

# Long-term Price Growth and Household Financial Conditions

by Dasol Kim and Jacob Lockwood<sup>1</sup>

Recent growth in delinquency rates for non-housing consumer debt has raised concern about financial distress in the household sector. This brief explored the extent to which the recent rise in consumer debt delinquencies is associated with inflationary pressures. Consumers living in areas with higher long-term price changes have higher delinquency rates on non-housing consumer debt. High growth in shelter prices, particularly for renters, is strongly related to the divergence in delinquency rates between areas experiencing higher and relatively lower price changes. Consistently, delinquency rates rose more among consumers who do not own homes than homeowners. These findings provide insight into the risks that inflation may pose to financial stability through strain on household balance sheets.

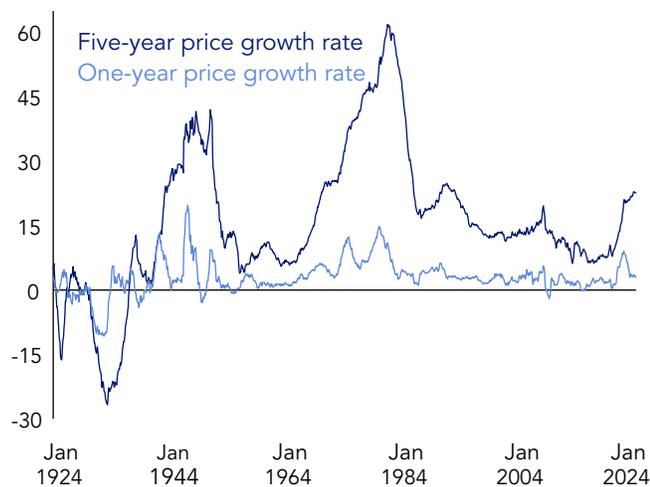
The recent rise in delinquency rates for non-housing consumer debt has raised concerns about broader stress in the household sector. Households may miss payments on consumer debt due to balance sheet strains, which could pose risks to financial institutions that lend to households. Elevated consumer debt delinquency rates have impaired financial stability in the past, most notably during the 2007-09 financial crisis when delinquency rates on residential mortgages rose sharply. A spike in foreclosures and steep losses on mortgage-related assets held by lenders and investors followed. Consumer debt delinquency rates remain well below these historical highs, but continued growth in non-current household debt could have implications for financial stability.

This brief examined the role of inflationary pressures since 2022 in recent delinquency rate trends. In the first year of the COVID-19 pandemic, consumer debt delinquency rates fell to historically low levels as a result of state and federal economic assistance and a resilient labor market. Since 2021, however, delinquency rates for non-housing consumer debt have risen above pre-pandemic levels. Starting around the same time, households witnessed price growth and monetary tightening to a degree not observed in decades.

While annual consumer price growth has slowed since 2022, long-term price changes remain high. **Figure 1** shows one-year and five-year growth rates in the Consumer Price Index (CPI) over time. As of June 2024, the five-year CPI growth rate was 23%, a rate that has not been reached since the early 1990s.

Although nominal average hourly earnings have grown by 25.2% during the same period,<sup>2</sup> there is a lot of heterogeneity in the composition of this growth across demographic groups and regions.<sup>3</sup> Disaggregated price indices also show greater long-term price increases for housing, food, and transportation, which disproportionately affect low-income households. Abrupt and pronounced increases in prices for consumer goods may strain household balance sheets and lead to greater difficulty making debt payments. These balance sheet strains may persist after annual inflation subsides as households adjust to higher price levels, especially for households with incomes that do not keep pace with price growth. As a result, lingering effects of the recent inflationary shock may contribute to rising consumer debt delinquency rates.

**Figure 1. Historical Five-Year and One-Year Price Growth Rates (percent)**



Note: Data as of July 2024. Price growth rates are one-year and five-year percent changes in the Consumer Price Index for All Urban Consumers: All Items in U.S. City Average, not seasonally adjusted.

Sources: Bureau of Labor Statistics, Authors' Analysis

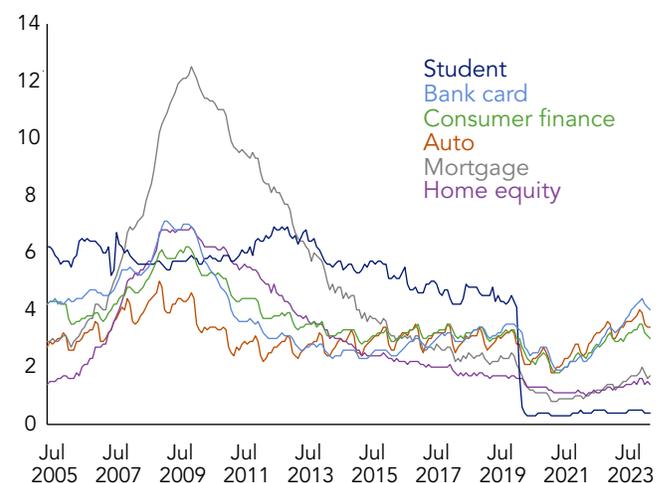
The analysis exploits variation in regional price growth to identify households more likely to experience inflation-related stress. Consumers living in areas with higher long-term price changes have had greater difficulty making debt payments since 2022. When decomposing these trends based on the CPI components, high shelter price changes explain much of the divergence in delinquencies between areas experiencing higher and lower long-term price changes. Also, delinquency rates rose more in recent years

among consumers who do not own homes than homeowners, similar to findings from prior research that delinquency rate growth has been concentrated among renters.<sup>4</sup> Persistent and large increases in shelter prices may drive the widening gap in non-housing delinquency rates between renters and homeowners, who face differing exposures to shelter price growth.

