Federal Reserve Bank of New York
Staff Reports

The Financial Crisis at the Kitchen Table: Trends in Household Debt and Credit

Meta Brown
Andrew Haughwout
Donghoon Lee
Wilbert van der Klaauw

Staff Report no. 480
December 2010

The Financial Crisis at the Kitchen Table: Trends in Household Debt and Credit

Meta Brown, Andrew Haughwout, Donghoon Lee, and Wilbert van der Klaauw

Federal Reserve Bank of New York Staff Reports, no. 480
December 2010
JEL classification: G20, D14, D12

Abstract

The Federal Reserve Bank of New York (FRBNY) Consumer Credit Panel, created from a sample of U.S. consumer credit reports, is an ongoing panel of quarterly data on individual and household debt. The panel shows a substantial run-up in total consumer indebtedness between the first quarter of 1999 and the peak in the third quarter of 2008, followed by a steady decline through the third quarter of 2010. During the same period, delinquencies rose sharply: Delinquent balances peaked at the close of 2009 and then began to decline again. This paper documents these trends and discusses their sources. We focus particularly on the decline in debt outstanding since mid-2008, which has been the subject of considerable policy and media interest. While the magnitudes of balance declines and borrower defaults, represented as "charge-offs" on consumers' credit reports, have been similar, we find that debt pay-down has been more pronounced than this simple comparison might indicate.

Key words: household debt, mortgages, household finance, financial crisis

---

Brown, Haughwout, Lee, van der Klaauw: Federal Reserve Bank of New York (e-mail: meta.brown@ny.frb.org, andrew.haughwout@ny.frb.org, donghoon.lee@ny.frb.org, wilbert.vanderklaauw@ny.frb.org). Maricar Mabutas, Sergiu Laiu, and Sungsu Kim provided excellent research assistance. The views expressed in this paper are those of the authors and do not necessarily reflect the position of the Federal Reserve Bank of New York or the Federal Reserve System.

Introduction

Policy makers, the press and academic researchers have recently showed urgent interest in the liabilities side of household balance sheets. By most accounts, the ongoing financial crisis began in the residential mortgage market, as increasingly large numbers of borrowers, especially in the nonprime market segment, became delinquent on their mortgage payments. The increase in these delinquencies and the enormous rise in residential mortgage foreclosures soon developed into a full-blown financial crisis, and led to one of the sharpest contractions in US history. While many features of the financial system played a role in these developments, household behavior was clearly a fundamental contributor.

As the financial crisis eased and economic growth resumed in the second half of 2009, many analysts pointed to consumer financial behavior as a crucial determinant of the vigor and sustainability of the economic recovery.[1] In this paper, we describe results from a new dataset that allows high-frequency monitoring of household liabilities, and describe trends in the data over both the long and short terms.

We find that the level of household debt, after a sustained period of increase, began to decline in 2008; aggregate delinquencies peaked at the end of 2009. Both figures – total debt outstanding and total delinquencies – have shown signs of stabilization in recent quarters.

Recent trends in Consumer Indebtedness

Our data begin in 1999Q1, and from that point through 2008Q3 we observe substantial increases in consumer indebtedness.[2] On March 31, 1999, consumers owed about $4.6 trillion to their creditors. During the subsequent nine years, consumer indebtedness rose 170%, reaching $12.5 trillion at the close of 2008Q3.[3] The driving force behind these changes was debt secured by residential real estate, which accounts for the great majority – over 80% in most periods - of household liabilities. Amounts owed on

[1] See for example, Gov. Duke's speech at Ohio Banker's Day, http://www.federalreserve.gov/newsevents/speech/duke20100630a.htm.
[2] See the box for a description of the dataset.
[3] By comparison, aggregate income (GDP) rose about 58% over the same period, from 9.1 to 14.5 trillion dollars.

installment mortgages and home equity lines of credit (HELOCs) more than tripled, from $3.3 trillion to $10 trillion over this period, accounting for $6.7 of the total $7.9 trillion increase in consumer liabilities. Nonetheless, other consumer debt also rose sharply, nearly doubling from $1.3 trillion to $2.5 trillion. Many factors were responsible for these increases, including rising populations, incomes, stock and house prices. Indeed, while consumer indebtedness – the liabilities side of the household balance sheet – was rising sharply, the Federal Reserve System's Flow of Funds accounts indicate that assets owned by the household sector were growing as well, leaving consumers' net wealth (the difference between the value of assets owned and liabilities owed) growing steadily over the period.

