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Insights into Consumers' Financial Standing and Distress from 2019-2022: Evidence from a CDFI

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NOTE: This report represents the views of the authors and does not indicate concurrence either by the CFPB or other members of the CFPB staff.

Consumer Financial Protection Bureau

Table of contents

1. Introduction

Consumers are emerging from the COVID-19 pandemic into an economically tumultuous period marked by high inflation and other threats to financial security. How has the financial standing of America's consumers, including those who are economically distressed, changed in response to the economic events of the past several years? In this report, we analyze changes in consumers' bank account balances across the months leading up to the pandemic, through two years of a pandemic economy punctuated by federal stimulus payments and expansions of other federal benefits, and into months characterized by high rates of inflation. We pay particular attention to the finances of consumers with lower account balances and markers of financial distress within the context of these recent economic events.

To study bank account balances of historically underserved consumers we launched a research partnership between the Consumer Financial Protection Bureau (CFPB) and Southern Bancorp Bank, a Community Development Financial Institution (CDFI)[1] that serves some of the most economically underserved areas in the United States.[2] Southern Bancorp Bank's application for certification under the CDFI program highlights that much of its activity is directed towards the Delta region of Arkansas and Mississippi, a largely rural area characterized by some of the country's most persistent poverty. Prior to the pandemic, Mississippi had the highest poverty rate in the country, and Arkansas had the fourth highest rate. Further, nearly half of Southern Bancorp Bank branches are in persistent poverty counties, and 44 percent are in majority-minority communities.[3]

We analyze the anonymized bank account information of 8,214 Southern Bancorp Bank customers from January 2019 to August 2022—roughly one year before the onset of the COVID-19 pandemic began to two and a half years after, including a period of inflation not seen in the U.S. in over four decades (since 1981).[4] Our sample is limited to Southern Bancorp Bank customers with an active checking account—deposits of at least $100 each month and at least

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[1] Community Development Financial Institutions (CDFIs) aim to expand economic opportunity in low-income communities by providing local residents and businesses with access to credit and other financial services (see https://www.cdfifund.gov/). Additional information about the CDFI program can be found at https://www.cdfifund.gov/programs-training/programs/cdfi-program.

[2] Reference herein to any specific commercial products, vendor, or service by trade name or otherwise, does not constitute or imply an endorsement, recommendation, or support by the CFPB.

[3] This information is included in Southern Bancorp Bank's CDFI application and was provided to us by Southern Bancorp Bank staff. Persistent poverty counties are counties that have 20 percent or more of its population living in poverty over the past 30 years.

[4] According to the Consumer Price Index (CPI) series available from the Federal Reserve Bank of St. Louis, the most recent month comparable to the peak of year-over-year inflation in June 2022 was December 1981. See https://fred.stlouisfed.org/graph/?g=YG3c for a full interactive chart.

one withdrawal each month—in the year leading up to the pandemic.[5] In addition to tracking the evolution of balances over time, this report focuses on customers' experiences with negative account balances. A negative account balance can occur when a customer makes a purchase for more than the account balance. It can also arise when a bank fee (e.g., account service charge) exceeds the account balance, and thus need not coincide with an overdraft or nonsufficient fund (NSF) fee.[6] A negative account balance is an indicator of financial distress and can have serious consequences, such as being unable to cover essential expenses or incurring bank overdraft fees.

Our research contributes to a growing body of work examining the effects of the COVID-19 pandemic on consumers' household finances. Research by the JPMorgan Chase Institute (JPMC) has reported changes in households' cash balances over the past several years, revealing aggregate patterns similar to what we observe among Southern Bancorp Bank customers.[7] Whereas the households analyzed in JPMC's research are grouped by income levels, our report focuses on consumer groups that are based on (1) what consumers hold in their bank accounts and (2) consumers' experiences with negative account balances. Additionally, we present new findings on how inflation impacts the purchasing power of consumers' account balances.[8]

Other recent research on household finances during the pandemic has looked at a combination of survey responses and credit bureau data to provide insight into consumers' financial health. The CFPB's Making Ends Meet (MEM) survey recently revealed that several measures of poor financial health, including credit card debt, difficulty paying bills, and financial well-being, all improved at the beginning of the pandemic but steadily worsened in the later stages of the pandemic (Fulford et al. 2022).[9] Our findings generally corroborate these patterns and further delineate them by focusing on economically distressed consumers and explicitly measuring incidents of financial distress within consumers' accounts.

5 Limiting the sample to active customers is consistent with the approach used in research by the JPMorgan Chase Institute, yet our approach is somewhat different and less restrictive. We discuss this more in Section 2 below.

6 Southern Bancorp Bank automatically enrolls customers in overdraft protection for payments made by check and automatic bill pay. Overdraft protection for other transactions operates on an "opt-in" basis. Details on Southern Bancorp Bank's overdraft program are available at https://banksouthern.com/policies/#overdraft.

7 See https://www.jpmorganchase.com/institute/research/household-income-spending/household-pulse-cash-balances-through-june-2022 for JPMC's household pulse release, which reports on household's cash balances through June 2022.

8 See https://www.jpmorganchase.com/institute/research/household-income-spending/household-purchasing-power-2019-to-2022 for an analysis of consumers' inflation-adjusted incomes from 2020-2022. By contrast, our analyses apply inflation adjustments to the bank account balances (and thus, the purchasing power) of Southern Bancorp Bank's customers.

9 Information on the MEM survey can be found at https://www.consumerfinance.gov/data-research/making-ends-meet-survey.

This report also contributes to our understanding of consumers' experiences with financial vulnerability.[10] This is in part because of the population we study: Southern Bancorp Bank's mission is to create economic opportunity in rural and underserved communities, which they pursue by providing banking and credit access to financially underserved and distressed consumers.

In addition to studying a historically underserved population, we contribute to research on financial vulnerability by narrowing in on the experience of having a negative account balance. We do so by grouping customers based on the number of months they had a negative account balance in the year prior to the onset of the COVID-19 pandemic, and we track the share of people with a negative account balance each month throughout the pandemic and recovery period. Using specific markers to examine financial vulnerability extends our understanding of this dynamic topic beyond simple classifications based on household income (e.g., "low-income" consumers).[11]

We report the results of analyses motivated by two primary research questions.

First, **how have account balances evolved from 2019 to 2022**—before, during the height of, and in the later stages of the COVID-19 pandemic? We describe how balances changed with federal interventions and pay particular attention to patterns among Southern Bancorp Bank customers who have relatively low, moderate, and high balance accounts, and have different experiences with negative account balances (e.g., no instances of a negative balance to multiple instances).

Second, **how has the share of customers with a negative account balance changed over time?** Answering this question shines a light on the financial state of struggling consumers, including those who were financially distressed before the pandemic began. We report analyses on the share of Southern Bancorp Bank customers who had a negative account balance each month. We further examine this measure among customers with lower account balances (relative to the rest of the sample), and by the number of months with a negative account balance in the year leading up to the pandemic. We ask how these groups of consumers experienced the financial impacts of the pandemic—and how they fared in 2022.

[10] Salisbury et al. (2022) refer to financial vulnerability as "being at risk of experiencing future [financial] harm." We adopt this definition of financial vulnerability in the context of this report.

[11] Salisbury et al. (2022) review weaknesses in the income-based approach to identifying financially vulnerable consumers and households. Their dynamic model proposes a measure of risk for financial vulnerability that incorporates (1) multiple points tracked over time and (2) specific financial events–including falling below certain thresholds for harm.

Key findings related to these questions are:

- Bank account balances increased after the onset of the pandemic—coinciding with the expansions of federal income support—but have generally been declining since the third and final stimulus payment was issued in March 2021. However, account balances remained above pre-pandemic levels in August 2022 (our last month of data).
- High rates of inflation eroded these customers' gains. Customers' median nominal account balances were $521 higher in August 2022 (median balance $1,726) than in August 2019 ($1,205), but adjusting for inflation reduces these gains by nearly half (46 percent).[12] The inflation-adjusted median gain during this period was only $281 ($1,493 in August 2022 versus $1,212 in August 2019).[13]
- Median account balances were higher in August 2022 than in August 2019 for all subgroups we examined based on consumers' pre-pandemic economic circumstances, although the gains were quite small for some groups. Among customers with the lowest account balances in the year leading up to the pandemic (bottom quartile), for example, the increase in the inflation-adjusted median account balance between August 2019 and August 2022 was only $19.[14]
- Financial distress, measured as experiencing a negative account balance in a month, declined with the expansion of federal benefits, but generally trended upward after the third stimulus payment was issued. The share of customers with a negative account balance decreased from 14 percent in August 2019 to 12 percent in August 2022.
- The decrease in the share of customers with a negative account balance is especially large among those with multiple months with a negative account balance prior to the pandemic. Among customers with a negative account balance in four or more months in the year prior to the pandemic, the share with a negative account balance fell by 22 percentage points from August 2019 (64 percent) to August 2022 (42 percent).

Before reporting the details of our findings, we first provide greater detail on our data, sample, and analytic approach.

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[12] This decline of nearly half is calculated at the median. The rate at which inflation eroded the gains differs across consumers.

[13] Dollars are inflation adjusted to February 2020.

[14] The nominal (not inflation-adjusted) gain for this group was $35.

2. Data and Sample

We analyze deidentified data from Southern Bancorp Bank customers' checking and savings accounts. The dataset spans January 2019, roughly one year before the pandemic began, to August 2022. These data therefore capture the effects of the pandemic and provision of federal benefits, and an inflationary period that began around March 2021 and persisted until the end of our data.

We conduct our analyses on a final sample of 8,214 active Southern Bancorp Bank customers. Beginning with a random sample of Southern Bancorp Bank customers, we arrived at the final analysis sample after two key steps. First, we removed 2,249 customers who did not have an account record in every month covered by our analysis (January 2019 to August 2022).[15] This was to ensure that any patterns reflect changes in the experiences of customers and not changes in the set of customers. Second, we removed an additional 2,423 customers who were not active in every month of the 12-month period prior to the pandemic (March 2019 to February 2020). We defined "active" as having at least one deposit and one withdrawal (2,415 customers removed) *and* having an average deposit of at least $100 (only 8 customers removed) in each month during this period.[16]

For each customer in our final sample, we have their checking and savings account information. For each of these accounts, we have a range of information including the total value of deposits into and withdrawals from the account during the calendar month, as well as a "month-end" snapshot of the account balance. Our analyses of account balances use the sum of month-end balances across all of a customer's accounts. That is, for customers with multiple accounts (including customers with both a checking and a savings account), we sum up month-end

[15] Of these 2,249 customers, 1,774 (nearly 80 percent) are removed because they did not have a Southern Bancorp Bank account by January 2019. The remaining 475 customers had an account in January 2019 but are removed because their account(s) closed by August 2022 (resulting in at least one month of missing data). Some of these account closures were temporary and customers reopened a Southern Bancorp Bank account by August 2022. However, 282 customers did not reopen another Southern Bancorp Bank account by August 2022, raising the possibility that they moved to unbanked status. We provide a brief analysis of these customers in Appendix A.

[16] Limiting the sample to active customers is consistent with the approach used in research by the JPMorgan Chase Institute, yet our approach is somewhat different and less restrictive. JPMC Institute research restrictions are based on adjusted annual income (versus account credits in our analysis) and requires adjusted annual income of at least $12,000 (versus $1,200) for inclusion in their analyses (https://www.jpmorganchase.com/institute/research/household-income-spending/household-pulse-cash-balances-through-june-2022). We use the less restrictive cut-off amount of at least $1,200 (an average of $100 per month in deposits) because Southern Bancorp Bank customers tend to reside in more economically disadvantaged areas. Southern Bancorp Bank serves some of the most disadvantaged areas of the country, with nearly half of Southern Bancorp Bank branches located in persistent poverty counties (Southern Bancorp Bank's CDFI application).

account balances across their accounts. Incorporating savings account data allows us to provide a more complete picture of customers' financial circumstances.[17]

Our data also include the minimum account balance held during each month. This information allows us to identify accounts that drop below $0 during the month, which we use to understand the share of customers with a negative account balance in a month. For customers with multiple accounts in a month, we identify whether any account balance fell below $0.