## Overview of Household Financial Conditions and Price Growth

The non-current share of consumer debt balances has increased during the past three years for credit cards, auto loans, and consumer finance loans. **Figure 2** shows the share of aggregate debt that is 30 or more days delinquent for these debt categories, as well as student loans, mortgages, and home equity lines of credit. Credit card delinquency rates have seen the greatest growth in recent years, more than doubling from a low of 1.9% in August 2021 to a recent high of 4.4% in early 2024, which was the highest level since early 2011. Auto and consumer finance delinquency rates have similarly risen beyond pre-pandemic levels. Together, these three debt categories represented more than \$3 trillion, or about 19%, of aggregate consumer debt balances as of June 2024.

**Figure 2. Delinquency Rate by Product (percent)**



Note: Data as of May 2024. All values are non-current shares of aggregate debt balances.

Sources: Equifax, Authors' Analysis

Other consumer debt categories related to housing, including mortgages and home equity lines of credit,

have maintained delinquency rates below pre-COVID-19 levels due to pandemic-era forbearance policies and high home price appreciation.<sup>5</sup> Student loans have also experienced historically low delinquency rates since 2020 due to pandemic forbearance policies and the gradual on-ramp to restarting payments since late 2023.<sup>6</sup>

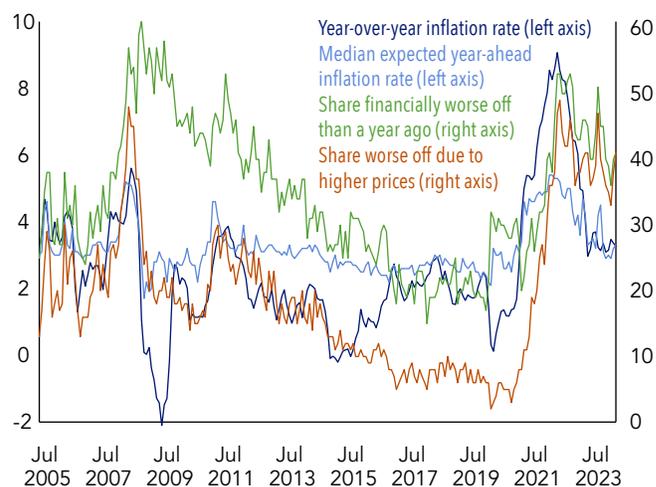
To isolate the portions of consumer debt that have seen rising delinquency rates in recent years, the remainder of this brief focuses on a combined non-housing delinquency rate that includes credit cards, auto loans, and other consumer finance loans. The non-housing delinquency rate is defined here as the share of consumers who are 30 or more days past due on payments for any of these three debt types in an Equifax consumer credit panel.

Growth in non-housing delinquency rates may signal deteriorating financial conditions among households. Consumer sentiment has also shown signs of elevated financial stress in recent years, coinciding closely with rising annual inflation in 2021 and 2022. **Figure 3** shows year-over-year percent changes in the CPI along with measures of consumer sentiment from the University of Michigan Survey of Consumers. Annual price growth spiked from below 2% at the start of 2021 to a recent high of over 9% in June 2022. During this same period, the share of respondents in the Michigan survey who said they were financially worse off than a year ago jumped from around 20% to more than half. This deterioration in self-assessed financial circumstances was closely related to the sharp increase in annual inflation. The share of Michigan survey respondents who cited higher prices as a reason for feeling financially worse off rose from 5% in early 2021 to 49% around the time inflation peaked, the highest share since this question was first asked in 1978.

Annual inflation has since fallen from its peak above 9% two years ago to around 3%, where it has remained since mid-2023 (**Figure 3**). Consumers' inflation expectations have improved as well, with median expected year-ahead inflation rates remaining around 3% in the Michigan survey since mid-2023. However, consumer sentiment has been persistently negative. As of May 2024, just over 40% of Michigan survey respondents continued to say they were financially worse off than a year ago, more than double the pre-pandemic share.

The same share still cited higher prices as a reason for feeling financially worse off. Consumers' assessments of their financial situation have not improved as quickly as annual inflation since 2022, and high price levels continue to be a major factor contributing to negative sentiment.

