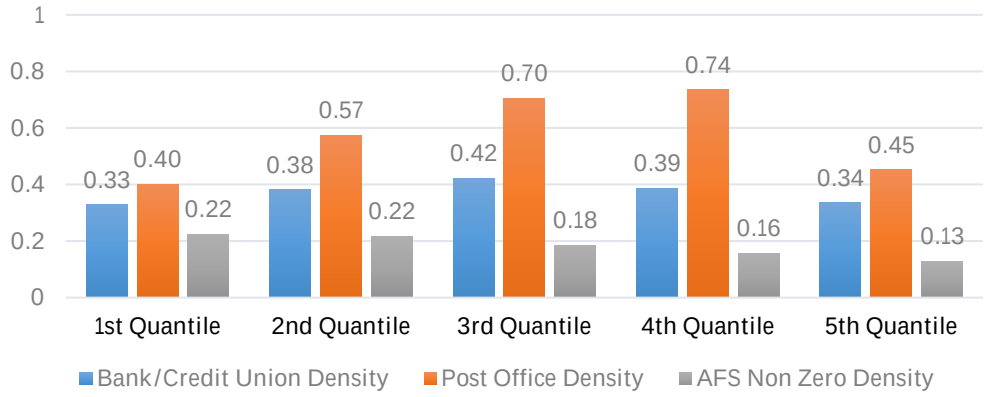
[1] The difference between 1.11 per 1,000 people post office density in banking deserts compared to 0.27 in non-deserts is statistically significant, $t(31{,}171) = 57.51$, $p < .001$, $d = .68$. Cohen's D – an effect size estimate based on the standardized difference between the two groups, which makes an adjustment for sample size where t tests are sensitive to large samples.

1st ($0 - $48,805)	0.32	0.55
2nd ($48,806 - $56,481)	0.38	0.62
3rd ($56,482 - $65,162)	0.40	0.72
4th ($65,166 - $80,303)	0.38	0.66
5th ($80,314 - $318,714)	0.37	0.32

Average Household Income Quintile	AFS Provider Density
1st ($9,822 - $48,701)	0.25
2nd ($48,717 - $57,534)	0.21
3rd ($57,548 - $68,647)	0.18
4th ($68,657 - $88,892)	0.15
5th ($88,865 - $256,650)	0.12

> *On average, there is a higher density of post offices compared to bank and credit union branches among zip codes with the lowest-income households—0.55 to 0.32 per 1,000 people, respectively.*

Figure 4: Financial Service and Post Office Densities by Average Household Net Worth



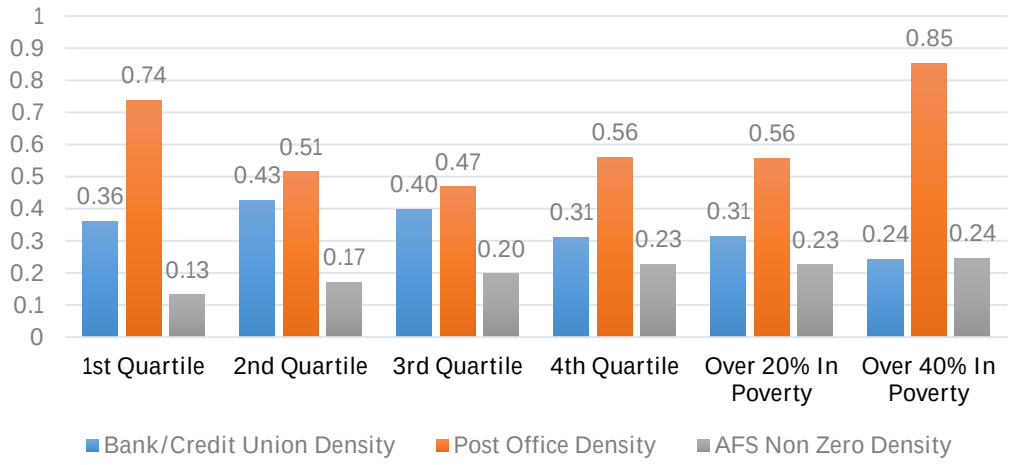
Note: AFS Non Zero density sample is comprised of zip codes with at least one AFS provider (*n* = 9,772).