Our analysis file also includes monthly indicators of whether the customer received Economic Impact Payments (EIPs, also referred to as "stimulus payments"),[18] expanded Unemployment Insurance (UI) benefit payments,[19] or advance Child Tax Credit (CTC) payments.[20] These federal benefits were provided to consumers in the wake of the pandemic. **Table 1** provides additional details on the timeline and characteristics for each of these financial benefits.

We use a multi-pronged approach to identify the three EIPs (issued starting in April 2020, January 2021, and March 2021) because the IRS code identifying EIPs was not put into place until after most of the first EIPs were dispersed. In our data, the first EIP code appears in September 2020.[21] For EIPs issued after September 2020, Southern Bancorp Bank used the IRS payment codes "EIP1", "EIP2", and "EIP3" to identify EIPs received by customers in our sample. Most of the first EIPs ("EIP1"), however, went out before this code was in place. We use

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[17] We exclude savings held in retirement accounts.

[18] During the pandemic, the federal government provided a wide array of fiscal supports as employment plummeted and the economy fell into a recession. One of these is a series of three direct stimulus payments administered by the IRS. The CARES Act, which was signed into law on March 27, 2020, provided the first of these, the Consolidated Appropriations Act, which was enacted December 27, 2020, provided the second, and the American Rescue Plan Act, enacted March 11, 2021, provided the third. Additional details on payments and eligibility requirements for the first, second, and third EIPs can be found at https://www.irs.gov/newsroom/calculating-the-economic-impact-payment, https://www.irs.gov/newsroom/treasury-and-irs-begin-delivering-second-round-of-economic-impact-payments-to-millions-of-americans, and https://www.irs.gov/coronavirus/third-economic-impact-payment.

[19] The expansion of federal UI benefits began under the CARES Act. Following its lapse, FEMA instituted the Lost Wage Assistance Program, dedicating a portion of its emergency funds to supplement state UI programs following the lapse of the CARES Act expansion. The Consolidated Appropriations Act created another phase of expanded federal UI benefits after the Lost Wage Assistance Program expired. Additional details on expanded federal UI payments can be found at https://www.cbpp.org/research/economy/historic-unemployment-programs-provided-vital-support-to-workers-and-the-economy and details on the Lost Wages Assistance Program can be found at https://www.fema.gov/disaster/coronavirus/governments/supplemental-payments-lost-wages/frequently-asked-questions.

[20] The American Rescue Plan Act also provided payments of the 2021 Child Tax Credit in advance of filing for tax year 2021 returns in 2022. These payments came in monthly installments in the latter half of 2021. Additional details on the advance Child Tax Credit can be found at https://www.irs.gov/credits-deductions/2021-child-tax-credit-and-advance-child-tax-credit-payments-topic-e-advance-payment-process-of-the-child-tax-credit.

[21] Effective September 21, 2020 the IRS began using "EIP1" as a deposit description to distinguish these payments from other IRS tax refunds and ACH credit entries (https://www.nacha.org/system/files/2020-09/ACH-Network-Pandemic-FAQs-Sep-24-2020.pdf).

transaction-level account data to construct an indicator for the first EIP using the more generic IRS tax payment code and information about the full EIP1 amounts ($1200 per adult and $500 per child).[22,23] Using this approach, 72 percent of Southern Bancorp Bank customers in our sample are identified as receiving an EIP.[24]

Expanded UI payments provided a federal supplement to state unemployment benefits. UI benefit payments to Southern Bancorp Bank customers were identified by Southern Bancorp Bank using state unemployment benefit codes from Arkansas and Mississippi on account deposit descriptions. Most Southern Bancorp Bank customers (97 percent) live in Arkansas and Mississippi, so codes from these two states should capture the vast majority of unemployment benefits paid into Southern Bancorp Bank accounts for customers in our sample. Among Southern Bancorp Bank customers in our sample, 7 percent are identified as receiving a UI benefit payment during the federal expansion. This is a lower bound on the share of Southern Bancorp Bank customers who received a UI benefit during the federal expansion period, as both Arkansas and Mississippi provide some UI benefits on debit cards.[25]

[22] To identify likely EIP1 payments, we first analyzed the distribution of EIP2 and EIP3 payments to estimate combinations of possible household sizes for EIP payments. We also calculated that more than 98 percent of EIP2 and EIP3 payments were made in full payment amounts (not reduced by income thresholds) per eligible family member. Given this, we created a flag that identified general IRS tax payments between April to September 2020 that were a full payment ($1200 per adult and $500 per child) for individual payments, or any combination of full payments up to a family of two adults and seven children.

[23] The first- and third-round EIPs were not broadly protected from garnishment, which may have affected the receipt of some of these EIP payments (https://www.irs.gov/newsroom/why-the-economic-impact-payment-amount-could-be-different-than-anticipated; https://www.helpwithmybank.gov/help-topics/covid-19/treasury-stimulus/stimulus-eip-garnished.html). However, garnishment is a relatively uncommon phenomenon. In 2016, for example, an estimated 7 percent of workers experienced a garnishment (https://www.adp.com/tools-and-resources/adp-research-institute/research-and-trends/-/media/RI/pdf/WageGarnishment_WhitePaper.ashx).

[24] The percentage of customers we observe receiving an EIP is smaller than the rate of receipt implied by IRS data for the states of Arkansas and Mississippi (https://www.irs.gov/statistics/soi-tax-stats-coronavirus-aid-relief-and-economic-security-act-cares-act-statistics). Assuming each EIP went to an individual adult in each of those states, 68, 62, and 70 percent of the population over 18 in those states received EIPs 1, 2, and 3 respectively. In our sample, 57, 54, and 66 percent of customers are identified as having received, respectively, EIPs 1, 2, and 3 to their account with Southern Bancorp Bank. We use these estimates to understand our sample, but precise identification of the EIPs is not crucial to our analyses.

[25] The percentage of customers we observe receiving UI payments is lower than the rate estimated by the Bureau of Labor Statistics using Census Household Pulse data. They find that 11 and 17 percent of Arkansas and Mississippi residents respectively reported receiving UI benefits between March 13, 2020 and December 21, 2020. (https://www.bls.gov/opub/mlr/2021/article/applying-for-and-receiving-unemployment-insurance-benefits-during-the-coronavirus-pandemic.htm). We calculate that 6 percent of customers in our sample received a UI payment in their Southern Bancorp Bank account between March 13, 2020 and December 21, 2020. Both Arkansas and Mississippi automatically enroll eligible residents to receive their UI benefit payment via a debit card. Arkansas makes readily available the option for UI beneficiaries to receive their benefit payment via direct deposit into a bank account during the claims process (https://www.ezarc.adws.arkansas.gov/home; https://www.arkansashouse.org/news/post/7888/unemployment-information-and-faq). In Mississippi, however, UI beneficiaries must complete a series of additional steps including emailing the Mississippi Department of Employment Security in order to receive their UI benefit payment via direct deposit into a bank account (https://mdes.ms.gov/unemployment-claims/benefit-information/benefit-payment-options).

TABLE 1: FEDERAL INCOME SUPPORT PROVIDED DURING THE PANDEMIC[26]

Benefit	Type	Date(s)[1]	Amount & Eligibility	Recurrence
EIP1	Economic Impact Payment	April 2020	Up to $1200 per adult and $500 per child	One-time
EIP2	Economic Impact Payment	January 2021	Up to $600 per adult and child	One-time
EIP3	Economic Impact Payment	March 2021	Up to $1400 per adult and child	One-time
Expanded Federal UI	Federal Pandemic Unemployment Compensation	April 2020 – July 2020	Up to $600 per unemployed adult	Recurring weekly
Expanded Federal UI	Federal Pandemic Unemployment Compensation	December 2020 – September 2021[2]	Up to $300 per unemployed adult	Recurring weekly
CTC	Advance Child Tax Credit payments	July 2021 – Dec 2021[3]	$300 per child under age 5 and $250 per child ages 6–17	Recurring monthly

[1] Dates for the Economic Impact Payment are generally the dates they began to be issued; EIP2 payments were issued beginning December 29, 2020 but had an official payment date in early January 2021 (https://www.taxpayeradvocate.irs.gov/covid-19-home/2020-rrc-and-eip-1-and-2/).
[2] Although expanded federal UI payments did not expire until September 2021, both Arkansas and Mississippi (where most Southern Bancorp Bank customers reside) opted out of the additional benefits and ended these expanded UI payments in June 2021 (https://crsreports.congress.gov/product/pdf/IN/IN11679).
[3] While CTC payments deposited into customer accounts are captured for this full time period, we only observe these transactions in July and August 2021.

Advance Child Tax Credit payments were made available to U.S. families from July through December 2021. Southern Bancorp Bank identified customers who received these payments using IRS payment code "CTC." While all CTC payments directly deposited in Southern Bancorp Bank accounts are captured in our data, the identifiers for these payments are only available to us for July and August 2021. Our data shows that 15 percent of Southern Bancorp Bank

[26] We consider only the expanded unemployment compensation appropriated by Congress here. As such, we do not include the Lost Wages Assistance (LWA) program. LWA was a grants program that allowed states to use Federal Emergency Management Agency (FEMA) funds to provide supplemental payments to people who lost their job because of the pandemic. Both Arkansas and Mississippi participated in this program (https://www.fema.gov/fact-sheet/lost-wages-assistance-approved-states). Recipients of this program were required to provide "self-certification" that their job loss was specifically caused by the pandemic (https://trumpwhitehouse.archives.gov/presidential-actions/memorandum-authorizing-needs-assistance-program-major-disaster-declarations-related-coronavirus-disease-2019/). We also do not consider other domain-specific provisions of federal relief, such as rental assistance, the pause on federal student loan repayment, and mortgage forbearance.

customers received an advance CTC payment in July 2021 and 13 percent received an advance CTC payment in August 2021.[27]

In addition to account-specific data, we have each customer's birth year. We use this to estimate their age when the pandemic hit. Southern Bancorp Bank customers in our sample are somewhat older than the broader U.S. adult population (**Table 2**). As a group, older Southern Bancorp Bank customers in our sample have higher account balances than younger customers. This raises the average and median account balances of our sample relative to a population that more closely mimics the U.S. adult population. The balance distribution for Southern Bancorp Bank customers is considerably lower than that observed in other publicly available data on liquid assets.[28]

TABLE 2: AGE COMPARISON OF SOUTHERN BANCORP BANK CUSTOMERS AND U.S. ADULT POPULATION

Age	Southern Bancorp Bank customers	U.S. adult population*
18-34	17%	29%
35-49	22%	27%
50-64	29%	27%
65+	32%	16%

* Source: U.S. Census Bureau, https://www.census.gov/data/tables/2020/demo/age-and-sex/2020-age-sex-composition.html. Age groups in our tabulations for the 18-34 age group do not line up precisely with Census Bureau tabulations. The percentages in the U.S. adult population column are based on the adult population ages 20 or older.

[27] These shares are lower than the percent of the combined adult population of Arkansas and Mississippi who report receiving an advance CTC in July and August 2021 on the Census Household Pulse survey. According to that survey, 20 percent of adults in Arkansas and Mississippi reported receiving a CTC payment in July 2021 and 25 percent reported receiving one in August 2021.

[28] The median month-end *checking account* balance for our sample is $1,109 in October 2020, for example. The JPMorgan Chase Institute reports a median month-end checking account balance of $1,784 (61 percent higher) in October 2020. The 25th and 75th percentiles of checking account balances for that month in our sample are $246 and $4,026. For the JPMorgan Chase Institute, they are $614 and $5,088 (https://www.jpmorganchase.com/institute/research/household-income-spending/household-finances-pulse-cash-balances-during-COVID-19). The median "transactional account" balance in 2019 for the U.S. population was $5,300 according to the Survey of Consumer Finances, though the definition of "transactional account" includes checking, savings, money market, call accounts, and prepaid debit cards (https://www.federalreserve.gov/publications/files/scf20.pdf).