**Figure 3. Actual Inflation, Expected Year-Ahead Inflation, and Consumer Sentiment (percent)**

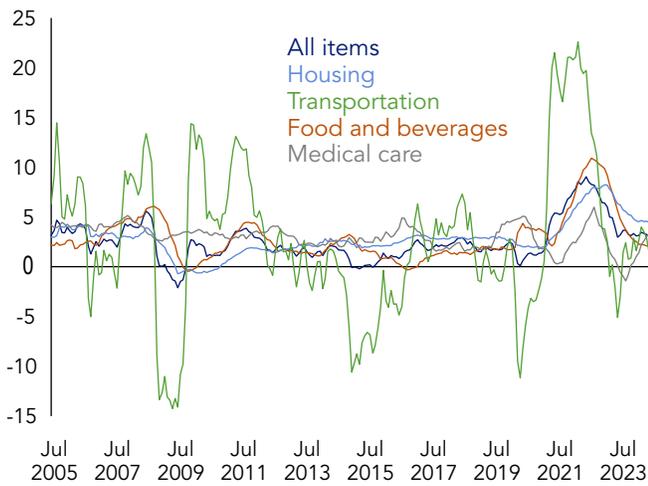


Note: Data as of May 2024. The inflation rate is the percent change from a year ago in the Consumer Price Index for All Urban Consumers: All Items (not seasonally adjusted). Expected inflation is the median percent by which respondents say they expect prices to go up during the next 12 months in the University of Michigan Survey of Consumers.

Sources: University of Michigan, Bureau of Labor Statistics, Authors' Analysis

The divergence between overall inflation and consumer sentiment may be partly related to differing growth rates across components of the CPI. In particular, annual changes in housing costs—which include the prices of shelter, utilities, and furnishings—remain higher than the composite change. **Figure 4** shows year-over-year price increases overall and for the CPI's four largest expenditure classes. While price growth rates for transportation, food, and medical care have each fallen below the 3% level of overall inflation, growth in housing costs has remained at approximately 4.5% year-over-year since the beginning of 2024. Housing represents the CPI's largest expenditure class at about 45%, nearly three times the next largest expenditure class (**Figure 5**). Most of this weight comes from shelter prices such as rent and equivalent costs paid by homeowners, which together represent 36% of CPI. Changes in shelter prices tend to lag overall inflation

**Figure 4. Year-over-Year Price Growth Rate by Consumer Price Index Component (percent)**



Note: Data as of June 2024. All values shown are 12-month percent changes in non-seasonally adjusted price indices for all urban consumers.

Sources: Bureau of Labor Statistics, Authors' Analysis

by about a year due to fixed-term price contracts such as rental leases.<sup>7</sup> As a result, annual growth in shelter prices remains above inflation in other major CPI components. Since housing costs tend to make up a large portion of household balance sheets, persistently high shelter inflation could impose financial strain on households.

Households may also continue to face elevated cost pressures because price levels are much higher than they were a few years ago. Despite declines in annual inflation, the rate of price growth remains positive year-over-year, so price levels continue to rise. Households may still be adjusting to these higher prices even if price growth over the past year has been moderate. To capture longer-term price changes, this brief focuses on five-year growth rates in consumer price indices. However, due to continued price growth, it is possible that consumers will continue to face stress from high price levels even after five-year price growth rates decline.

**Figure 5. Relative Importance and Price Growth Rates by CPI Expenditure Class**

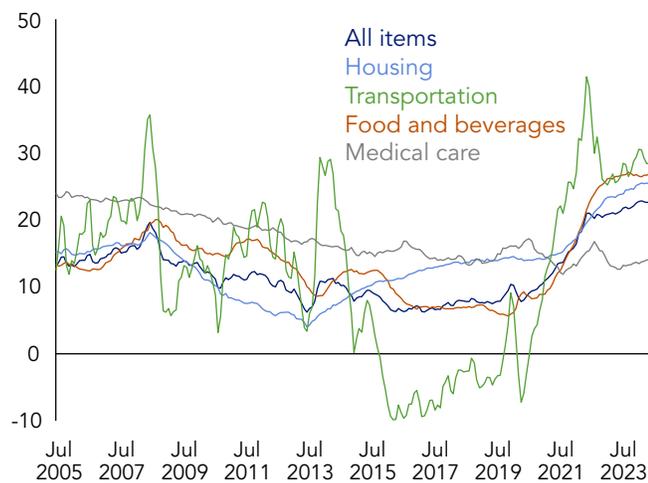
CPI Expenditure Class	Relative Importance May 2024 (percent)	One-Year Price Growth June 2024 (percent)	Change in One-Year Rate from June 2022 (percentage points)	Five-Year Price Growth June 2024 (percent)	Change in Five-Year Rate from June 2022 (percentage points)
All items	100.000	3.0	-6.1	22.7	1.7
Housing	44.980	4.4	-2.9	25.4	5.8
Shelter	36.240	5.2	-0.4	25.7	7.1
Owners' equivalent rent of residences	26.691	5.4	0.0	26.2	7.5
Rent of primary residence	7.623	5.1	-0.7	26.7	6.9
Fuels and utilities	4.335	4.2	-13.4	29.2	2.6
Transportation	16.309	1.3	-18.5	28.4	-13.0
Food and beverages	14.230	2.2	-7.8	26.9	5.4
Medical care	7.970	3.3	-1.3	14.1	-1.2
Education and communication	5.814	0.7	-0.1	6.2	0.4
Recreation	5.232	1.3	-3.3	15.0	4.7
Other goods and services	2.883	4.2	-2.5	24.6	7.9
Apparel	2.583	0.8	-4.5	6.3	4.7

Note: Price growth rates are percent changes in non-seasonally adjusted consumer price indices. The expenditure classes of housing, transportation, food and beverages, medical care, education and communication, recreation, other goods and services, and apparel sum to the All Items Consumer Price Index. Subcomponents of the Housing category are also shown, including shelter and fuels and utilities. Shelter is further broken down into rent and owners' equivalent rent indices. Not all subcomponents of Housing CPI and Shelter CPI are shown.