Since the close of the third quarter of 2008, US consumers have shed nearly a trillion dollars from their indebtedness, resulting in a decrease in the aggregate consumer debt balance from $12.5 trillion at its 2008Q3 peak to $11.6 trillion at the close of 2010Q3, the most recent quarter in the panel. Figure 1 shows the total debt observed in credit reports for the entire 11 years, in the aggregate and broken down by loan type. Total household debt has decreased by roughly 7.4 percent since its peak. Mortgage-related debts now account for 80% of the total debt, with the rest being composed of credit cards, auto loans and student loans. It is interesting to note that, despite the general decrease in debt, student loans have actually increased by roughly 17 percent since overall consumer debt peaked in 2008Q3.

Though the debt reduction is a nationwide phenomenon, there are significant variations across states. Figure A1 shows that the increase and subsequent decrease in household debt are more apparent in states that had an especially pronounced housing market cycle, such as California, Nevada, Florida and Arizona. Figure A2 shows the difference in September 2010 consumer debt composition over states. Many interesting differences emerge, particularly the high debt level and relatively high share of housing-related debt in boom states like California and Nevada, and the low debt level and housing debt share in Texas, where HELOCs are virtually unknown.

Recent Trends in Delinquencies on Consumer Debt

Along with the decrease in household debt, delinquency and defaults have increased rapidly with only modest signs of stabilization through September 2010, as shown in Figure 2. In 2005, delinquent balances accounted for only 4 percent of the total outstanding consumer debt balance, with serious delinquency, defined as 90 or more days late, accounting for only 2 percent of the total balance. However, these figures roughly tripled and quadrupled, respectively, accounting for 11.1 percent and 8.0 percent of the total balance as of the most recent quarter. It is interesting to see that the deterioration of household debt started as early as 2006, and accelerated from then through 2009Q4. One important fact to note in Figure 2 is that the three most recent quarters of data show a modest reversal in the share of debt that is delinquent.

Taking a look at flows into delinquency by loan type, Figure 3 shows that the deterioration of debt is common across all debt types, but the deterioration of mortgage debts preceded that of other categories. Between 2005Q4 and 2008Q4, new mortgage delinquencies tripled from $98 billion to over $310 billion. After that, the deterioration of mortgage debts slowed and, in recent quarters, appears to be stabilizing at around $220 billion per quarter.[4] Looking across the different states, Figure A3 confirms that the four housing boom and bust states, California, Nevada, Arizona and Florida, stand out against the rest of the states in terms of their levels of seriously delinquent debt.

The deterioration of mortgage and other household debts is naturally reflected in an increase in foreclosures and personal bankruptcies.[5] Figure 4 shows the quarterly number of new foreclosures and bankruptcies nationwide, with approximately two million people experiencing a new foreclosure, and approximately two million experiencing a new bankruptcy in 2009; foreclosures have fallen a bit and

[4] Delinquency and defaults in mortgage loans basically drive the patterns in total debt in Figure 2, given that mortgage related debts account for four fifths of the aggregate debt balance. Though mortgages are responsible for much of the magnitude of consumer debt, the prevalence of mortgage debt among US households is either similar to or substantially less than the prevalence of credit card debt, depending on the measure. Bucks et al. (2009) find in the 2007 Survey of Consumer Finances (SCF) that 48.7 percent of households hold home-secured debts; we observe 42.3 percent of September 2007 panel households with home-secured debts. Bucks et al. show 46.1 percent of households reporting credit card balances; we find that 76.1 percent of September 2007 panel households have positive credit card balances on their credit reports. (This discrepancy between lender and borrower debt reporting is the subject of Zinman 2009 and Brown et al. 2010.)

[5] The spike in the personal bankruptcy rate in 2005 is due to the (much anticipated) change in bankruptcy laws that made filing for bankruptcy more difficult after that year. See, for example, Morgan et al. (2008).

bankruptcies have increased in the first three quarters of 2010.[6] The foreclosure and bankruptcy rates observed for 2006Q1, by contrast, suggest an annual foreclosure rate of only 691,000, and an annual bankruptcy rate of only 855,000. The climb in both foreclosure and bankruptcy rates over the past four years has been striking indeed. Figures A4 and A5 indicate that there is, as expected, very significant geographic variation in the rates of foreclosures and bankruptcies. Again, the boom-bust states stand out in terms of foreclosure starts.

How are consumers reducing their debts?