3. Approach and Descriptive Sample Statistics

3.1 Analytic approach

Our analysis focuses on two key measures of customers' financial standing: month-end balance (summed across Southern Bancorp Bank accounts for customers with multiple accounts) and an indicator of whether the customer had an account balance drop below $0 during the month. Month-end balances provide a consistent measure of customers' finances as they finish up the month. We examine whether customers had an account balance fall below $0 as a measure of financial fragility, as these consumers may struggle to pay bills and make ends meet.[29]

Although we pick a consistent time to measure balances each month, there is predictable variation over time. Some months have five (versus four) Fridays. Five-Friday months have been shown to have higher deposits (i.e., more income; Farrell and Greig 2015) and we see a similar pattern in our data: customers have higher month end balances in months with five Fridays.[30]

We present smoothed, three-month rolling averages for both month-end balances and the share of customers with a negative account balance. This allows us to make clearer comparisons of customer accounts over time.[31] The three-month rolling average is based on the current month and the prior two months. For August 2022, for example, we calculate the three-month rolling average for each customer using data from June, July, and August 2022. We refer to the three-month rolling average using the most recent of the three months (i.e., August 2022 in the prior example).

[29] This is not always the case as, for example, a customer may have forgotten to transfer money into a checking account to cover a specific purchase.

[30] The median end-of-month balance for the average five-Friday month in our sample is about 14 percent higher than that of the preceding month.

[31] Using month-end balances from a single month rather than a rolling average can result in volatile comparisons over time because balances are subject to calendar-based volatility from five-Friday months. Using a three-month rolling average helps address this concern by ensuring that most comparison periods have the same number of five-Friday months. From January 2019 to August 2022, 37 of 44 three-month periods have exactly one five-Friday month. Three have no five-Friday months (the three months ending in February 2019, April 2020, and March 2022) and four have two five-Friday months (the three months ending May 2019, January 2020, July 2020, and December 2021). Month-end balances can also be noisy because of volatile incomes and expenses. A single month-end balance might dip suddenly because of a large but idiosyncratic expense in that month, for example. Three-month rolling averages at the customer level allow us to measure more persistent downturns and upticks in balances.

We examine customers' month-end balances and instances of negative balances for our full Southern Bancorp Bank sample and then separately for groups of Southern Bancorp Bank customers based on their circumstances in the year leading up to the onset of the pandemic (March 2019 through February 2020). We use two approaches to group Southern Bancorp Bank customers by their pre-pandemic economic circumstances. Our first approach divides customers into quartiles based on their average month-end account balance for the year leading up to the pandemic. Our second approach divides customers into one of three groups based on the number of months they had a negative account balance in the year leading up to the pandemic (0, 1-3, or 4 or more months).[32] Separating consumers into different groups in this manner provides a window into the finances of financially vulnerable consumers.[33]

3.2 Customer characteristics by pre-pandemic economic circumstances

To provide context for our analyses in **Section 4**, we present a brief profile of the groups of Southern Bancorp Bank customers (quartiles of account balances and number of months with a negative account balance). Focusing first on the four quartiles based on customers' average month-end balances in the year leading up to the pandemic, we see wide variation. The median month-end balance (median of the average balance in the year leading up to the pandemic) was $145 for those in the lowest quartile and $807 for those in the second quartile (**Table 3**).[34] While our data only allow us to see money held at Southern Bancorp Bank (and some customers may have money held elsewhere), our analysis suggests a large group of Southern Bancorp Bank customers had limited financial resources and were struggling financially before the pandemic.[35] The dollar amounts for those in the third quartile are higher yet still modest ($2,667). Balances of those in the highest quartile are substantially higher ($19,900).

[32] While there is some overlap across the two sets of groupings, it is far from exact. There is a moderate negative correlation (-0.43) between the two groupings, indicating that customers with higher month-end balances are less likely to have negative account balances. For example, among customers with no negative balances in the year leading up to the pandemic (the group that is best off in terms of negative balance incidents), 15 percent are in the lowest account balance group (lowest quartile) and another 20 percent are in the next lowest account balance group (second quartile) in the year leading up to the pandemic.

[33] Analyses examining these different customer groups over time have a static set of customers.

[34] For our full sample of Southern Bancorp Bank customers, the median month-end balance in the year leading up to the pandemic was $1,412.

[35] These balances are low relative to consumers' financial needs in the face of a financial shock. In a survey conducted by the Pew Charitable Trust (2015), for example, roughly 60 percent of consumers reported experiencing a financial shock in the past year (e.g., unexpected medical bill, car repair) and the median cost of their most expensive shock (if they experienced more than one shock) was $2,000.

TABLE 3: MEDIAN ACCOUNT BALANCES BY QUARTILE AND THE SHARE OF CUSTOMERS IN EACH QUARTILE BY AGE

	Quartile groups based on the average month-end balance in the year prior to the pandemic			
	Quartile 1	**Quartile 2**	**Quartile 3**	**Quartile 4**
Median Balance*	$145	$807	$2,667	$19,900
Share of customers All customers	25%	25%	25%	25%
By age**				
18 to 34	28%	37%	24%	11%
35 to 49	26	30	30	15
50 to 64	26	24	26	24
65+	22	16	22	40

* Among all Southern Bancorp Bank customers in our analysis sample, the median month-end balance in the year leading up to the pandemic was $1,412.

** Rows may not sum to 100 percent because of rounding.

Customers in the lower quartiles tend to be younger, especially as compared with those in the top quartile. Among customers ages 18 to 34, 65 percent are in the bottom two quartiles, with only 11 percent having account balances that put them in the top quartile (**Table 3**). In comparison, among customers ages 65 and older, 38 percent are in the bottom two quartiles and roughly the same share—40 percent—are in the top quartile. While older consumers have higher balances in general, there is still a substantial share of older Southern Bancorp Bank customers with lower balances. Since these consumers are more likely to be retired or not working, this analysis suggests that these older consumers may face greater difficulty handling unexpected negative financial shocks.

Turning to the three groups based on the number of months a customer had a negative account balance in the year leading up to the pandemic (0, 1-3, or 4 or more months), our analysis shows that 62 percent of Southern Bancorp Bank customers never had a negative account balance during this time, while 22 percent had a negative balance in one, two, or three months and 17 percent had a negative balance in four or more months during this one-year period (**Table 4**).

Consistent with our finding for month-end balances (younger customers tend to have lower balances), we find that younger customers are more likely to have a negative account balance. Nearly half (48 percent) of customers ages 18 to 34 had a negative account balance in at least one month in the year leading up to the pandemic, while the comparable share for customers ages 65 and older is about half of that—24 percent.

TABLE 4: SHARE OF CUSTOMERS WITH A NEGATIVE ACCOUNT BALANCE IN THE YEAR LEADING UP TO THE PANDEMIC, OVERALL AND BY AGE

	Number of months with a negative account balance incident in the year prior to the pandemic		
	None	1 to 3	4 or more
All customers	62%	22%	17%
Customer age			
18 to 34	52%	29%	20%
35 to 49	50	26	25
50 to 64	62	22	16
65 to 100	76	14	10

* Rows may not sum to 100 percent because of rounding.

4. Findings

This section examines how month-end account balances and the share of customers with a negative account balance incident evolved from January 2019 through August 2022. For these two measures, we examine our full sample of Southern Bancorp Bank customers and then examine customers based on their pre-pandemic economic circumstances: (1) quartiles based on their average month-end account balance in the year leading up to the pandemic and (2) three groups based on the number of months with a negative account balance incident (0, 1-3, or 4 or more months) in the year leading up to the pandemic.

4.1 How have account balances evolved from 2019 to 2022: pre-pandemic to high inflation?

Bank account balances (month-end) increased after the onset of the pandemic, coinciding with the EIPs, but have generally been declining since the third and final EIP was issued in March 2021. The three EIPs were issued beginning in April 2020 (EIP1), January 2021 (EIP2), and March 2021 (EIP3), with amounts up to $1,200 and $500 for adults and children for the first EIP (respectively), up to $600 for adults and children for the second EIP, and up to $1,400 for both adults and children for the third EIP.[36] Most Southern Bancorp Bank customers—72 percent—are identified as receiving at least one EIP.[37] This high share aligns with the pattern of median account balances showing an increase following each EIP.[38] **Figure 1** shows a spike in account balances following the EIPs (indicated with the dashed lines), with median nominal balances rising from $1,487 in February 2020 to $1,992 in April 2020 and then up to $2,897 in

[36] See Table 1 for details. More information is also available at https://www.pgpf.org/blog/2021/03/what-to-know-about-all-three-rounds-of-coronavirus-stimulus-checks.

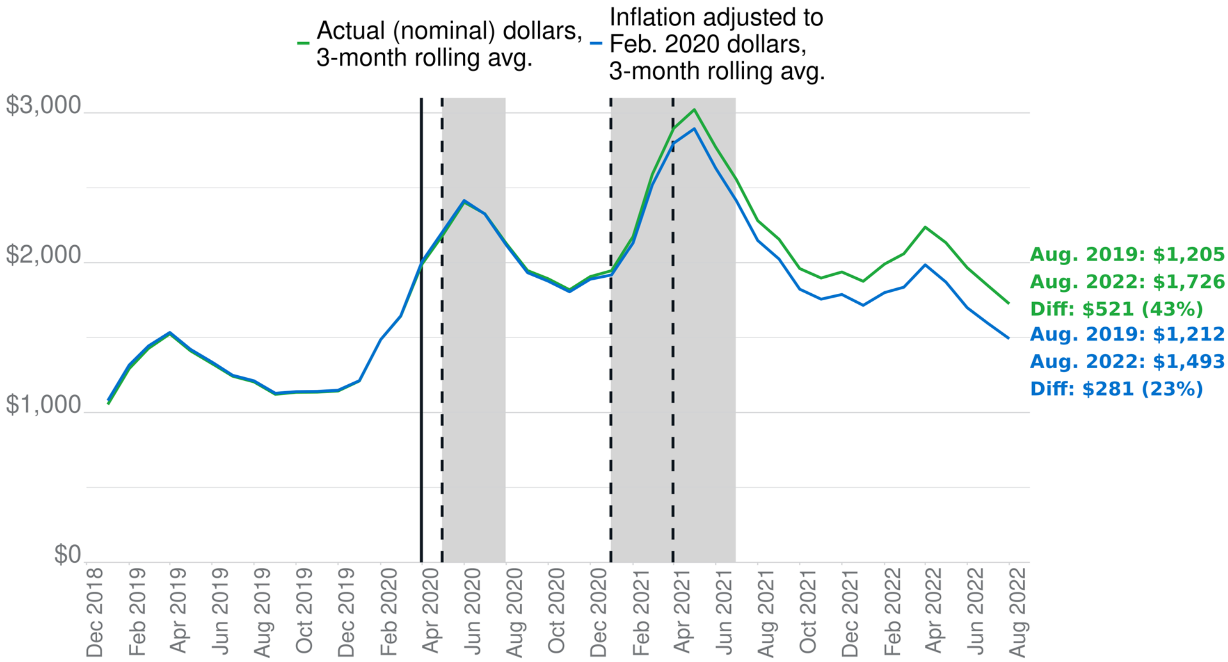
[37] Section 2 discusses how EIP payments are identified in our Southern Bancorp Bank data. Some Southern Bancorp Bank customers may have received an EIP via a paper check or through deposit into an alternate (i.e., not Southern Bancorp) account, while others may not have been eligible for an EIP at all (e.g., because they did not have a social security number), so this is a lower bound estimate.

[38] This pattern of account balances for the Southern Bancorp Bank population is similar to the pattern for JPMC customers even though we combine dollars held in customers' checking and savings accounts and the JPMC research includes dollars held in checking accounts only (https://www.jpmorganchase.com/institute/research/household-income-spending/household-pulse-cash-balances-through-june-2022). Also note that analyses of account balances at the 25th and 75th percentiles of the account balance distribution show patterns similar to what we find for median (50th percentile) account balances (not shown).