Sources: Bureau of Labor Statistics, Authors' Analysis

**Figure 6** shows five-year price growth both overall and for the four largest CPI expenditure classes. Though annual inflation has fallen from its peak in June 2022, long-term price growth measured over five years has continued to rise gradually since then, reaching 22.7% in June 2024. This is well above the pre-pandemic five-year price growth rate, which averaged around 9% throughout the 2010s. Five-year price growth rates for housing, food and beverages, and transportation all exceed this overall price growth rate, reflecting rapid growth in these categories during the past few years.

**Figure 6. Five-Year Price Growth Rate by Consumer Price Index Component (percent)**



Note: Data as of June 2024. All values shown are five-year percent changes in non-seasonally adjusted price indices for all urban consumers.

Sources: Bureau of Labor Statistics, Authors' Analysis

**Figure 5** further summarizes one-year and five-year price growth rates for all eight expenditure classes that combine to form the CPI, as well as some key subcomponents of housing CPI. Year-over-year price changes have fallen since 2022 for every price index in **Figure 5**, but five-year price changes have risen over the same period for most of these indices. Long-term price growth in shelter prices has seen a particularly large increase since 2022, consistent with the lagged decline in annual rental price changes.

Inflation typically causes permanent increases in price levels for consumer goods and services. High price levels can impose long lasting distress on vulnerable households, particularly when incomes do not keep up with prices. Although income growth has also been

elevated in recent years, households may still struggle with high price levels, which have only recently started to stabilize. The current moderation in year-over-year price changes will not be reflected in longer-term price growth rates until annual inflation has remained low for a longer period.

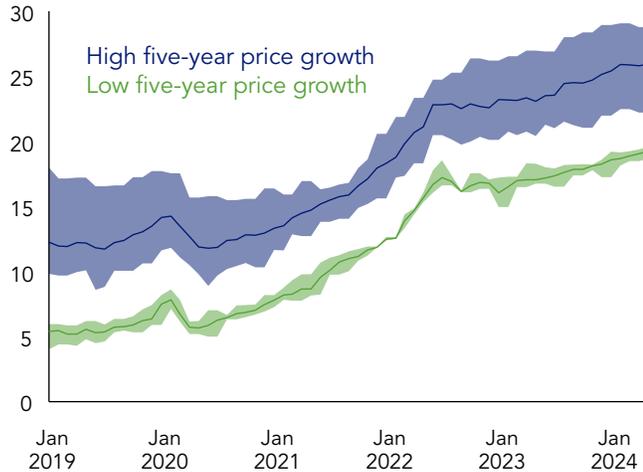
Price changes have also varied across regions, which could impose varying price pressures on households in different areas. Those living in areas with higher long-term price changes may face elevated financial stress, which could lead to greater difficulty in making consumer debt payments. As a result, consumers living in areas with higher five-year price growth rates may also have higher delinquency rates.

Thus, the analysis compares non-housing delinquency rates between areas with low and high five-year price growth rates by combining consumer credit records with geographic inflation data. An Equifax consumer panel provides delinquency information at the individual level for 10% of U.S. credit records. Local consumer price indices are available for 21 metropolitan statistical areas (MSAs), 14 of which have sufficient data to observe five-year price growth rates as far back as 2019.<sup>8</sup> Consumers in the Equifax data are matched to these 14 MSAs based on their reported zip codes, and the MSAs are separated into three groups of roughly equal size in terms of zip codes (terciles) ranked from lowest to highest five-year price growth rates. A separate delinquency rate is calculated for each of these terciles by taking the share of all consumers in each MSA group who are delinquent on a bank card, auto, or consumer finance loan. The analysis primarily compares these aggregate non-housing delinquency rates between the lowest and highest tercile of MSAs ranked by five-year price growth rates.

**Figure 7** summarizes the distribution of local five-year price growth rates in the lowest and highest tercile of these MSAs over time. The spread between these groups has remained relatively stable since 2019 as five-year price changes have shown similar growth across MSAs. As of May 2024, regional five-year price growth ranges from a minimum of 18.7% in the low-price growth tercile to a maximum of 28.8% in the high price growth tercile, a difference of just over 10 percentage points. The analysis exploits this regional variation in five-year price changes to test whether

high long-term price growth is related to the recent increase in non-housing consumer debt delinquency rates. **Figure 8** shows the non-housing delinquency rate over time for the lowest and highest tercile of MSAs ranked by five-year price growth rates.

**Figure 7. Distribution of Local Five-Year Price Growth Rates by Zip Code Tercile (percent)**



Note: Data as of May 2024. Local five-year price growth rates are calculated based on metro area CPI values, and zip codes are grouped into five-year price growth terciles. Only the lowest and highest price growth terciles are shown. Each line is the average five-year price growth rate weighted by the number of zip codes in each tercile, and the shaded areas represent the range from the minimum to maximum five-year price growth rate in each tercile.