Average Household Net Worth Quintile	Bank/Credit Union Density	Post Office Density
1st ($0 - $268,903)	0.33	0.40
2nd ($268,927 - $379,946)	0.38	0.57
3rd ($379,949 - 508,324)	0.42	0.70
4th ($508,369 - 729,469)	0.39	0.74
5th ($729,476 - 3,705,582)	0.34	0.45

Average Household Net Worth Quintile	AFS Provider Density
1st ($9,617 - $228,566)	0.22
2nd ($228,581 - $346,261)	0.22
3rd ($346,289 - $487,160)	0.18
4th ($487,314 - $749,394)	0.16
5th ($750,015 - $3,248,776)	0.13

Zip codes where the proportion of households with low- and moderate-incomes (below $50,000) was 50% or greater had an average bank and credit union density of .36 compared to .37 for zip codes where this proportion was less than 50%.[2]

Figure 5: Financial Service and Post Office Densities by Poverty Rates



Note: AFS Non Zero density sample is comprised of zip codes with at least one AFS provider (*n* = 9,772).

% of Households in Poverty Quartile	Bank/Credit Union Density	Post Office Density
1st (0 – 7.5%)	0.36	0.74
2nd (7.6 – 12.9%)	0.43	0.51
3rd (13 – 20.1%)	0.40	0.47
4th (20.2 – 100%)	0.31	0.56

% of Households in Poverty Quartile	AFS Provider Density
1st (0 – 9.2%)	0.13
2nd (9.3 – 14.7%)	0.17
3rd (14.8 – 21.7%)	0.20
4th (21.8 – 67%)	0.23

Concentrated Poverty

Concentrated poverty refers to zip codes designated by the US Census Bureau as poverty areas and extreme poverty areas where 20% and 40% of residents live in poverty, respectively. For poverty areas, bank/credit union density was 0.31 compared to 0.40 in non-poverty areas. This difference also holds true for extreme poverty areas.[3] For post office density, there was no statistically significant difference between poverty and non-poverty areas, yet post office density

[2] The difference was not statistically significant, $t(31{,}174) = 1.37$, $p = .17$.
[3] The differences between poverty/non-poverty areas and extreme poverty areas and non-extreme poverty areas were statistically significant (respectively, $t(30{,}641) = 12.51$, $p < .001$, $d = 0.16$ and $t(30{,}641) = 8.27$, $p < .001$, $d = 0.27$).

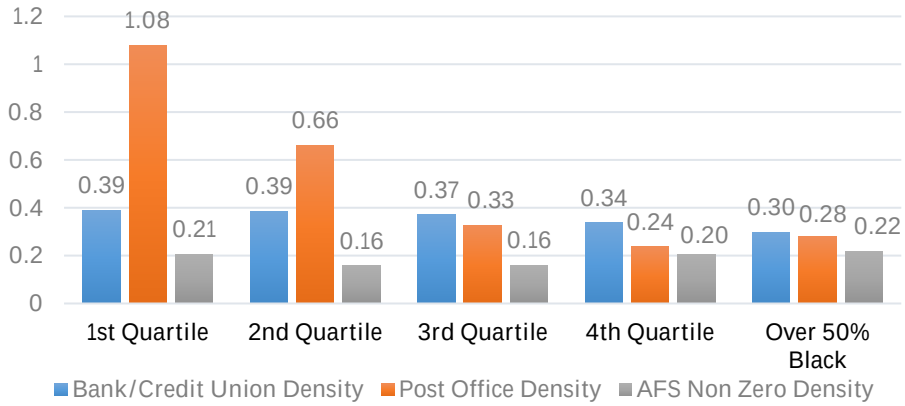
was higher in extreme poverty areas (0.85) compared to non-extreme poverty areas (0.56).[4] AFS density was higher in poverty areas (0.23) and extreme poverty areas (0.24) compared to non-poverty and non-extreme poverty areas – 0.16 and 0.18, respectively. Both of these comparisons were statistically significant.[5]