April 2021.[39] While the EIPs roughly coincided with tax time (a time when many households, particularly lower income households, receive a sizable influx of cash from their tax refund),[40] **Figure 1** shows a much steeper spike in account balances in early 2020 and 2021 than in early 2019 or 2022.[41]

FIGURE 1: ACCOUNT BALANCES DECLINED SINCE THE FINAL ECONOMIC IMPACT PAYMENT, HEIGHTENED BY INFLATION

Median of three-month rolling average of nominal and inflation-adjusted month-end account balances from January 2019 to August 2022



Solid line: Pandemic emergency declared
Dashed lines: Federal stimulus payments
Shaded areas: Periods of expanded federal unemployment benefits for AR and MS

The federal expansion of UI benefits that began in April 2020 likely contributed to the pattern of account balances over time. Unemployed workers received a $600 weekly federal supplement from March to July 2020. A federal weekly supplement of $300 was subsequently provided (see **Table 1**). While the federal supplement ran through September 2021, both Arkansas and

[39] **Appendix B, Figure 7** presents the median inflation-adjusted month-end account balances for each month (not the three-month rolling average) from January 2019 to August 2022.

[40] The average tax refund in 2022 was over $3,000 (https://www.irs.gov/newsroom/filing-season-statistics-for-week-ending-april-15-2022). Farrell, Greig, and Hamoudi (2019) find that the average tax refund recipient receives a tax refund equal to nearly six weeks of take-home income.

[41] Also see **Appendix B, Figure 8**, which shows the percent difference in month-end balances between the current month and the same month in 2019.

Mississippi opted out of the additional benefits and ended the expanded UI payments in June 2021,[42] just three months after the final EIP. This likely contributed to the decline in account balances in 2021.[43] We observe that only a small minority of Southern Bancorp Bank customers—7 percent—received UI benefits between April 2020 and June 2021. However, as discussed above, this is a lower bound estimate, as both Arkansas and Mississippi provide some UI benefits on debit cards. UI payments not deposited into Southern Bancorp Bank accounts can still affect customer account balances, as customers do not have to draw down account balances to the same extent to pay bills and meet their needs.

The monthly advance CTC was available from July through December 2021 (see **Table 1**). These payments do not coincide with the same type of spike that we see for the Economic Impact Payments.[44] Nonetheless, these payments have been found to reduce poverty (Parolin et al. 2021) and food insecurity (Pilkauskas et al. 2022) among families with children.

Inflation is also playing a role for consumers' financial circumstances. **Figure 1**, which presents inflation-adjusted account balances in February 2020 dollars, shows a divergence between actual (i.e., nominal) account balances and inflation-adjusted account balances starting in early 2021. By August 2022, customers' inflation-adjusted account balances were 13 percent lower than their actual balances. For example, the median actual and inflation-adjusted account balances in August 2022 were $1,726 and $1,493, respectively.[45]

While account balances have been declining, they remain above pre-pandemic levels. For actual account balances, the median account balance in August 2022 was $521 (or 43 percent) higher than the median account balance in August 2019. The inflation-adjusted account balance is also higher, but by only $281 (or 23 percent). A comparison of the gains from August 2019 to August 2022 for actual and inflation-adjusted median account balances—$521 versus $281, respectively—shows that inflation eroded nearly half (46 percent) of the gains over this period.[46]

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[42] See https://crsreports.congress.gov/product/pdf/IN/IN11679.

[43] **Appendix B, Figure 9** shows the steeper increase and then steeper decrease in account balances for customers who received both EIPs and UI benefits than for customers who received EIPs only.

[44] We separately examine customers who received an advance CTC and, again, do not observe a pattern of spikes for this population.

[45] The inflation-adjusted dollars are in February 2020 dollars. The actual and inflation-adjusted single-month account balances for August 2022 were lower at $1,439 and $1,245, respectively.

[46] Looking at all months since the pandemic's onset shows that median account balances have been consistently higher than pre-pandemic balances, both in actual and inflation-adjusted dollars (see **Appendix B, Figure 8**).

4.1.1 How does the pattern of account balances differ by customers' economic circumstances?

To better understand the pattern of account balances by customers' economic circumstances, we take into consideration customers' circumstances in the year leading up to the pandemic (March 2019 to February 2020). This provides a window into consumers who are more financially vulnerable within the broader population of Southern Bancorp Bank customers. As discussed above (**Section 3**), we group customers by their pre-pandemic economic circumstances: (1) quartiles based on their average month-end account balance in the year leading up to the pandemic, and (2) three groups based on the number of months with a negative account balance incident (0, 1-3, or 4 or more months) in the year leading up to the pandemic.[47]

Overall, our analysis shows similar patterns of account balances over time for these different customer groups, although the levels vary widely. First, the similarities. Across all the groups we analyze, median account balances increased with the EIPs, but have generally declined since the final EIP was issued in 2021. Additionally, median balances in August 2022 were above pre-pandemic levels for all groups, with inflation eroding gains made by customers. As for the differences, the dollar amounts—both in the levels and in the gains—are vastly lower for more financially vulnerable customers. Additionally, we see suggestive evidence that cash infusions helped customers avoid having their accounts drop below $0.

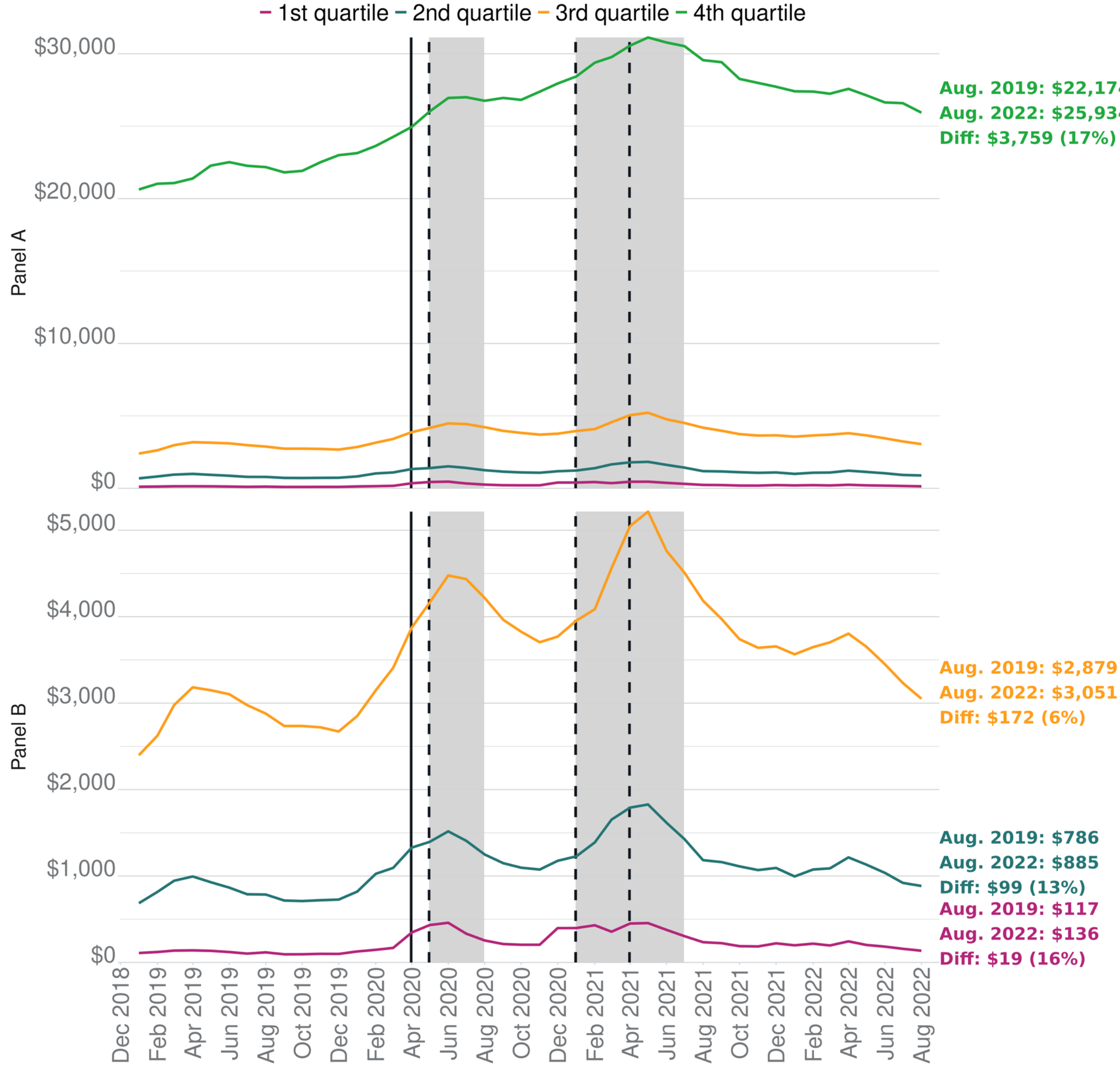
Focusing on the first grouping (quartiles based on month-end balances in the year leading up to the pandemic), **Figure 2** shows the similarity in the pattern of median account balances across the quartiles. The top panel shows all four quartiles, but because balances for the top quartile are so much higher than balances for the other quartiles, **Panel B** zooms in on the lower three quartiles. The increase in median account balances with each of the EIPs tracks with the fact that over two-thirds of customers in each quartile received an EIP. Roughly 75 percent of customers in the two middle quartiles received an EIP, while the shares are slightly lower—70 percent and 68 percent—for those in the bottom and top quartile, respectively (**Table 5**).[48] Table 5 also shows the share of customers who received UI benefits when the federal expansion was in place and the share that received an advance CTC payment in July or August 2021.

[47] We also present median month-end balances for Southern Bancorp Bank customers by their age at the start of the pandemic (see **Appendix B, Figure 10**).

[48] Our finding that lower-balance consumers were less likely to receive an EIP is consistent with other analyses. For example, data from the CFPB's 2021 Making Ends Meet survey show that 69 percent of those with annual incomes below $20,000 per year received an EIP by the first quarter of 2021, compared with nearly 90 percent of those with incomes between $20,000 and $50,000 and those with incomes between $50,000 and $200,000. Consumers with incomes above $200,000 were less likely to receive an EIP (authors' tabulations).

FIGURE 2: THE PATTERN OF ACCOUNT BALANCES OVER TIME IS SIMILAR FOR HIGHER AND LOWER ACCOUNT BALANCE CUSTOMERS, WITH BALANCES REMAINING ABOVE PRE-PANDEMIC LEVELS FOR ALL FOUR GROUPS IN AUGUST 2022

Median of three-month rolling average of inflation-adjusted month-end account balances from January 2019 to August 2022, by pre-pandemic account balance quartiles



Solid line: Pandemic emergency declared
Dashed lines: Federal stimulus payments
Shaded areas: Periods of expanded federal unemployment benefits for AR and MS

Median account balances in August 2022 vary from $136 for customers in the bottom quartile (quartile 1) to $25,934 for those in the top quartile (quartile 4). Customers in the second quartile have balances of $885, while those in the third quartile have balances of $3,051. The particularly low median balances for customers in the bottom two quartiles suggest that many Southern

Bancorp Bank customers are financially vulnerable and would have difficulty weathering even small, unexpected expenses.

Even these low balances, however, are higher than pre-pandemic balances. For those in the bottom two quartiles (quartiles one and two), for example, inflation-adjusted balances in August 2022 are 16 percent and 13 percent (respectively) higher than they were in August 2019.[49] However, because account balances are low for these two groups, the differences in dollar amounts are small ($19 and $99, respectively).[50] The pattern of account balances over time suggests that the typical (i.e., median) Southern Bancorp Bank customer spent a portion of their Economic Impact Payments and other financial support provided by the federal government quickly and then continued to spend it down gradually.[51]

TABLE 5: SHARE OF CUSTOMERS THAT RECEIVED GOVERNMENT ASSISTANCE, OVERALL AND BY PRE-PANDEMIC ACCOUNT BALANCE QUARTILES

		Quartile groups based on the average month-end balance in the year prior to the pandemic			
	All Customers	**Quartile 1**	**Quartile 2**	**Quartile 3**	**Quartile 4**
Economic Impact Payment	72%	70%	76%	74%	68%
Unemployment Insurance*	7%	7%	10%	8%	5%
Child Tax Credit**	15%	9%	24%	20%	8%

* Includes customers who received Unemployment Insurance benefits when the federal expansion was in place.
** Received an advance CTC payment in July or August 2021.