Sources: Bureau of Labor Statistics, Authors' Analysis

## Composite Price Growth and Delinquency Rates

As shown in **Figure 8**, from 2019 through late 2022, there was little to no difference in delinquency rates between consumers living in the lowest and highest tercile of zip codes ranked by five-year price growth rates. However, non-housing delinquency rates in areas with high five-year price growth rates began to exceed those in low price growth areas in late 2022. The gap in delinquency rates between areas of low and high five-year price growth has since grown. At the start of 2024, 8.1% of consumers in high price growth areas were delinquent on non-housing debt compared to 5.9% of those in low price growth areas, a difference of 2.2 percentage points. Additionally, delinquency rates have risen in high price growth areas since 2021, but they have remained relatively stable in

low price growth areas since late 2022. This suggests that consumers living in areas with higher long-term price growth have had greater difficulty making debt payments over the past two years, potentially due to the impact of high price levels.

**Figure 8. Non-Housing Delinquency Rate by Local Five-Year Price Growth Rate (percent)**



Note: Data as of May 2024. Local five-year price growth rates are calculated based on metro area CPI values, and zip codes are grouped into five-year price growth terciles. Only the lowest and highest price growth terciles are shown. Non-housing delinquency represents the share of consumers who are non-current on a bank card, auto, or other consumer finance loan. Student loans, mortgages, and HELOCs are excluded.

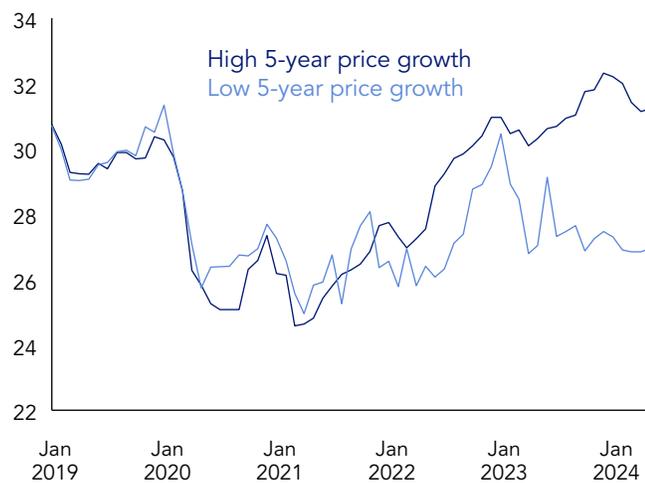
Sources: Equifax, Authors' Analysis

Average bank card utilization rates also differ among consumers in the lowest and highest tercile of zip codes ranked by five-year price growth rates. Bank card utilization, measured as the ratio of a consumer's total credit card balance to their total credit card limit, reflects the share of available credit used by a consumer. Credit cards can provide consumers with liquidity to weather shocks, but higher credit card usage may also signal financial distress. **Figure 9** shows average bank card utilization rates across consumers in the lowest and highest terciles of MSAs ranked by five-year price growth.

Consistent with the recent divergence in delinquency rates between price growth terciles, consumers in high five-year price growth areas have had higher bank card utilization rates than those living in low price growth areas since late 2022. This gap has also grown over time. At the start of 2024, average utilization was

32.2% in high price growth areas and 27.3% in low price growth areas, a gap of just over 5 percentage points. Utilization has also remained relatively stable in low price growth areas while it has risen in high price growth areas. This regional difference provides evidence that some consumers may have increased their leverage in response to higher price levels by carrying larger credit card balances, which could in turn increase their default risk and contribute to rising delinquency rates.

**Figure 9. Average Bank Card Utilization Rate by Local Five-Year Price Growth Rate (percent)**



Note: Data as of May 2024. Local five-year price growth rates are calculated based on metro area CPI values, and zip codes are grouped into five-year price growth terciles. Only the lowest and highest price growth terciles are shown. Bank card utilization is the ratio between a given consumer's credit card balance and credit card limit. Utilization rates are averaged across consumers in each price growth tercile.

Sources: Equifax, Bureau of Labor Statistics, Authors' Analysis

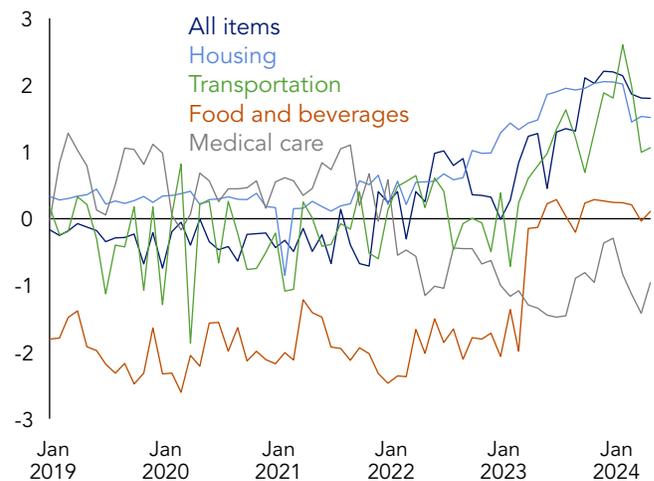
## Price Growth by Spending Category and Delinquency Rates

Since inflation rates vary across expenditure classes as shown in **Figure 5**, certain categories of consumer price growth may relate more closely to trends in delinquency and utilization rates. To analyze which expenditure classes are most relevant to consumer debt performance, the composite price index used in the previous section is decomposed into several major subcomponents, such as housing, transportation, and food. MSAs are grouped into new terciles ordered by five-year growth rates in each of these component

price indices, allowing for comparison of the spread in delinquency rates between the highest and lowest terciles of price growth across product types.