> *Post office and AFS[6] densities are higher in extreme poverty areas, where bank and credit union density is lower.*

Race/Ethnicity

As seen in Figures 6 and 7, both bank and credit union densities and post office densities have a similar pattern by race/ethnicity: as the proportion of Black and Latino households in a zip code increases, both bank/credit union and post office densities decrease. In zip codes where half or more of the population is Black or Latino, bank/credit union density is 0.26 compared to 0.38 for zip codes where this is not the case.[7] Similarly, post office densities for these two types of zip codes is 0.32 and 0.59, respectively.[8] For AFS densities, a somewhat different pattern is evident, where densities are highest in the first and fourth compared to the second and third quartiles. In zip codes where half or more of the population is Black or Latino, AFS density is 0.21 compared to 0.18 for zip codes where this is not the case.[9]

Figure 6: Financial Service and Post Office Densities by Race: Black



Note: AFS Non Zero density sample is comprised of zip codes with at least one AFS provider (n = 9,772).

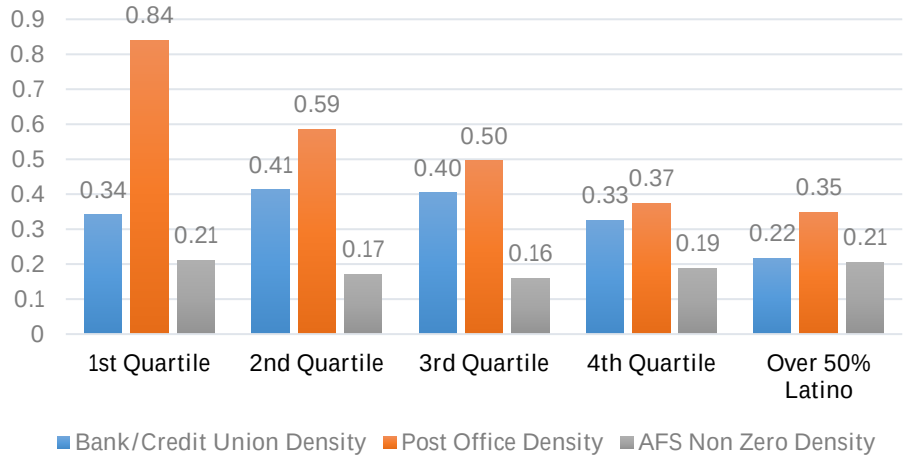
[4] The difference in post office density between extreme poverty areas (0.85) compared to non-extreme poverty areas was statistically significant, $t(30,634) = 6.74$, $p < .001$, $d = 0.22$.
[5] The relationship was statistically significant at $p < .001$, $d = 0.43$.
[6] AFS non-zero density includes zip codes with at least one AFS provider, whereas bank/credit union and post office densities are comprised of zip codes that do not have any of these locations.
[7] The relationship between bank and credit union density in zip codes where half or more of the population is Black or Latino compared to zip codes where this is not the case is significant at $t(31,174) = 11.48$, $p < .001$, $d = 0.25$.
[8] The relationship between post office density in zip codes where half or more of the population is Black or Latino compared to zip codes where this is not the case is significant at $t(31,171) = 9.89$, $p < .001$, $d = 0.21$
[9] The relationship between AFS density in zip codes where half or more of the population is Black or Latino compared to zip codes where this is not the case is significant at $t(9,770) = 8.03$, $p < .001$, $d = 0.23$

% of Black Households Quartile	Bank/Credit Union Density	Post Office Density
1st (0 – 0.4%)	0.39	1.08
2nd (0.4 – 1.3%)	0.39	0.66
3rd (1.3 – 7%)	0.37	0.37
4th (7 – 98.1%)	0.34	0.24

% of Black Households Quartile	AFS Provider Density
1st (0 - 1.6%)	0.21
2nd (1.6 - 5.2%)	0.16
3rd (5.2 – 16%)	0.16
4th (16 - 98.1%)	0.20

> *As the proportion of Black and Latino households in a zip code increases, both bank/credit union and post office densities decrease.*

Figure 7: Financial Service and Post Office Densities by Ethnicity: Latino



Note: AFS Non Zero density sample is comprised of zip codes with at least one AFS provider (*n* = 9,772).