The unusual decline in consumers' use of credit that we have observed in the last two years raises the question of its sources. At least three major mechanisms could be at work:

(i) declining consumer use of, and demand for, credit,

(ii) declining lender supply of credit and

(iii) lenders writing off an increasing amount of nonperforming debt as a result of the sudden increase in default rates

Since a large increase in charge-offs occurred at the same time as the decline in debt, mechanism (iii) is a good place to begin. If charge-offs explain the entire reduction in debt outstanding, then there is little need to look further in order to understand the roles played by the other two mechanisms. We thus now turn to the question: Is the reduction in consumer indebtedness mainly attributable to defaults, or are consumers actively reducing their debts, either voluntarily or because credit has become very difficult to obtain?

[6] It is important to reiterate that this measure of new foreclosures is at the individual level. It is the number of individuals with a foreclosure newly added to their credit reports, as opposed to the number of mortgages or houses with a foreclosure notice, a more commonly reported figure. New foreclosures are counted at the individual level by a switching on of an indicator for whether the person has experienced a foreclosure start during the past 24 months. Thus an individual who sequentially defaulted on several mortgages within a 24 month period would appear as a new foreclosure only once: when the first mortgage went into foreclosure.

For non-mortgage debt answering this question is relatively straightforward. Figure 5 shows the annual change in non-mortgage debt after stripping out charge-offs. Until 2009, consumers were increasing their non-mortgage debt obligations each year. In 2009 net borrowing other than mortgages was a small negative ($13 billion). Since consumers had been borrowing an average of over $200 billion per year between 2000 and 2007, this indeed looks like a change in behavior.

Mortgages are more complicated, because after a charge-off and foreclosure, there is typically a house that can be resold, albeit often at a discounted price. Take as an example a borrower who defaults on her $100,000 mortgage and the lender repossesses her house. The lender then resells the house to a new buyer, who pays $80,000 for the property, making a 20% down payment and financing the remaining $64,000 with a 30-year mortgage. The amount charged off in this case is $100,000, but the net change of mortgage indebtedness from this series of events is only -$36,000 (=$64,000-$100,000).

In order to focus on the active borrowing and repayment behavior of mortgage borrowers, we break the change in mortgage balances down into three categories.

(1) Changes in mortgage debt related to housing transactions, shown in blue in Figure 6, include the payoffs of mortgages associated with the "normal" (i.e., outside of foreclosure) sale of a house from one owner to another, and the opening of new first mortgages for the purpose of buying a home, whether it is for sale by its previous owner or a lender. As expected, this series has fallen sharply as the value of housing transactions has declined. In this calculation we exclude the reduction in debt attributable to charge-offs.

(2) For convenience, we show the negative contribution of charge-offs to mortgage balances as the red line. We see here clear evidence of the foreclosure crisis, as charge-offs on mortgage debt total around $600 billion between 2007 and 2009.

(3) Our final series, shown in green, combines cash-out refinances of first liens, changes in junior lien balances, including HELOCs, and regular amortization of first lien balances. While first lien amortization reduces balances at a fairly steady pace, the other

components have declined sharply since 2007. We interpret this component of balance changes as indicative of consumer responses to economic and financial conditions. While consumers were on average extracting equity and increasing their mortgage debt until 2007, they have started to pay down debt since then. Between 2000 and 2007, consumers increased their indebtedness by an average of $130 billion per year. In 2008 this series turned negative, and reached negative $140 billion in 2009.

Taken together, the mortgage and non-mortgage series reported here indicate a change in consumer behavior other than delinquency and default. While borrowing contributed an annual average of about $330 billion to consumers' cash flow between 2000 and 2007, by 2009 consumers reduced their cash flow by $150 billion to reduce these debts. This represents a $500 billion change in cash flow in just two years.

So are consumers becoming more frugal? Yes. Holding aside defaults, they are indeed reducing their debts at a pace not seen over the last ten years. A remaining issue is whether this frugality is a result of borrowers being **forced** to pay down debt as credit standards tightened, or a more voluntary change in saving behavior.

Is the new frugality voluntary?

A number of measures available in the FRBNY Consumer Credit Panel provide some insight into whether consumers' debt pay-down is voluntary, or the product of tightened credit standards. First, the panel includes information on the number of open credit accounts. Figure 7 shows a substantial decrease in the number of open accounts, especially credit card accounts, since the 2008Q2 peak. At the peak, the data reflected nearly 500 million credit card accounts in total. By 2010Q3, that figure had dropped by nearly a quarter, to 378 million accounts. This represents a striking change over a relatively short period in US consumers' use of revolving credit.