**Figure 10** shows the difference in non-housing delinquency rates between areas with high and low five-year price growth in the four largest CPI expenditure classes.

**Figure 10. Spread in Non-housing Delinquency between High and Low Five-Year Price Growth Areas by CPI Component (percentage points)**



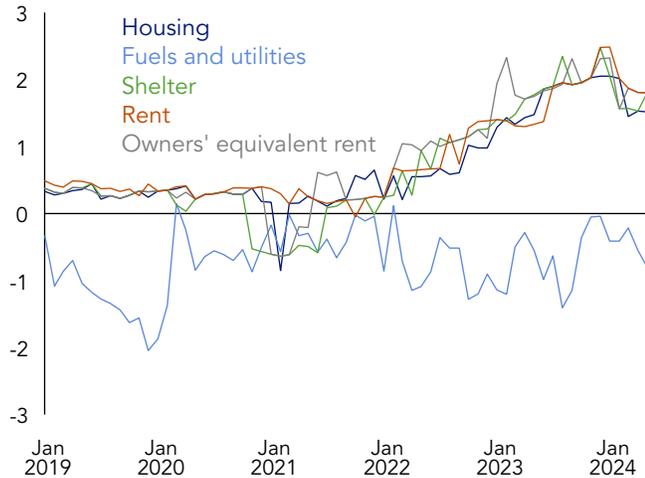
Note: Data as of May 2024. Values are differences in non-housing delinquency rates between the lowest and highest tercile of zip codes ordered by five-year price growth rates in each consumer price index component. Non-housing delinquency represents the share of consumers who are non-current on a bank card, auto, or consumer finance loan.

Sources: Equifax, Bureau of Labor Statistics, Authors' Analysis

Delinquency rates vary considerably across spending categories, though they all trended higher over the past two years. The housing price index shows an especially pronounced divergence in delinquency rates between high and low-price growth areas since 2022, with a gap exceeding 2 percentage points in early 2024 similar to **Figure 8**. Delinquency rates have also diverged over the past year between areas of high and low five-year price growth in transportation prices, but this spread has been more volatile and fell to about 1 percentage point as of May 2024. When grouping areas based on five-year price growth of food, the spread between delinquency rates in high and low-price growth areas is negative at the beginning of the sample period before

rising to around zero in recent years. Together, these results indicate that the patterns documented based on the aggregate index are not being driven wholly by any individual CPI subcomponent.

**Figure 11. Spread in Non-housing Delinquency between High and Low Five-Year Price Growth Areas by Housing CPI Components (percentage points)**



Note: Data as of May 2024. Values are differences in non-housing delinquency rates between the lowest and highest tercile of zip codes ordered by five-year price growth rates in each consumer price index component. Non-housing delinquency represents the share of consumers who are non-current on a bankcard, auto, or consumer finance loan.

Sources: Equifax, Bureau of Labor Statistics, Authors' Analysis

Housing CPI includes several component costs, such as prices of shelter, fuels and utilities, and other household items, such as furnishings. To decompose which housing costs drive the divergence in non-housing delinquency rates between high and low-price growth areas, delinquency rate spreads are compared across a few major subcomponents of housing CPI. **Figure 11** shows delinquency rate spreads between areas of high and low five-year price growth for utility costs and overall shelter prices, as well as shelter price indices specific to renters and homeowners. Delinquency rate spreads based on each shelter price index show very similar growth to those based on the overall housing price index, all rising from near zero before 2022 to a gap of more than 2 percentage points by early 2024. Meanwhile, the difference in delinquency rates between areas of high and low growth in fuels and utilities prices remains at or below zero over time. This indicates that five-year price growth in shelter prices like

rent and similar costs paid by homeowners, which together comprise about 36% of the CPI, may drive the relationship between long-term price growth and non-housing delinquency rates.

Similar patterns are present when repeating this analysis using bank card utilization rates. Areas of low and high five-year housing price growth show the most pronounced divergence in average utilization, reaching a spread over 4.5 percentage points in early 2024. Shelter prices also appear to drive the relationship between housing price growth and bank card utilization, while other CPI components generally show little to no difference in average utilization between high and low-price growth areas. Taken together, these findings suggest that high shelter price growth over the past few years may be a major contributor to the recent growth in non-housing delinquency and bank card utilization rates.

These aggregate results persist when accounting for individual-level characteristics such as age, credit scores, income, and debt balances among consumers. To confirm this, the analysis uses a linear probability model to estimate the relationship between non-housing delinquency status at the consumer level and local five-year price growth rates for several price indices while controlling for consumer characteristics. To facilitate computation, the analysis is performed using a 10% random sampling of the consumer credit panel during the period from January 2019 to June 2024.<sup>9</sup> **Figure 12** shows regression coefficients for five-year price growth rates across varying combinations of CPI components.<sup>10</sup> These coefficients can be interpreted as the number of basis points by which the probability of delinquency increases when local five-year price growth for a given expenditure class increases by 1 percentage point.