% of Latino Households Quartile	Bank/Credit Union Density	Post Office Density
1st (0 – 1.6%)	0.34	0.84
2nd (1.6 – 3.4%)	0.41	0.59
3rd (3.4 – 9.3%)	0.40	0.50
4th (9.3 – 100%)	0.33	0.37

% of Latino Households Quartile	AFS Provider Density
1st (0 - 1.6%)	0.21
2nd (1.6 - 5.2%)	0.17
3rd (5.2 – 16%)	0.16
4th (16 - 98.1%)	0.19

Discussion and Implications

A few patterns emerge from our findings, each of which has potentially important implications for financial access. Concerning geography, post office densities are highest in rural zip codes, and especially high in bank deserts, which are mostly located in rural areas. Consequently, this means that the gap between post office and bank/credit union densities is greatest in rural communities. These findings suggest that rural communities could have more access to financial services if post office locations were to offer these services.

> *Post office densities are highest in rural zip codes, and especially high in bank deserts. Rural communities could have greater geographic access to financial services if post office locations were to offer these services.*

The findings in this study also suggest that economically marginalized communities enjoy less access to mainstream financial services. Bank/credit union densities are lowest in zip codes with the lowest incomes and net worth, while AFS densities are the highest. Moreover, in zip codes with concentrated poverty, bank/credit union densities were lower compared to zip codes without concentrated poverty.

> *In the zip codes where residents have the lowest incomes and net worth, bank and credit union densities are the lowest whereas AFS densities are the highest.*

The lack of access to nearby brick-and-mortar financial services may mean that lower-income households avoid mainstream financial institutions altogether simply because they have no way to get to them. Transportation in lower-income communities can be a real issue since households in these communities are less likely than higher-income households to own cars (Blumenberg & Pierce, 2012) or have the convenience of public transportation (Blumenberg & Manville, 2004) to help them access financial services in nearby areas. Arguably, technology such as mobile banking would make the need for transportation obsolete, but there is evidence that lower-income households are less likely to use internet or mobile banking than higher-income households[10].

Brick-and-mortar financial services may still be relevant to lower-income households for different reasons, even as internet and mobile banking become more commonplace. Lower-income workers are less likely than higher-income workers to be paid via direct deposit[11] and thus may still need a way to deposit paychecks. Also, lower-income households – especially households comprised of recent immigrants – are more likely to be employed informally and be

[10] Only 22% of households in the lowest average household income quintile zip codes are estimated to have used online banking in the last months, compared to 33% of households in quintiles 2-5.
[11] See https://www.nacha.org/news/new-nacha-survey-shows-adoption-and-awareness-direct-deposit-ach-continues-build

paid in cash (Smith Nightingale & Wandner, 2011). Most lower-income households prefer making cash over non-cash payments and use cash for a wider range of transactions and for a greater proportion of monthly income than households with higher incomes (Bennett, Conover, O'Brien, & Advincula, 2014). Therefore, having a bank or credit union close by to make cash deposits and withdrawals may be important for low-income households to conduct everyday transactions. This includes making savings account deposits to build emergency savings, which can help lessen risk for experiencing material hardship (Gjertson, 2016).

As an alternative to high-cost AFS providers and banks or credit unions that are unable or unwilling to open branches in under-served areas, post offices have the potential to provide basic banking options for marginalized communities. Many people can walk or take a short bus ride to their nearest post office. People who lack access to or prefer not to use mobile and/or online banking would have an option for financial services. Post offices may be a familiar and non-intimidating place for persons without a bank account to access financial services.

Although postal banking has the potential to provide access to financial services for many underserved communities, findings from our study suggest that it is not a panacea for all financial access problems, especially when it comes to serving racial and ethnic minorities. In fact, as the proportion of residents in a zip code who are Black or Latino increases: 1) bank/credit union and post office density decreases and 2) the gap between bank/credit union and post office density narrows. These results suggest that post offices would fill less of a void than in communities with lower concentrations of Black and Latino households, and, are indicative of a broader issue with access to institutional resources within these "majority-minority" communities.