Turning to customer groups based on number of months with a negative account balance in the year leading up to the pandemic (0, 1-3, or 4 or more months), **Figure 3** shows patterns similar to the figures above. For each of the three groups, bank account balances (month-end) increased with each EIP but have generally been declining since March 2021. The increase in median account balances with the EIPs tracks with the fact that over 70 percent of customers in each of the three groups received an EIP (**Table 6**). **Table 6** also shows the share of customers in each

49 **Appendix Figure 11** shows the difference in month-end balances between the current month and the same month in 2019 for each of the quartile groups.

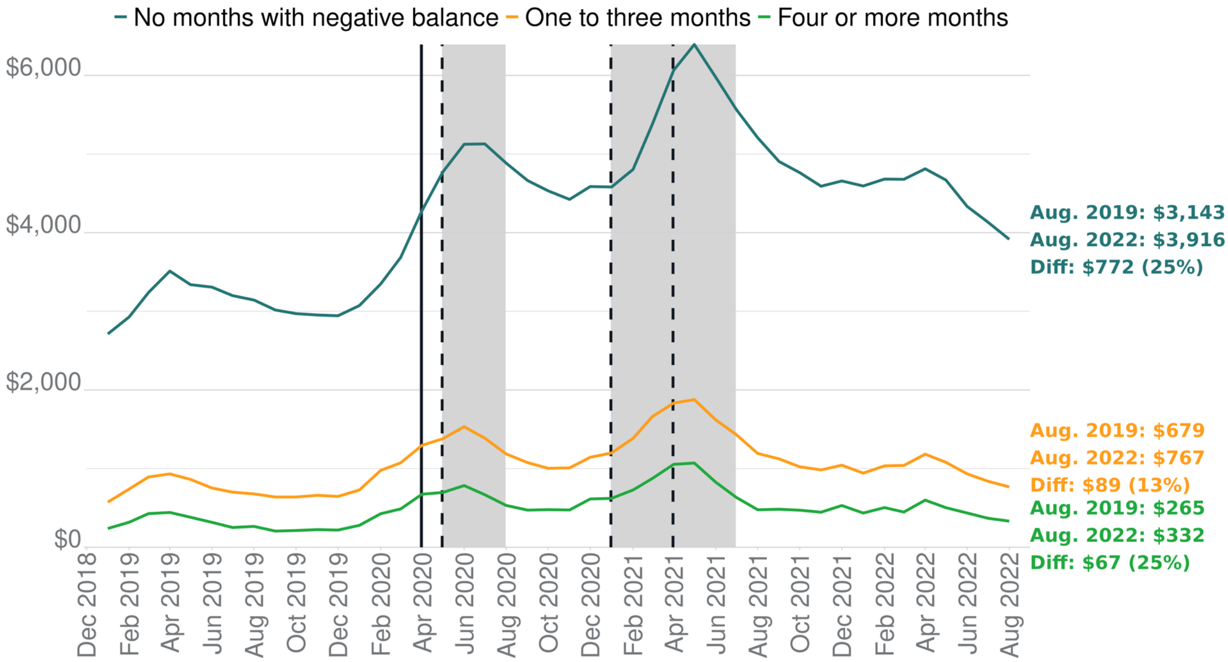
50 The increases in median account balances between August 2019 and August 2022 are $35 and $209 (respectively) when looking at actual (non-inflation-adjusted) balances.

51 Analyses of the New York Federal Reserve Bank's Survey of Consumer Expectations (June and August 2020 surveys) find that many households reported using the initial economic impact payment on essential spending and to pay down debt, with lower-income (versus higher-income) households spending a higher share of their economic impact payment on these two categories (https://libertystreeteconomics.newyorkfed.org/2020/10/how-have-households-used-their-stimulus-payments-and-how-would-they-spend-the-next/).

of the three groups who received UI benefits when the federal expansion was in place and the share that received an advance CTC payment in July or August 2021.

FIGURE 3: THE PATTERN OF ACCOUNT BALANCES OVER TIME IS SIMILAR FOR CUSTOMERS WHO DID AND DID NOT HAVE A NEGATIVE BALANCE, WITH BALANCES REMAINING ABOVE PRE-PANDEMIC LEVELS FOR ALL THREE GROUPS IN AUGUST 2022

Median of three-month rolling average of inflation-adjusted month-end account balances from January 2019 to August 2022, by number of months customers had a negative account balance in the year leading up to the pandemic



Solid line: Pandemic emergency declared
Dashed lines: Federal stimulus payments
Shaded areas: Periods of expanded federal unemployment benefits for AR and MS

Although balances have been on a recent downward trend, they remained above pre-pandemic levels in August 2022 for all three groups. However, customers with a negative account balance in the year leading up to the pandemic had relatively low account balances in August 2022. Median account balances were $332 for customers who had a negative account balance in four or more months and $767 for customers who had a negative account balance in one to three months. Median account balances (inflation adjusted) for customers in these two groups were 25 percent and 13 percent (respectively) higher than they were in August 2019.[52] Because account balances are low for these two groups, the dollar amount gains are small ($67 and $89,

[52] **Appendix Figure 12** shows the difference in month-end balances between the current month and the same month in 2019 for each of the three negative account balance groups.

respectively).[53] For customers who did not have a negative balance in the year leading up to the pandemic, the median account balance was $3,916 in August 2022, which was 25 percent ($772) higher than it was in August 2019.

TABLE 6: SHARE OF CUSTOMERS THAT RECEIVED GOVERNMENT ASSISTANCE, OVERALL AND BY NUMBER OF MONTHS CUSTOMERS HAD A NEGATIVE ACCOUNT BALANCE IN THE YEAR LEADING UP TO THE PANDEMIC

	All Customers	Number of months with a negative account balance incident in the year prior to the pandemic		
		None	1 to 3	4 or more
Economic Impact Payment	72%	71%	73%	76%
Unemployment Insurance*	7%	6%	9%	11%
Child Tax Credit**	15%	12%	20%	23%

* Includes customers who received Unemployment Insurance benefits when the federal expansion was in place.
** Received an advance CTC payment in July or August 2021.

4.2 How has the share of customers with a negative account balance changed over time?

As a measure of financial fragility, we examine the share of customers who had an account balance fall below $0 at some point during a month. Consistent with our finding for account balances, we find that the share of customers with a negative account balance declined with the EIPs but has generally taken an upward path since the last EIP in March 2021 (**Figure 4**).

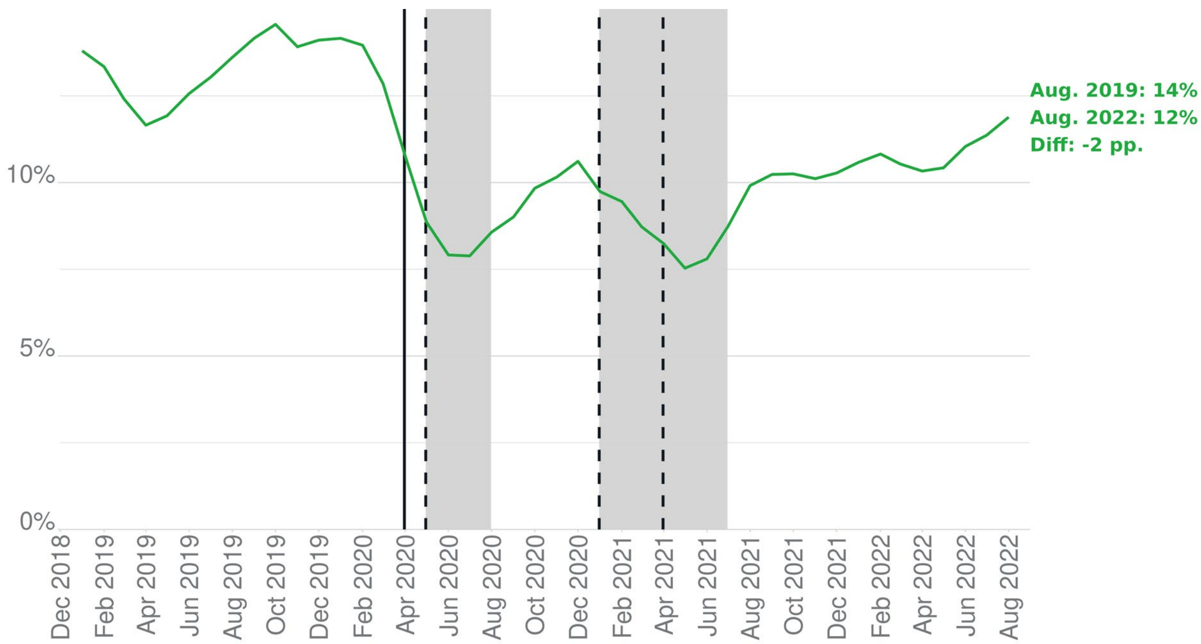
In August 2022, 13 percent of Southern Bancorp Bank customers had a negative account balance at some point during the month. The three-month rolling average is slightly lower at 12 percent (**Figure 4**). In the months following the EIPs, the share of customers with a negative balance was substantially lower—below 8 percent in some months. This suggests that the EIPs helped ease financial strain and provided some consumers a reprieve from potential consequences of negative balances, such as overdraft fees, in the post-pandemic period. This finding is consistent with data from the CFPB's Making Ends Meet survey where consumers

[53] The differences reported in the text and figure (i.e., "Diff") are based on the unrounded values that include cents, so can differ slightly from a calculation comparing the dollar amounts in August 2019 and August 2022.

reported fewer overdrafts in roughly the first year of the pandemic than prior to the pandemic.[54] Even with the recent upward trend in the share of customers with a negative account balance, an over-time comparison shows that this measure was lower by 2 percentage points in August 2022 than in August 2019.[55]

FIGURE 4: SHARE OF CUSTOMERS WITH A NEGATIVE ACCOUNT BALANCE DECLINED WITH THE ECONOMIC IMPACT PAYMENTS, BUT HAS SINCE INCREASED

Three-month rolling percentage of customers with a negative account balance from January 2019 to August 2022



Solid line: Pandemic emergency declared
Dashed lines: Federal stimulus payments
Shaded areas: Periods of expanded federal unemployment benefits for AR and MS
pp: Percentage point

54 In the June 2019 MEM survey, 23 percent of respondents reported that they overdrafted their account in the past year (roughly July 2018 to June 2019). In the later February 2021 MEM survey, the share was lower by 7 percentage points—16 percent of respondents reported that they overdrafted their account in the past year (roughly March 2020 to February 2021; authors' tabulations).

55 This finding is also consistent with data from the CFPB's MEM survey, which show a slight decline in the share of customers with an account overdraft between 2019 and 2022. In the June 2019 MEM survey, 23 percent of respondents reported that they overdrafted their account in the past year. For the February 2022 MEM survey, the share was 22 percent—lower by just 1 percentage point.

4.2.1 How does the share of customers with a negative account balance differ by customers' pre-pandemic economic circumstances?

Following our analyses of month-end balances, we examine the pattern of negative account balances by customers' economic circumstances in the year leading up to the pandemic: (1) quartiles based on their average month-end account balance and (2) three groups based on the number of months with a negative account balance incident (0, 1-3, or 4 or more months).[56] Consistent with the findings above, the share of customers with a negative balance fell for most groups in the months after the EIPs were issued and then generally increased after the last EIP.

Focusing on quartiles based on customers' average month-end balances in the year leading up to the pandemic, the share of customers with a negative account balance fell for all four quartiles after the EIPs were distributed (**Figure 5**). Focusing on customers in the lowest quartile (quartile 1), 22 percent had a negative balance in August 2022, compared with 29 percent just three years earlier in August 2019—a difference of 7 percentage points. While the share of these low-balance customers with a negative balance has fallen over time, this analysis suggests that many low-balance customers continue to struggle to keep their account balances in positive territory.

For customers in the three higher quartiles, the shares in August 2022 and August 2019 are more similar. Among customers in the second quartile, the share with a negative account balance was lower by just 1 percentage point in August 2022 (15 percent) than in August 2019 (16 percent). Customers in the upper two quartiles (higher month-end balances) are less likely to have an account dip below $0, although some of these customers also experience negative balances (**Figure 5**). In August 2022, 3 percent of customers in the top quartile (quartile 4) and 8 percent of customers in the third quartile had a negative account balance.[57] These shares are slightly higher (0.6 to 0.7 percentage points higher) than they were in August 2019.