Model 1 shows that overall five-year price growth has a significant relationship with consumer-level delinquency status when controlling for individual characteristics. The likelihood of delinquency rises about 12 basis points per percentage point increase in local five-year price growth. To identify which expenditure classes drive this relationship, Model 2 decomposes overall price growth into its top-level components. Housing price growth has the strongest relationship with delinquency, followed by price growth

in food costs. Model 3 further decomposes housing price growth into two of its primary components, revealing that shelter price growth dominates the relationship with delinquency. Finally, Model 4 separates shelter price growth into rent prices and equivalent costs for homeowners. Rent price growth has a strong relationship with delinquency while growth in owners' equivalent rent has no significant effect. This suggests that renters may face greater financial strain from shelter price growth than homeowners.

In this final model, rent price growth and food price growth both have a coefficient of about five basis points, while other expenditure classes have a smaller relationship with delinquency. This implies that the probability of non-housing delinquency would increase by 0.5 percentage points if local five-year price growth in either rent prices or food prices increased by 10 percentage points. **Figure 6** showed that five-year price growth rates have increased by similar magnitudes in

recent years, and **Figure 7** showed that local five-year price growth rates currently vary by about this amount from the lowest to highest price growth metro areas. These elevated levels of long-term price growth appear to be closely related to rising rates of non-housing delinquency at both geographic and individual levels.

## Homeownership and Delinquency Rates

As the regression results in the preceding section suggest, shelter price growth may impose varying price pressures on households with different types of shelter costs. To assess this, non-housing delinquency rates are compared among consumers grouped by homeowner status in **Figure 13**. Renters and homeowners cannot be identified directly in credit bureau data, so homeownership is estimated by identifying all those who have ever had a mortgage as homeowners. This

**Figure 12. Regression Coefficients from Linear Probability Model of Consumer-Level Non-Housing Delinquency and Local Five-Year Price Growth Rates (basis points)**

CPI Expenditure Class	Relative Importance May 2024 (percent)	Model 1 Coefficients	Model 2 Coefficients	Model 3 Coefficients	Model 4 Coefficients
All items	100.000	11.8***			
Housing	44.980		5.5***		
Shelter	36.240			5.2***	
Owners' equivalent rent of residences	26.691				-0.2
Rent of primary residence	7.623				4.9***
Fuels and utilities	4.335			-0.15	-0.2
Transportation	16.309		-0.29	0.28	0.46
Food and beverages	14.230		4.1***	4.6***	4.9***
Medical care	7.970		0.89	1.4	1.5*
Education and communication	5.814		0.92	0.89	1.3
Recreation	5.232		1.5**	1.4**	1.4**
Other goods and services	2.883		1.0	0.78	0.81
Apparel	2.583		0.59	0.7*	0.6

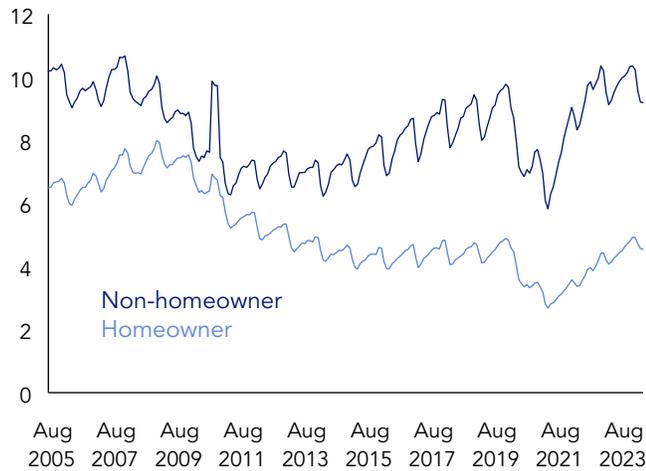
\* p-value below 0.1; \*\* p-value below 0.05; \*\*\* p-value below 0.01

Note: These results are generated using a linear probability model estimated on a consumer panel where the dependent variable is an indicator for non-housing delinquency, and the primary independent variables are local five-year growth rates in various price indices. Other controls include indicators for each consumer's age, credit score, and metro area, as well as their annual income, total debt, and an interaction between these variables. All coefficients are presented in terms of basis points.

Sources: Equifax, Bureau of Labor Statistics, Authors' Analysis

classification aims to capture both those who currently have a mortgage and those who have previously paid off a mortgage. Those who have never had a mortgage are likely to be renters, though this group may also include some people who purchased homes without mortgages or paid off a mortgage before the credit bureau data began in 2005.

**Figure 13. Non-housing Delinquency Rate by Homeowner Status (percent)**



Note: Data as of May 2024. Homeowners are defined as consumers who currently or previously had a mortgage, and non-homeowners are defined as consumers who have never had a mortgage. Non-housing delinquency represents the share of consumers who are non-current on a bank card, auto, or consumer finance loan. Student loans, mortgages, and HELOCs are excluded.

