

The when, what and where of consumer debt: The view from Cook County

by Gene Amromin and Leslie McGranahan

Consumer debt grew rapidly in the years leading up to the Great Recession,¹ and contracted sharply in its immediate aftermath. This credit cycle played out unevenly among households with different financial means and in different parts of the country. While much attention has been paid to mortgages, other debt categories, such as automobile and student, play an important role in household finances. Consequently, we analyze trends in both mortgage and non-mortgage debt across income groups during the period surrounding the Great Recession.

In an article in 2015, we explored household debt patterns in places of different income levels and across different types of consumer credit.² In particular, we divided US zip codes into population weighted income quintiles based on the average income reported on tax returns from addresses in each zip code in 2001. In addition to mortgages, we explored debt patterns for revolving home equity loans, auto debt, and student loans. For the 2015 article, we focused on the period since the Great Recession.

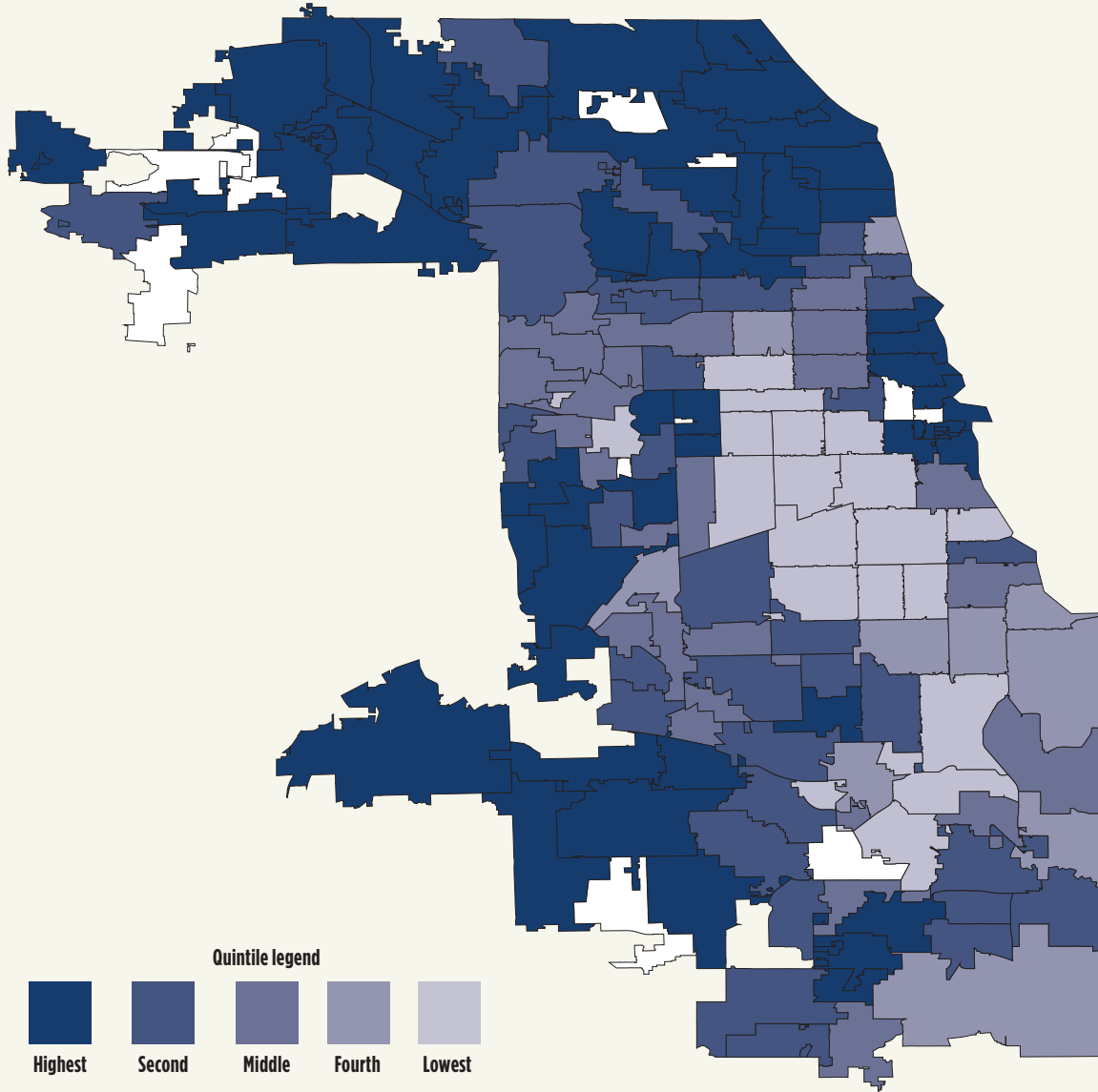
We found that debt patterns differed across income quintiles and types of consumer credit. In particular, we noted that mortgage balances consistently fell from 2008:Q3 through 2014:Q3 (the end of the sample used for the 2015 paper) in low-income quintile zip codes, while there was a modest recovery in 2013 and 2014 in the top two quintiles. For auto loans, we noted higher pro-cyclicality in consumer debt in low-income locales: greater declines in low-income areas during the recession and more rapid credit expansion during the recovery. We found that student loans rapidly increased in zip codes