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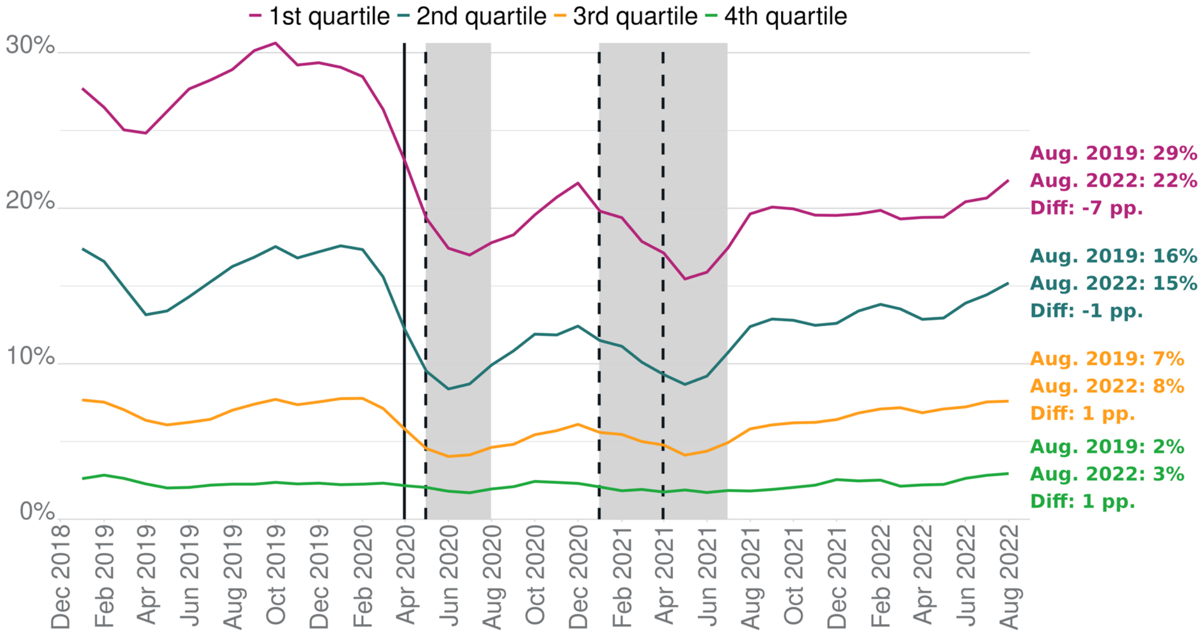
[56] We also present the share of Southern Bancorp Bank customers with a negative account balance by their age at the start of the pandemic (see **Appendix B, Figure 13**).

[57] **Figure 14** (in Appendix B) zooms in on the top quartile.

FIGURE 5: THE SHARE OF CUSTOMERS WITH A NEGATIVE ACCOUNT BALANCE DECLINED AND THEN INCREASED MOST FOR THOSE WITH LOWER PRE-PANDEMIC ACCOUNT BALANCES

Three-month rolling percentage of customers with a negative account balance from January 2019 to August 2022, by pre-pandemic account balance quartiles

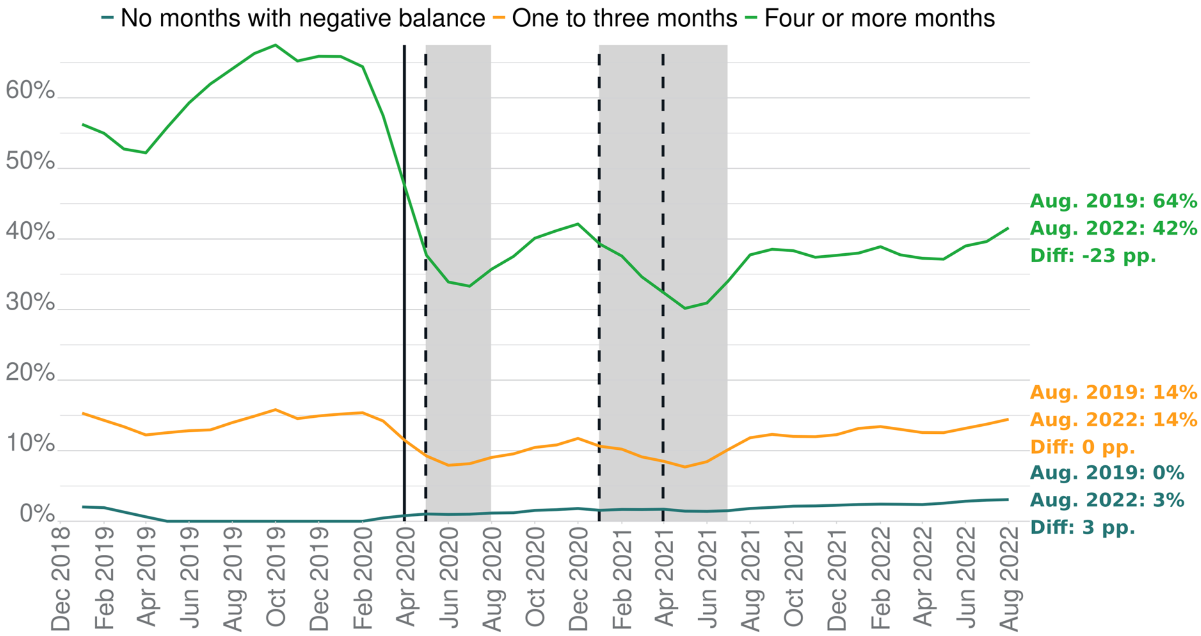


Solid line: Pandemic emergency declared
Dashed lines: Federal stimulus payments
Shaded areas: Periods of expanded federal unemployment benefits for AR and MS
pp: Percentage point

Turning to customer groups based on the number of months with a negative account balance in the year leading up to the pandemic (0, 1-3, or 4 or more months), **Figure 6** shows the pattern over time. The most dramatic change is for the most economically distressed customers based on this measure—those who had a negative account balance in four or more months in the year leading up to the pandemic. In August 2019, 64 percent of these customers had a negative balance, while the share was 42 percent in August 2022—a decline of 23 percentage points. For customers in the middle group, the share with a negative balance is the same in August 2022 and August 2019—14 percent. For customers in the best-off group (no months with a negative account balance in the year leading up to the pandemic), the only direction for them to go was up, and they did. In August 2022, 3 percent of customers in this group had a negative balance.

FIGURE 6: THE SHARE OF CUSTOMERS WITH A NEGATIVE ACCOUNT BALANCE DECLINED AND THEN INCREASED MOST FOR CUSTOMERS WITH MORE NEGATIVE ACCOUNT BALANCE INCIDENTS BEFORE THE PANDEMIC

Three-month rolling percentage of customers with a negative account balance from January 2019 to August 2022, by number of months customers had a negative account balance in the year leading up to the pandemic



Solid line: Pandemic emergency declared
Dashed lines: Federal stimulus payments
Shaded areas: Periods of expanded federal unemployment benefits for AR and MS
pp: Percentage point

Looking beyond the expansion of federal income support during the pandemic, these results highlight volatility in consumers' financial circumstances over time. The most economically distressed consumers experienced a decrease in instances of negative account balances while consumers who were better off pre-pandemic saw a slight increase. This volatility can be driven by many factors: consumers' economic standing can improve over time, such as through a higher-paying job or eliminating debt (e.g., paying off a student loan or credit card debt). On the other hand, consumers can experience unexpected shocks like a job loss, health crisis, or large unexpected expense (e.g., car repair) that weaken their economic standing.[58] Thus, as for consumers generally, the picture is not a static one among Southern Bancorp Bank customers.

[58] Upwards of 60 percent of consumers report experiencing a financial shock in the past year (Pew Charitable Trust 2015; Ratcliffe et al. 2020). Research also finds that experiencing an economic shock, particularly an income shock, is associated with declines in financial well-being (Bufe et al. 2021). Shocks like these, and the volatility they produce, point to the benefits of measuring financial vulnerability dynamically rather than using simple income-based designations alone (Salisbury et al. 2022).

5. Conclusion

This report provides a window into the financial circumstances faced by more financially vulnerable consumers, as seen through the experiences of Southern Bancorp Bank customers, during the pandemic and beyond. As compared with the broader U.S. population, Southern Bancorp Bank customers have lower account balances and a higher incidence of negative account balances. This report—and its unique focus on a historically underserved population and markers of financial distress—therefore complements previous research based on customers of a prominent national bank.[59]

Despite the economic upheaval, bank account balances increased after the onset of the pandemic—coinciding with the EIPs and expanded federal UI benefits. However, balances have generally been declining since the third and final EIP in March 2021 and the end of federal UI benefits in June 2021. Consistent with these findings, the share of customers with a negative account balance declined during the period with federal support, but it has been rising since this support ended in 2021. These patterns are consistent with trends in related measures of financial health, including financial well-being and food insecurity.[60] Moreover, analyses that group consumers by their pre-pandemic economic circumstances show similar patterns across economic groups, including Southern Bancorp Bank customers with low or negative account balances.

In general, consumers were better off in August 2022 than in August 2019, as measured using account balance data, but have nearly returned to their pre-pandemic starting point. In August 2022, median inflation-adjusted account balances stood at $1,439, compared with $1,212 in August 2019. Similarly, the share of customers with a negative account balance decreased from 14 percent in August 2019 to 12 percent in August 2021.

Our analysis suggest that the financial support provided by the federal government in the wake of the pandemic helped maintain consumers' account balance levels and prevented these balances from falling below zero. Thus, it appears that the federal support provided in 2020 and 2021 helped consumers weather strained economic conditions into 2022. However, our analyses

[59] See https://www.jpmorganchase.com/institute/research/household-income-spending/household-pulse-cash-balances-through-june-2022.

[60] Research using the CFPB's MEM data shows that financial well-being initially increased with the pandemic, but then returned to pre-pandemic levels by February 2022 (Fulford et al. 2022). Food security followed a similar trend where it increased and then returned to pre-pandemic levels (Waxman et al. 2022). Data from the U.S. Census Bureau's Household Pulse Survey suggests that the Economic Impact Payment helped ease financial hardship (https://www.census.gov/library/stories/2021/03/many-american-households-use-stimulus-payments-to-pay-down-debt.html).

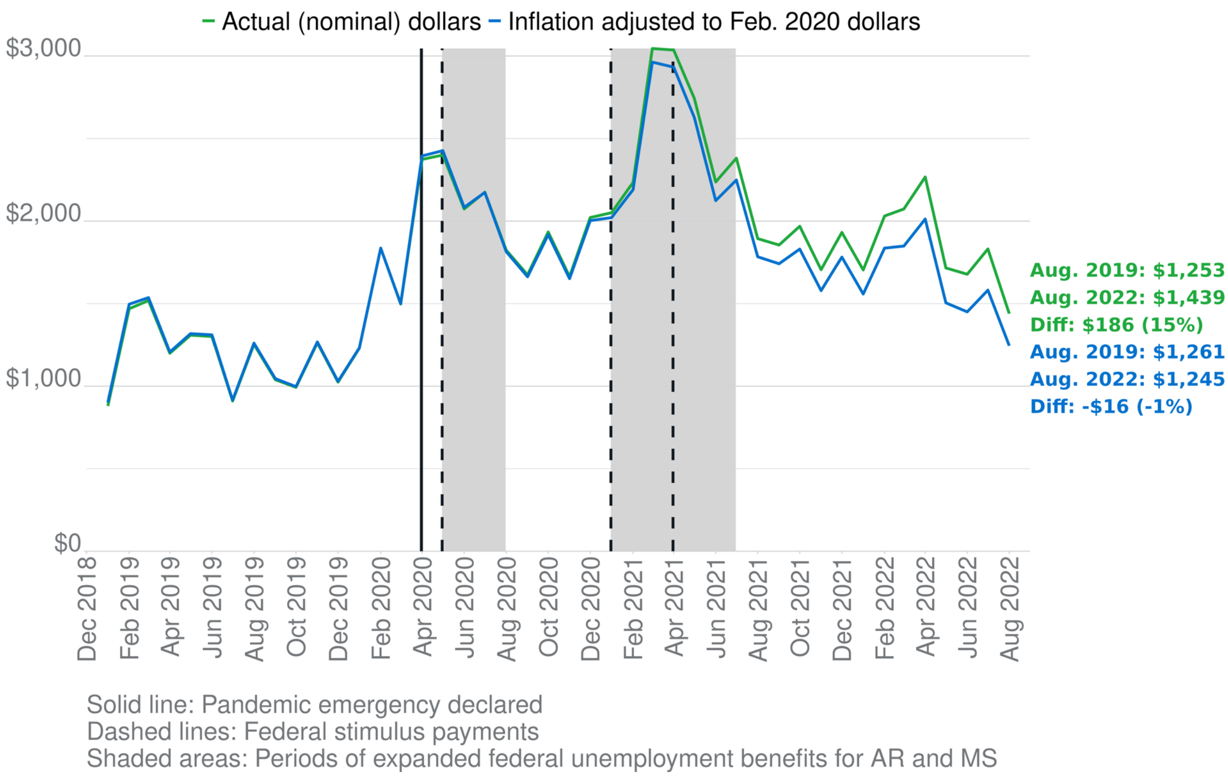
also illustrate the pressures inflation has imposed on consumers: we find that inflation reduced the nominal gains customers experienced over a three-year period by nearly half. With current high levels of inflation and continuing economic uncertainty, we expect that many consumers—particularly those who are financially vulnerable—will experience continued or newfound economic fragility.