This net loss of nearly 120 million credit card accounts does not, in itself, tell us whether consumers are choosing to reduce their number of credit cards, and presumably their available credit, or

lenders are restricting new credit and terminating old borrowing relationships in the aftermath of the crisis, or both. FRBNY Consumer Credit Panel series on account openings and closings, and on credit report inquiries, shed some light on the question.

The blue line in Figure 8 shows the total number of installment and revolving accounts opened within 12 months for each quarter of the available 11 years of data. The rate of new account openings is high and flat through the middle of the decade, but then begins a decline in early 2008 that continues through the most recent quarter of data. By 2010Q3, new account openings have fallen by nearly 40%, from a peak of roughly 250 million in each of 2005Q3-2007Q3 to 158 million in 2010Q3.

Of course new account openings may slow either because consumers seek fewer new accounts or because lenders deny more applications. Data on credit report inquiries help us make a distinction here. In general, credit report inquiries are triggered by consumer applications for credit. Therefore if the number of inquiries were to remain stable while the number of new account openings fell significantly, we believe that it would be reasonably safe to infer that creditors' standards had risen, and lenders were responsible for the decline in new accounts. If inquiries track new accounts, however, then consumers would appear to help generate at least some of the decline in new accounts by decreasing their applications for credit.[7]

The credit report inquiries series in Figure 8 (green) tracks the new account series quite closely. As the 12-month rate of new account openings falls by more than a third from its 2005 to 2007 plateau of around 250 million to a low of 158 million in 2010Q3, the rate of inquiries quite similarly drops from a plateau of around 240 million inquiries per 6 month period between 2005 and 2007 to a 2010Q2 low of 150 million inquiries, before bouncing back in the most recent quarter to over 160 million. The available evidence suggests that weaker demand for credit from borrowers contributed to the decline in new

[7] One caveat that must be included here is that not all credit inquiries go to all credit bureaus, and our data come from a single bureau. If our coverage of the reporting market is relatively stable over time, then our conclusions should be reliable. However, if there are large shifts in lenders' preferred credit reporting firms over the panel then these could appear as changes in inquiry rates in our data and could generate spurious credit report inquiry trends unrelated to consumers' actual application choices.

account openings.[8] As such, the recent rebound may be a very preliminary sign that consumers are again seeking new credit.

The drop in new account openings is only half of the picture of credit account transitions. The red line in Figure 8 shows the number of credit account closings in the past 12 months for each quarter in the panel. Account closings have risen since 1999, although not steadily. From 2008Q3 to 2009Q3 closings underwent a sudden, steep increase from 226 million to a peak of 376 million. They have since moderated, to 217 million, very near their 2004-2008 levels. So at a time when new account openings were quite depressed, evidently due at least in part to softening consumer demand for credit, accounts were also being closed in record numbers. As with account openings, we cannot infer from the account closing rate whether borrowers or lenders were primarily responsible for closing existing accounts. However some lenders, including Citibank, Bank of America, Advanta, Chase Bank and others, reportedly closed large numbers of accounts in 2009, particularly troubled and inactive accounts.[9] These results are consistent with recent survey evidence indicating that 13% of consumers had a credit card account closed by their bank during 2009 (Chakrabarti et al., 2010).

Figure 9 documents a steep, nine quarter decrease in borrowing limits on credit card accounts from 2008Q3 to 2010Q3, and a simultaneous (if less pronounced) borrowing limit decrease for home equity revolving accounts. In the credit card case, total credit limits decreased by 28 percent over the nine quarters, pushing up the utilization rate (balance divided by credit limit) by four percentage points, despite a decline in credit card balances over the period. At the same time, the relatively modest HELOC limit decrease, in the face of nearly flat HELOC balances, also led to a five percentage point increase in utilization. Credit limit decreases are very rarely requested by consumers. Further, in quarterly Federal Reserve Senior Loan Officer Surveys (Federal Reserve 2008-2010), large fractions of loan officers

[8] It is possible, of course, that consumers are not applying for credit because they believe that lending standards have tightened. In addition, the decline in inquiries is likely to reflect a reduction in consumers' receipt of credit card offers. Our data by themselves thus cannot cleanly distinguish whether supply or demand has declined.

[9] See two *American Banker* articles by Kate Fitzgerald: "Bill Due for '09 Account Closings," March 8, 2010 and "Issuers Found to Cut Inactive Accounts," September 14, 2010.

reported lowering credit limits for existing consumer accounts from April of 2008 through early 2010. The data suggest that lenders have acted to curtail consumers' existing credit in the face of growing delinquency rates and broader financial market uncertainty.