across all income categories with higher growth rates in the lowest income places, albeit from a much lower base.

For the Federal Reserve's "What It's Worth" conference, we focused this analysis to investigate how these patterns played out in Cook County, Illinois, and extended our analysis through 2015:Q4. Cook County is the second most populous county in the United States with over 5 million people, and contains the entire city of Chicago and many surrounding communities. The county is economically diverse with wealthy suburbs and city neighborhoods as well as numerous poor urban and suburban areas. While the county is relatively rich with 45 percent of the population in top income quintile zip codes, the city itself is relatively poor with over a third of its population living in bottom income quintile zip codes (map 1).

The debt patterns for Cook County were broadly similar to those for the nation as a whole, albeit with several notable differences. In chart 1, we show the level of aggregate real mortgage debt relative to 2008:Q4 by income quintile for Cook County zip codes and for all US zip codes. We choose to do our calculations relative to 2008:Q4 because that is the quarter during which national total real consumer debt peaked. During the post-recession recovery, there is greater disparity amongst the income quintiles in Cook County than in the nation as a whole. In Cook County, mortgage debt in low-income zip codes has experienced greater declines in both absolute (compared to 2008:Q4) and relative terms (compared to the top quintile zip codes), when compared to the nation as whole. In addition, while there was

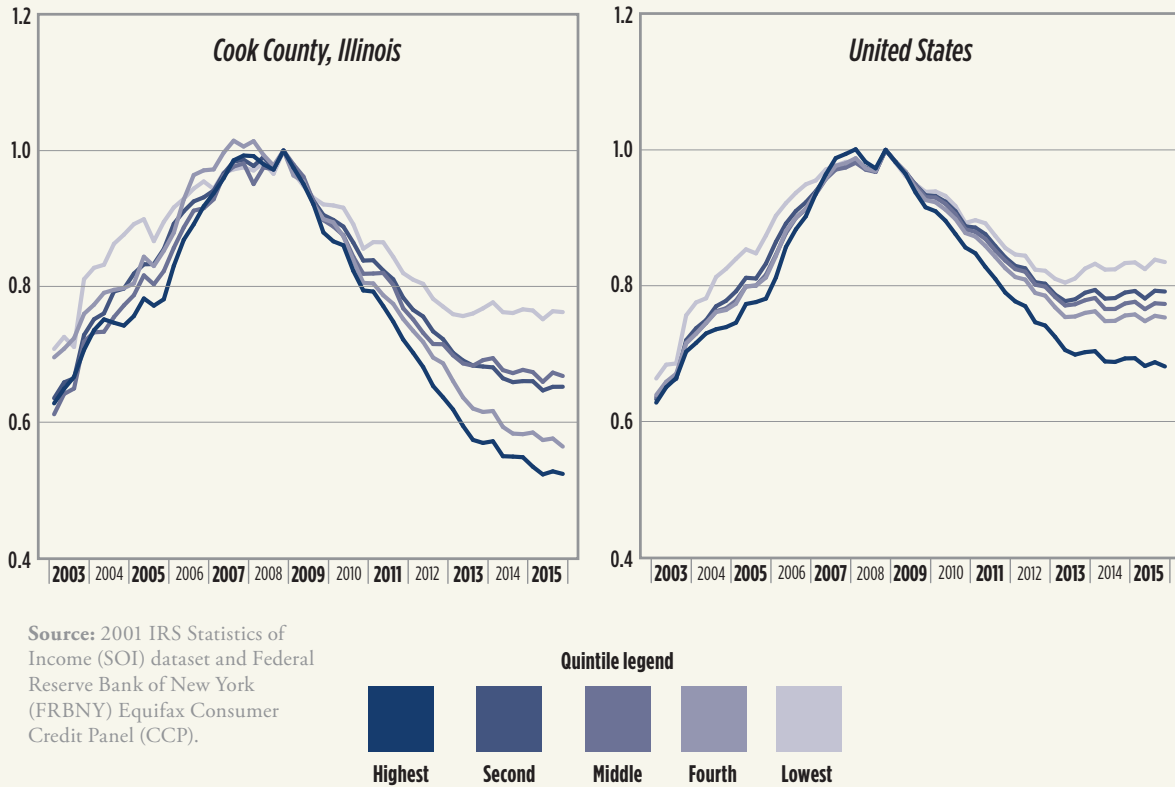
Map 1. Adjusted gross income quintile, Cook County, Illinois