Conclusion

In sum, to the extent that post office locations might fill a void to help households access financial services, this is true for rural and lower-income communities, but not "majority-minority" communities where larger patterns of racial segregation may perpetuate lack of access to financial services. In the end, postal banking may help increase access to basic financial services in many underserved communities, but it should not be construed as a solution for all communities that lack access to mainstream financial services.

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Technical Appendix

This study used several sources of data to compare zip code densities of post offices and financial services within communities, including the US Geological Survey, Federal Deposit of Insurance Corporation (FDIC), National Credit Union Association (NCUA), Esri Business Analyst, and US Census Bureau's American Community Survey (ACS). Zip codes served as a proxy for communities given that zip codes are units defined by the US Postal Service and that use of geographic space (i.e., activity space) is larger than smaller geographic units such as census blocks (Crawford, Jilcott Pitts, McGuirt, Keyserling, & Ammerman, 2014). The initial sample consisted of 31,778 zip codes. To draw meaningful conclusions from the data concerning access to financial services, zip codes with no residents (n = 238) or no households were excluded (n = 51), resulting in an analytical sample of 31,489. These excluded zip codes were comprised of large institutions, such as college and university campuses, airports, military bases, NASA facilities, shopping malls, hospitals, and other health care facilities.

Post office location data by zip code were collected from the 2016 US Geological Survey, including street addresses and zip codes. These locations included full-service post offices and did not include locations that were only self-service kiosks, greeting card offices, collection boxes, or business services. In other words, the post office locations that were included were closer to the equivalent of bank and credit union branches and alternative financial services.

Financial services data were collected through several sources. The FDIC and NCUA provided data for bank and credit union branch locations, including their street addresses and zip codes. Bank branch locations were collected through the FDIC's summary of deposits, which provided quarterly information on all bank and bank branch locations. Credit union branch locations were collected through the NCUA call reports, which provided quarterly information on all credit union and credit union branch locations. Bank and credit union branch location data were retrieved from the first quarter in 2014.

Data by zip code on alternative financial service locations and market potential were collected from 2015 Esri Business Analyst Geographic Information System (GIS). Twelve codes from the North American Industry Classification Systems (NAICS) were used to identify alternative financial services and included auto title loan, payday loan, tax refund, pawn shop, and rent-to-own services.

Density measures were calculated by aggregating the locations of post offices, bank and credit union branches, and alternative financial services within zip codes and calculating their total numbers of locations per 1,000 population. Zip codes with no matching density measure were considered to not have any post offices, bank and credit union branches, or alternative financial services within their communities. Densities were truncated at the 99th percentile to exclude extreme outliers. For example, the 75261 zip code is the Dallas/Fort Worth International Airport, which has a single resident and four credit unions.

Additional community demographic data were collected from the US Census Bureau American Community Survey's (ACS) 2010 to 2014 five-year estimates and Esri Business Analyst. These

data provided aggregate population estimates by Census Bureau zip code tabulation areas (ZCTAs), which were cross-walked to zip codes. These variables measured household income and net worth, and the percentages of the population that was of different racial groups or was living in poverty. We used the Census Bureau's defined thresholds for poverty area and extreme poverty area, reflective of zip codes where 20% and 40% or more of households live in poverty, respectively[12]. Data also included the number of residents in a zip code who live in an urban area, urban cluster, or rural area. Zip codes were categorized as urban if the population was 1,000 persons or more, population density was at least 1,000 persons per square mile, 50% or more of residents were classified as living in an urban area[13], and the zip code was part of a Metropolitan Statistical Area (MSA). Zip codes were categorized as town if 50% or more of residents were classified as living in an urban cluster[2] or 50% or more of residents were classified as living in an urban area[3] yet the population of the zip code was less than 1,000 persons and/or the zip code did not belong to an MSA. Lastly, zip codes were categorized as rural if 50% or more of residents were classified as living in a rural area[3].

[12] See https://www.census.gov/population/socdemo/statbriefs/povarea.html
[13] See https://www.census.gov/geo/reference/ua/urban-rural-2010.html