6. Appendix A: Analysis of Customers with Closed Accounts

We examined the subset of 282 Southern Bancorp Bank customers with account(s) that closed after the onset of the pandemic (i.e., they no longer had a Southern Bancorp Bank account) and did not reopen a Southern Bancorp Bank account by August 2022, which may suggest that they moved to unbanked status. To do so, we asked whether these 282 customers were more likely to belong to the bottom (vs. the top) quartile of account balances, and whether they were more likely to have had negative account balances, during the 12-month pre-pandemic period. We find that customers with lower account balances (bottom quartile versus top quartile of account balances in the year pre-pandemic) and those with more months having a negative account balance incident (four or more versus zero months in the year pre-pandemic) were two to three times more likely to no longer have a Southern Bancorp Bank account by August 2022. While 1.7 percent of customers in the top-balance quartile no longer had an account by August 2022, the share is more than three times as large among customers in the bottom-balance quartile (6.1 percent). Similarly, 2.5 percent of customers with no negative account balances in the year before the pandemic no longer had an account by August 2022, while the share is more than twice as large (5.5 percent) among customers who had a negative balance incident in four or more months prior to the pandemic. This raises the possibility that these customers were more economically distressed and may have moved to unbanked status when their account closed.

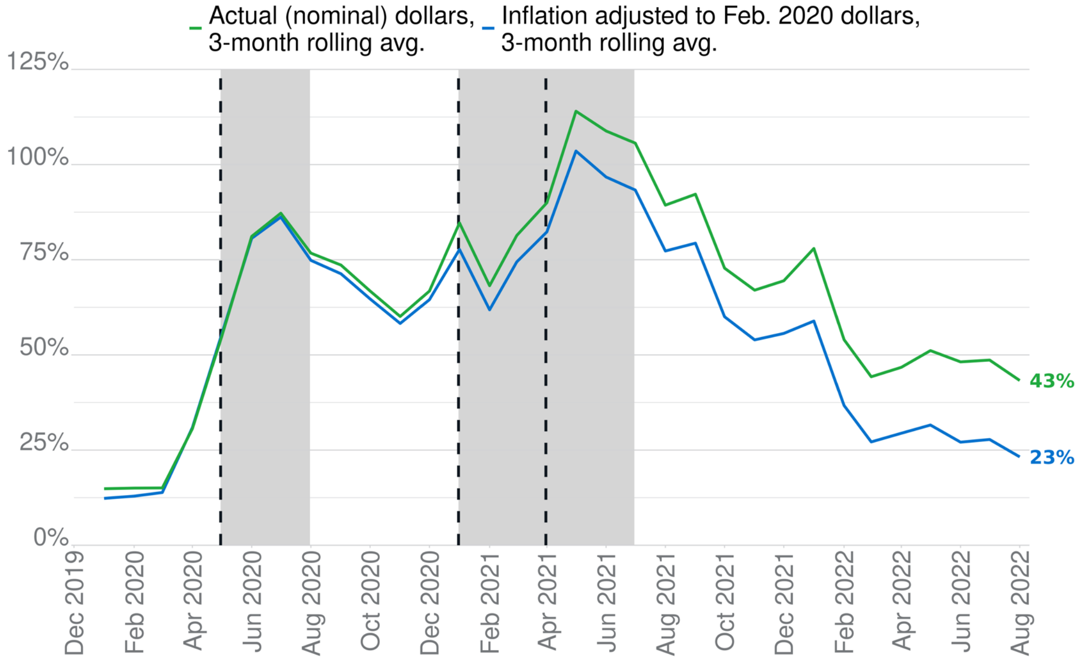
7. Appendix B: Supplemental Figures

FIGURE 7: MEDIAN OF AVERAGE NOMINAL AND INFLATION-ADJUSTED MONTH-END ACCOUNT BALANCES FROM JANUARY 2019 TO AUGUST 2022



Note: This figure shows month-end balances for each month (i.e., not three-month rolling averages). Note that August 2019 was a five-Friday month, while August 2022 was a four-Friday month (see discussion in Section 3).

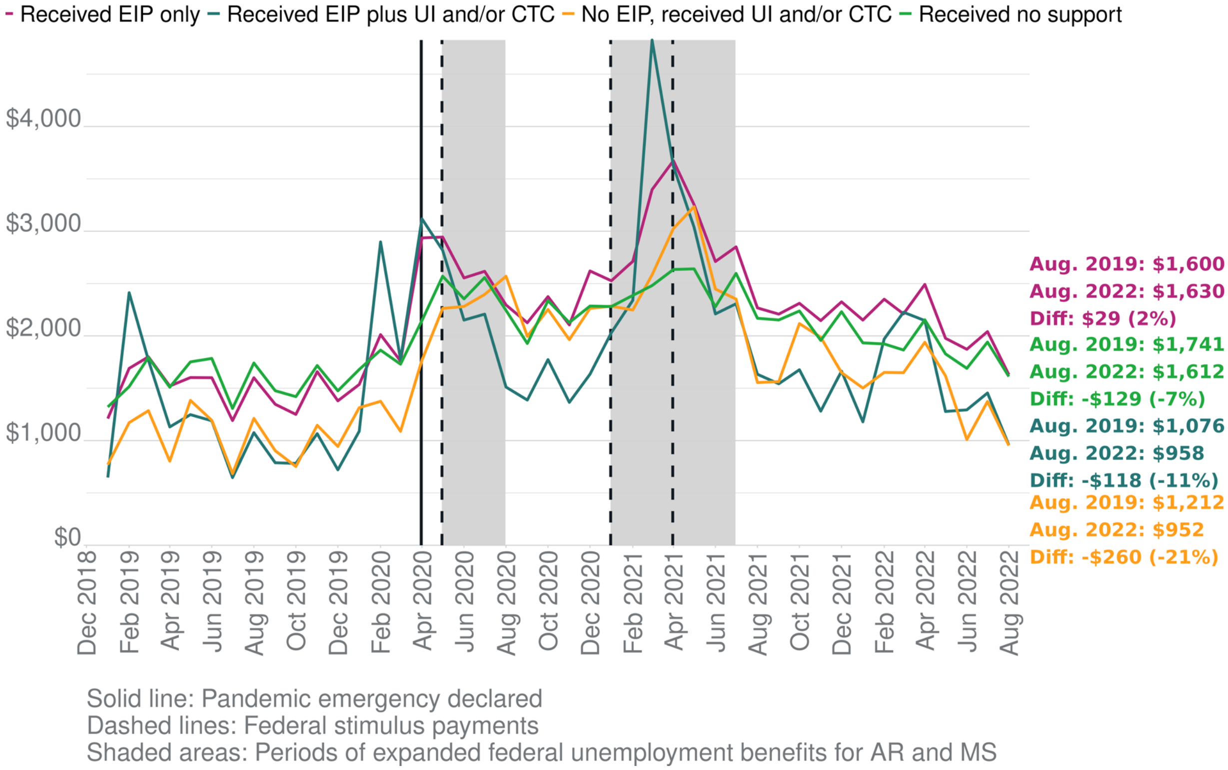
FIGURE 8: PERCENT DIFFERENCE IN MEDIAN MONTH-END BALANCES (THREE-MONTH ROLLING AVERAGE) BETWEEN THE CURRENT MONTH AND THE SAME MONTH IN 2019



Solid line: Pandemic emergency declared
Dashed lines: Federal stimulus payments
Shaded areas: Periods of expanded federal unemployment benefits for AR and MS

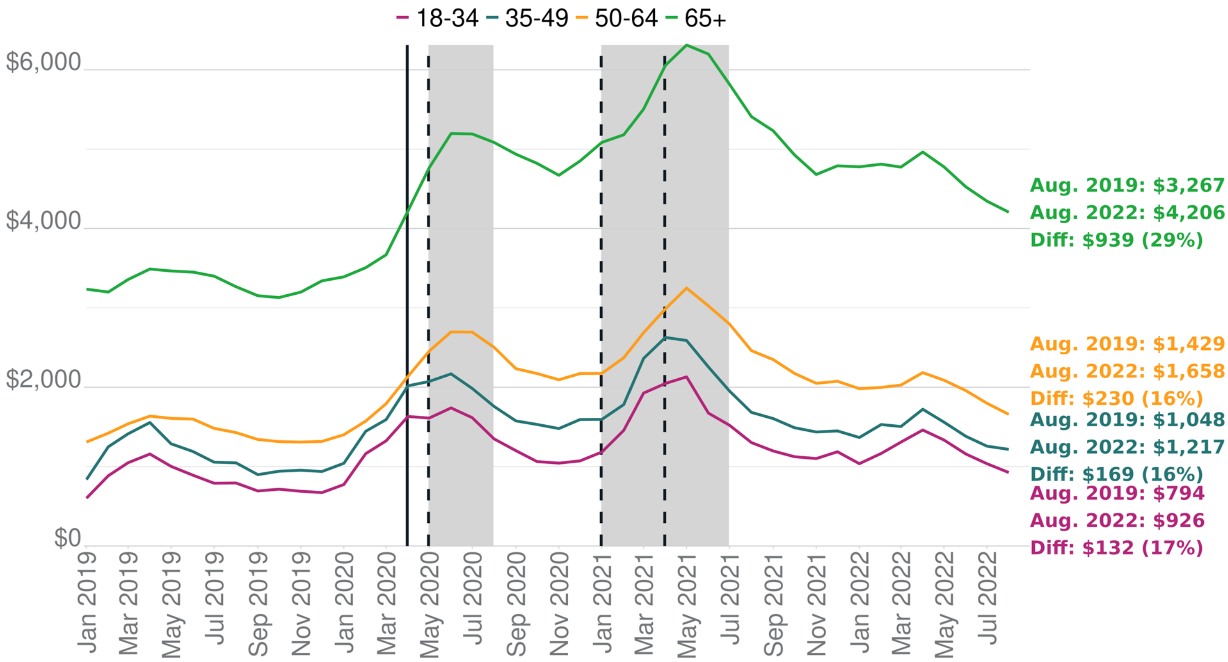
Note: This figure shows that median account balances (three-month rolling average) have been higher than pre-pandemic balances (same month in 2019), both in actual and inflation-adjusted dollars, for all months since January 2020. In August 2022, for example, the median account balance (not inflation adjusted) in August 2022 was 43 percent higher than the median account balance in August 2019. The inflation-adjusted account balance is higher by 23 percent.