Source: 2001 IRS Statistics of Income (SOI) dataset.

Map 1 shows differences in income, by zip code, across Cook County. Viewers can observe concentrations of poverty (lowest income quintile) on the west side of Chicago and in the southern suburbs. In contrast, pockets of wealth (highest income quintile) can be found in the far northern and southwestern regions of the county.

Chart 1. Mortgage debt by income quintile



modest growth in overall mortgage debt in the US since 2013, overall mortgage debt is flat or down across all five income quintiles in Cook County.

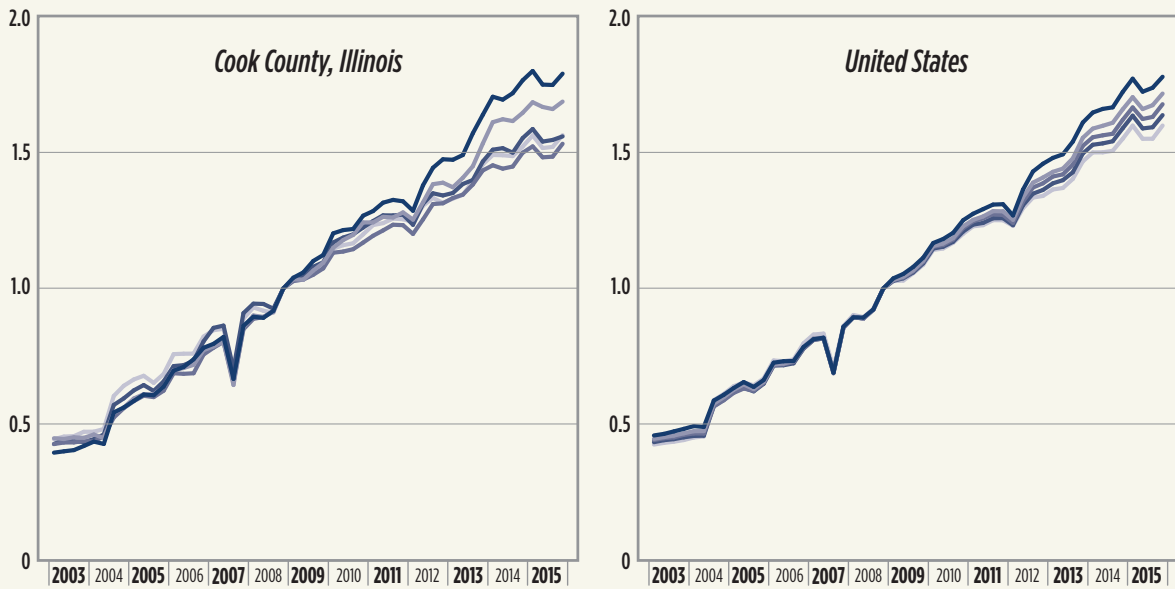
The pattern for auto debt in Cook County closely mirrors the national pattern with pro-cyclicality among all zip code income quintiles that is more pronounced in lower-income geographies.