Sources: Equifax, Authors' Analysis

**Figure 13** shows that non-homeowners have persistently higher rates of non-housing delinquency compared to homeowners, consistent with the fact that renters tend to have lower incomes and credit scores than homeowners. However, the gap in delinquency rates between homeowners and non-homeowners has widened since 2021. At the start of 2024, 10.3% of non-homeowners were delinquent on a credit card, auto loan, or consumer finance loan compared to just 4.9% of homeowners—a difference of 5.4 percentage points or more than 50%. This gap grew from a recent low of 3.2 percentage points in May 2021 as delinquency rates increased sharply among non-homeowners. This finding is consistent with a prior analysis conducted by Bhutta (2023), which similarly found that recent increases in delinquency rates have been concentrated among renters.

The growing gap in delinquency rates between homeowners and non-homeowners aligns closely with the divergence in delinquency rates between areas of high and low five-year price growth. This provides evidence that high long-term price growth, particularly in shelter prices, has imposed disproportionate financial strain on non-homeowners. One reason may be that many homeowners were able to refinance into low fixed-rate mortgages during the COVID-19 pandemic prior to any interest rate hikes, shielding them from the high shelter price increases that have occurred in rental markets. Meanwhile, renters often face shelter price increases when moving to a new apartment or renewing an existing lease. Rent costs tend to weigh heavily on household balance sheets, so elevated growth in rental prices during the past few years could explain the increase in financial distress among renter households. High rents may worsen the ability to make debt payments among distressed households, contributing to the growth in non-housing consumer debt delinquency rates.

## Conclusion

There is a strong relationship between recent increases in delinquency rates for non-housing consumer debt and high long-term price growth. Borrowers living in areas with higher five-year price growth rates have had greater non-housing delinquency rates than those in low-price growth areas since 2022, and this gap has grown. This divergence is particularly associated with long-term growth in shelter prices. Housing costs comprise a large share of consumer spending and have risen rapidly in recent years. Consistent with this is a widening gap in non-housing delinquency rates between homeowners and renters, which may be driven by differing exposures to shelter price growth between these groups. These findings suggest that the lingering effects of the inflation shock of 2021 and 2022 continue to impose price pressure on the household sector even as short-term price growth has declined to moderate levels. These elevated levels of price-driven distress could pose risks to broader financial stability if consumer debt delinquency rates continue to rise.

## Endnotes

- 1 Dasol Kim, Office of Financial Research ([Dasol.Kim@ofr.treasury.gov](mailto:Dasol.Kim@ofr.treasury.gov)), and Jacob Lockwood, Office of Financial Research ([Jacob.Lockwood@ofr.treasury.gov](mailto:Jacob.Lockwood@ofr.treasury.gov)).
- 2 See data on Average Hourly Earnings of All Private Employees by the Bureau of Labor Statistics, available at <https://fred.stlouisfed.org/series/CES0500000003>.
- 3 For example, see the Federal Reserve Bank of Atlanta's Wage Growth Tracker at <https://www.atlantafed.org/chcs/wage-growth-tracker>.
- 4 For example, see Office of Financial Research Annual Report to Congress 2022 (Office of Financial Research, 2022): 43, <https://www.financialresearch.gov/annual-reports/files/OFR-Annual-Report-2022.pdf>; and Neil Bhutta, "Are Rising Rents Raising Consumer Debt and Delinquency?," Federal Reserve Bank of Philadelphia Consumer Finance Institute Brief, November 14, 2023, <https://www.philadelphiafed.org/consumer-finance/consumer-credit/are-rising-rents-raising-consumer-debt-and-delinquency>.
- 5 For example, see "Lessons Learned from the CARES Act Mortgage Forbearance Program and Its Aftermath," Federal Reserve Bank of Philadelphia Consumer Finance Institute Brief, March 2, 2023, <https://www.philadelphiafed.org/consumer-finance/mortgage-markets/examining-resolution-of-mortgage-forgiveness-and-delinquencies-first-quarter-2023>; and Homeowner Equity Insights Report, Q2 2024, by CoreLogic, available at <https://www.cotality.com/press-releases/home-equity-gains-climb-slower-q2>.
- 6 For example, see Quarterly Report on Household Debt and Credit, Q3 2024, by the Federal Reserve Bank of New York, available at [https://www.newyorkfed.org/medialibrary/Interactives/householdcredit/data/pdf/HHDC\\_2024Q3.pdf?sc\\_lang=en](https://www.newyorkfed.org/medialibrary/Interactives/householdcredit/data/pdf/HHDC_2024Q3.pdf?sc_lang=en).
- 7 Brian Adams et al., "Disentangling Rent Index Differences: Data, Methods, and Scope," American Economic Review: Insights 6, no. 2 (2024): 230-245, <https://www.aeaweb.org/articles/pdf/doi/10.1257/aeri.20220685>
- 8 The Bureau of Labor Statistics releases local CPI data for some subnational geographies, including 21 metropolitan statistical areas. Of these 21 MSAs, 7 do not have a long enough history of CPI data to calculate five-year price growth rates before 2022. These 7 MSAs are excluded from the analysis. See MSA-level CPI data available at <https://www.bls.gov/charts/consumer-price-index/consumer-price-index-by-metro-area.htm>.
- 9 In this individual-level analysis, the large number of observations in the consumer credit panel makes regression estimates difficult to compute for the full sample.
- 10 Coefficients for consumer-level characteristics are omitted from Figure 12 to conserve space.