FIGURE 9: MEDIAN OF AVERAGE INFLATION-ADJUSTED MONTH-END ACCOUNT BALANCES FROM JANUARY 2019 TO AUGUST 2022, BY RECEIPT OF FEDERAL INCOME SUPPORTS



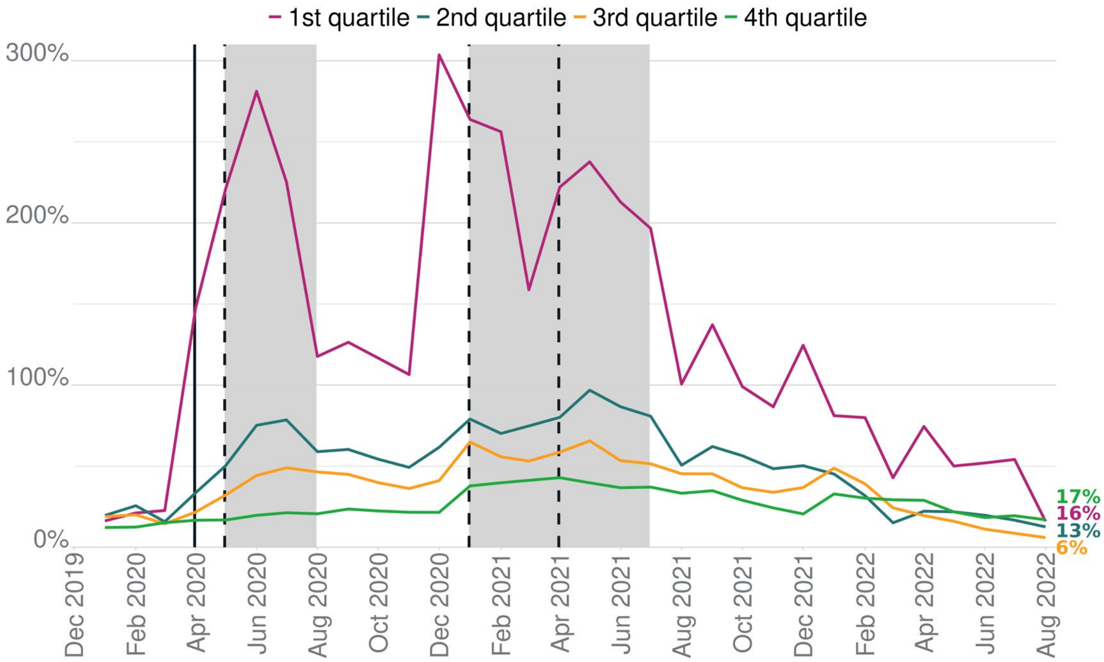
Note: This figure shows month-end balances for each month (i.e., not three-month rolling averages). Note that August 2019 was a five-Friday month, while August 2022 was a four-Friday month (see discussion in Section 3).

FIGURE 10: MEDIAN OF THREE-MONTH ROLLING AVERAGE INFLATION-ADJUSTED MONTH-END ACCOUNT BALANCES FROM JANUARY 2019 TO AUGUST 2022, BY AGE



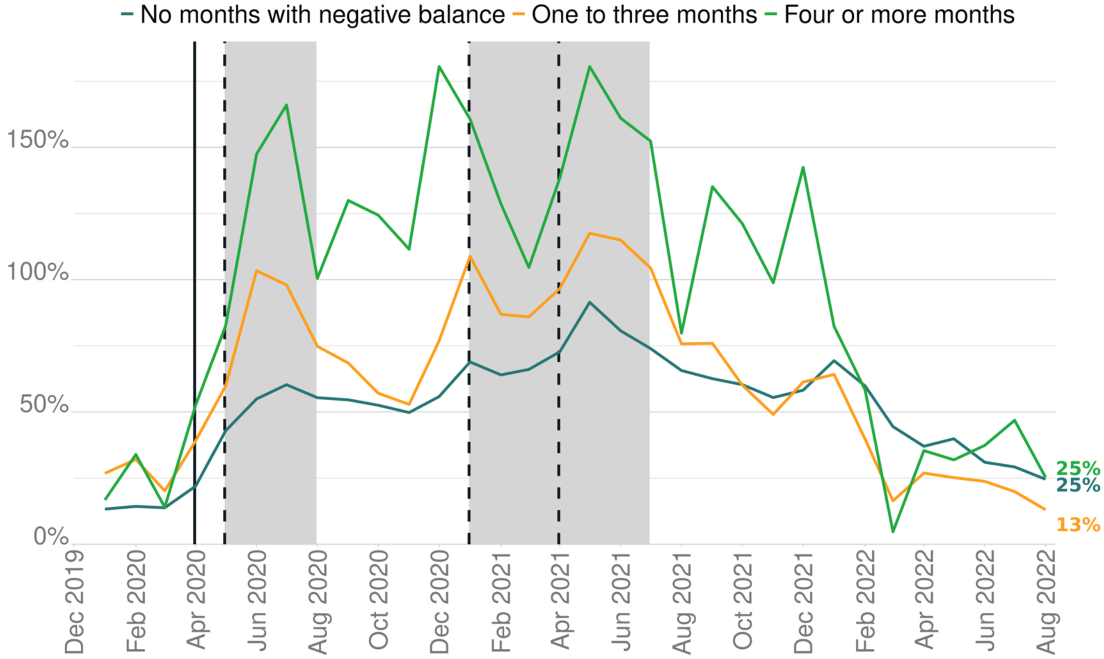
Solid line: Pandemic emergency declared
Dashed lines: Federal stimulus payments
Shaded areas: Periods of expanded federal unemployment benefits for AR and MS

FIGURE 11: PERCENT DIFFERENCE IN MEDIAN MONTH-END BALANCES (THREE-MONTH ROLLING AVERAGE) BETWEEN THE CURRENT MONTH AND THE SAME MONTH IN 2019, BY PRE-PANDEMIC ACCOUNT BALANCE QUARTILES



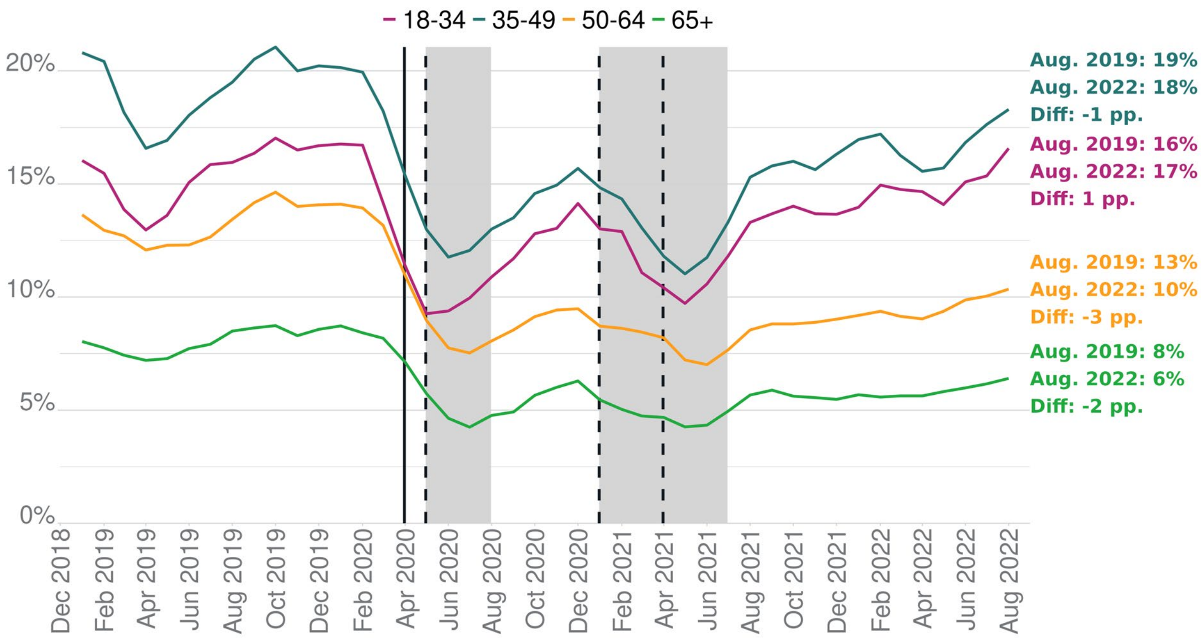
Solid line: Pandemic emergency declared
Dashed lines: Federal stimulus payments
Shaded areas: Periods of expanded federal unemployment benefits for AR and MS

FIGURE 12: PERCENT DIFFERENCE IN MEDIAN MONTH-END BALANCES (THREE-MONTH ROLLING AVERAGE) BETWEEN THE CURRENT MONTH AND THE SAME MONTH IN 2019, BY NUMBER OF MONTHS CUSTOMERS HAD A NEGATIVE ACCOUNT BALANCE IN THE YEAR LEADING UP TO THE PANDEMIC



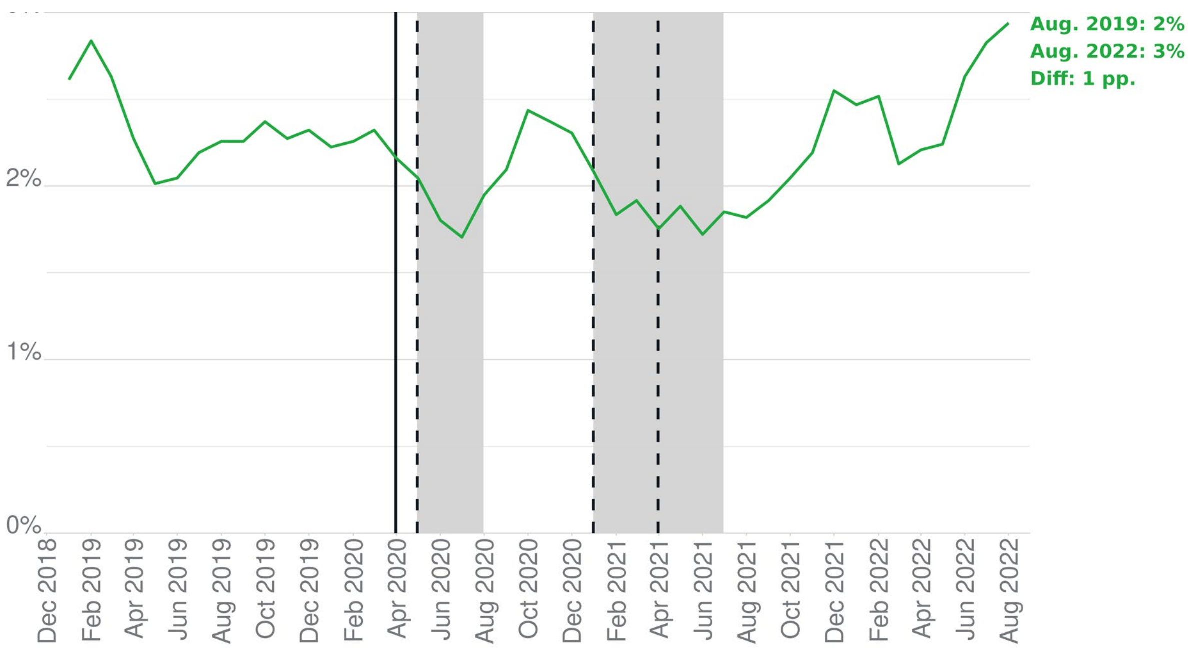
Solid line: Pandemic emergency declared
Dashed lines: Federal stimulus payments
Shaded areas: Periods of expanded federal unemployment benefits for AR and MS

FIGURE 13: THREE-MONTH ROLLING PERCENTAGE OF CUSTOMERS WITH A NEGATIVE ACCOUNT BALANCE FROM JANUARY 2019 TO AUGUST 2022, BY AGE



Solid line: Pandemic emergency declared
Dashed lines: Federal stimulus payments
Shaded areas: Periods of expanded federal unemployment benefits for AR and MS
pp: Percentage point

FIGURE 14: THREE-MONTH ROLLING SHARE OF CUSTOMERS WITH A NEGATIVE ACCOUNT BALANCE FROM JANUARY 2019 TO AUGUST 2022 FOR THE TOP (HIGHEST) PRE-PANDEMIC ACCOUNT BALANCE QUARTILE



Solid line: Pandemic emergency declared
Dashed lines: Federal stimulus payments
Shaded areas: Periods of expanded federal unemployment benefits for AR and MS
pp: Percentage point

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