For student loan debt, the overall pattern of rapid growth independent of macroeconomic conditions holds for Cook County as well. We show the pattern for the level of student loan debt relative to 2008:Q4 in chart 2. Debt grew at a similar pace prior to 2008:Q4 in all zip code groups. Since then, the pace of student loan debt growth has diverged across income quintiles in both the US as a whole and in Cook County with faster growth in the lowest income quintiles. This trend is slightly more pronounced in Cook County than nationwide.

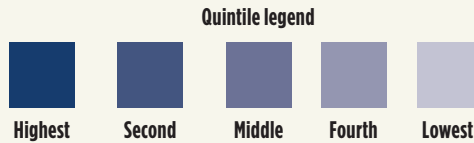
Given the dramatic rise in student loan debt, we are interested in how student loan debt levels compare to the levels of other types of debt. Since mortgage debt is by far the largest debt category, accounting for approximately two-thirds of all consumer debt, we omit it from the analysis. For the remaining non-mortgage debt categories, we look across the zip codes in Cook County to ask which type of debt represents the highest share of non-mortgage debt. There are five types of debt under consideration: home equity, auto, credit cards, student, and ‘other,’ which includes consumer finance and retail debt (such as store and gas credit cards). Results for Cook County zip codes as of 2003:Q1 (the start of the sample presented in charts 1 and 2) are presented in map 2 on page 10.

We see that in the majority of zip codes, credit card debt is the largest source of non-mortgage debt at the beginning of 2003. This is followed by auto debt, which dominates in the southern part of the County.³ The third

Chart 2. Student debt by income quintile



Source: 2001 IRS Statistics of Income (SOI) dataset and Federal Reserve Bank of New York (FRBNY) Equifax Consumer Credit Panel (CCP).



most prevalent type of non-mortgage debt, in 2003:Q1, is student loans, particularly in the zip codes with universities and areas with a high percentage of recent college graduates (e.g., Hyde Park and Lincoln Park). Home equity debt is prevalent in the wealthy northern suburbs.

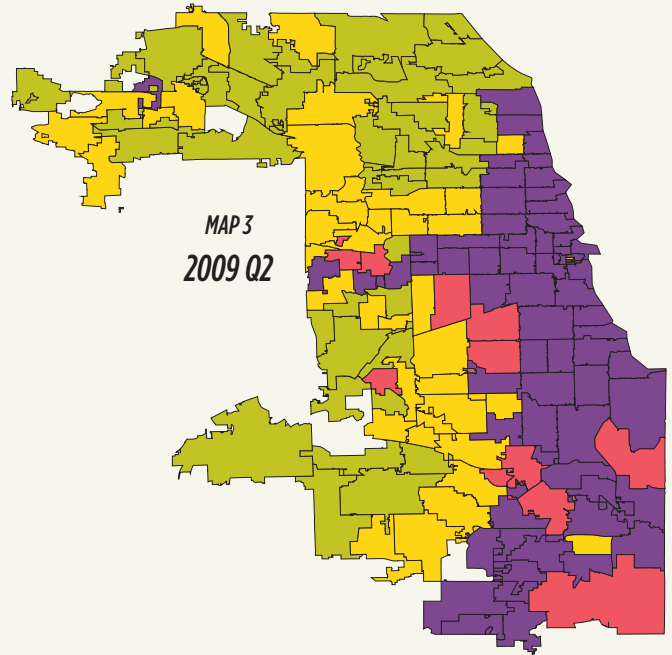
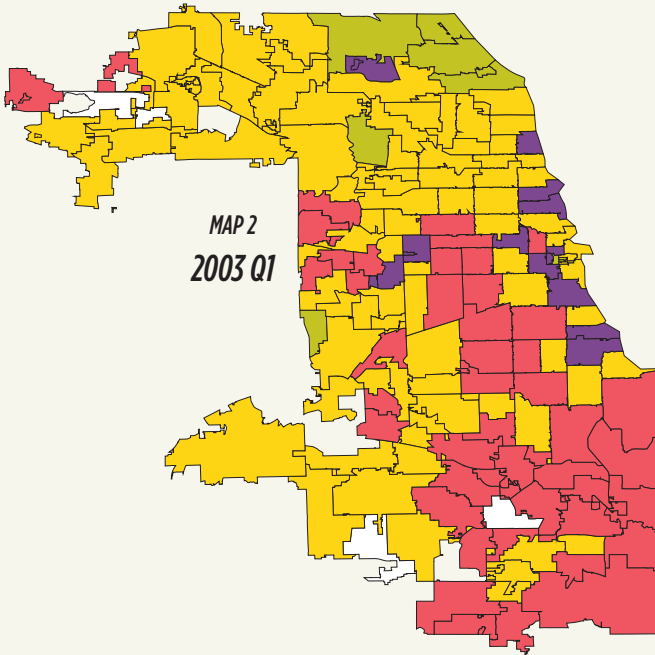
Map 3 reflects the mid-point of our sample, 2009:Q2, which shows an increased prevalence of student debt. At this point, student debt is the highest form of non-mortgage debt in two-thirds of the zip codes in the city and a quarter of the zip codes outside the city. Home equity debt is also increasing and credit card debt is the third highest level of debt when measured by number of zip codes.

Finally, in map 4, we move to the last quarter of our sample, 2015:Q4. At this point, student loan debt dominates in 82 percent of zip codes in the county. The

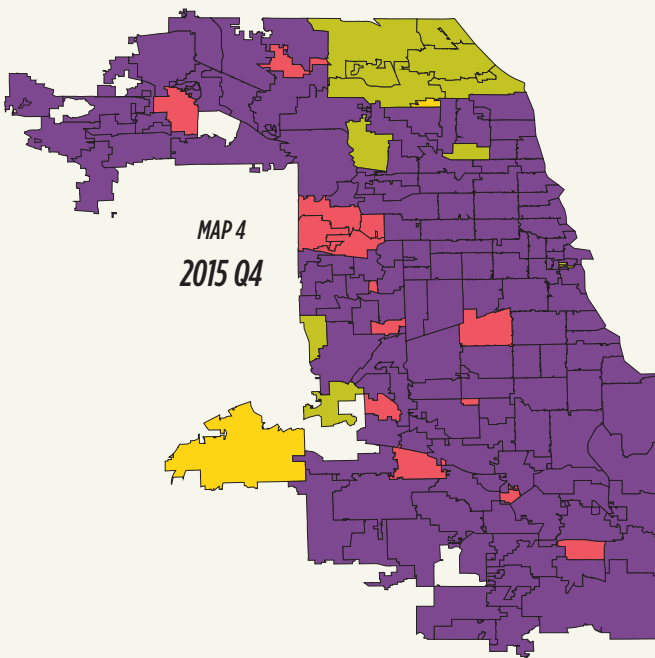
principal exception is the wealthy northern suburbs, which continue to have high levels of home equity debt. This figure shows how universal the spread of student loan debt has been across the county. Even when looking across zip codes with vastly different socioeconomic characteristics, student loan debt represents the largest source of non-mortgage debt.

The goal of this note has been to document changes in the pattern of consumer credit over time by income group and loan category in Cook County overall, and as compared to the nation. We find that patterns in Cook County largely parallel the national narrative with some modest differences. We further observe that student loan debt growth has occurred across all income groups and areas of the county. Student loans represent the single largest type of non-mortgage debt in nearly every zip code within the county independent of zip code income, or location.

Maps 2-4. Highest type of non-mortgage debt, Cook County, Illinois



student auto credit card home equity



Maps 2-4 show the transition in non-mortgage debt that occurred leading up to, through, and following the Great Recession. Whereas prior to the recession, non-mortgage debt was split between auto and credit card (Map 2), by 2015 student loan debt is almost uniformly the primary type of non-mortgage debt (Map 4).

Source: Federal Reserve Bank of New York (FRBNY) Equifax Consumer Credit Panel (CCP).

Notes

1. According to the National Bureau of Economic Research, the Great Recession lasted from 2008:Q1 through 2009:Q2.
2. Amromin, Gene, and Leslie McGranahan, 2015, "The Great Recession and Credit Trends across Income Groups," *American Economic Review*, 105(5): 147-53, available at <http://pubs.aeaweb.org/doi/pdfplus/10.1257/aer.p20151054>.
3. According to the Census Bureau, in most of these zip codes, individuals are more likely to drive to work than in the remainder of Cook County.

Biographies

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