Gross and Souleles (2002) estimate consumers' "MPC out of liquidity", i.e., their propensity to increase (decrease) consumption in response to an increase (decrease) in available credit, to be 10-14 percent. Hence the large decreases in available revolving credit from 2008 to 2010 can be expected to have meaningful effects on consumer spending and therefore on consumer debt. This suggests that lenders' reduction of credit card limits by 28 percent and of HELOCs by 12 percent entailed a substantial lender-side contribution to the recent consumer deleveraging trend.[10]

Why did consumers reduce their debts?

Overall, the evidence suggests that while tightened lending standards have played a major role in declining liabilities of the household sector, consumer-initiated reductions in debt have contributed substantially as well. This conclusion raises the further question of why households chose to reduce their debts, especially during a period in which many saw their incomes stagnate or drop. Here our data are less informative, but we can combine them with other data sets to make some suggestions. Two explanations merit special attention.

First, the decline in consumer debt is temporally correlated with the very rapid rise in unemployment rates in the latter half of 2008. Rising unemployment affects consumer debt decisions in two potentially offsetting ways. First, households may choose to build their precautionary savings (or increase their available credit) to insure their cash flow against a job loss. This would tend to reduce debt balances outstanding. Second, households that do experience a job loss may use their credit accounts to smooth their consumption, leading to more borrowing. Undoubtedly, the data in figures 5 and 6 reflect the net effects of both types of household behavior, although it is difficult to determine the net effect. Going

[10] In addition to account closings and credit card limit reductions, average interest rates on revolving consumer credit have increased since 2008 (Federal Reserve 2010).

forward, reductions in unemployment risk should temper the demand for precautionary savings by households, and reduce borrowing to smooth consumption during unemployment spells.

A second possible source of declines in consumer debt comes from the other (asset) side of household balance sheets. Here we focus particularly on mortgage debt, the major form of collateralized household debt. An important consequence of the initial increase and subsequent fall in average housing prices for households is the dramatic fall in home equity. As shown in Figure 10, with the rise in home prices total equity of homeowners rose. However, it did so at a much lower rate, with homeowner's equity share in their homes actually staying relatively constant until the end of 2006. On average for each 1% increase in home prices, homeowners increased their mortgage debt by 1% (through higher balances on first mortgages, cash-out refinances, second mortgages and home equity lines of credit), so that their equity share in their homes actually remained constant. When home prices began to fall in 2007, owners' equity in household real estate began to fall rapidly from almost $13.5 trillion in 1Q 2006 to a little under $5.3 trillion in 1Q 2009, a decline in total home equity of over 60%. At the end of 2009 owner's equity was estimated at $6.3 trillion, still more than 50% below its 2006 peak. If consumers have a target for their net housing wealth, as their actions during the boom suggest, then absent an increase in house prices, consumer mortgage debt reduction may continue for some time to come.

Conclusions

The FRBNY Consumer Credit Panel provides a unique look into household borrowing and debt payment behavior. The data clearly show the dramatic reversal in household behavior after 2008, as debt levels fell and delinquencies rose sharply. Taking into account the contribution of an unprecedented increase in defaults**,** we find important roles for both tightening credit and voluntary actions by consumers in reducing debts. In light of recent improvements in credit availability, a key question is how much further voluntary debt reduction will proceed before consumers begin to spend again.

This question is important for the economic outlook. While household debt paydown has helped improve household balance sheets, it has also likely contributed to slow consumption growth since the beginning of the recession. Thus the trajectory for consumer indebtedness has important implications for consumption and economic growth going forward, and we will continue to monitor these important trends in our data, and will make key information available to the public on our website.[11]

[11] See http://www.newyorkfed.org/research/national_economy/nationalindicators.html under Household Credit for quarterly releases of many of the key data series and occasional supplemental reports.

References

Avery, Robert B., Paul S. Calem, and Glenn B. Canner. "An Overview of Consumer Data and Credit Reporting." *Federal Reserve Bulletin*, February 2003, pp. 47-73.

Bucks, Brian K., Arthur B. Kennickell, Traci L. Mach, and Kevin B. Moore. "Changes in U.S. Family Finances from 2004 to 2007: Evidence from the Survey of Consumer Finances." *Federal Reserve Bulletin*, February 2009, pp. A1-A55.

Chakrabarti Rajashri, Donghoon Lee, Wilbert van der Klaauw and Basit Zafar, "Household Debt and Saving during the 2007 Recession". Forthcoming FRBNY Staff Report.

Federal Reserve, Senior Loan Officer Opinion Survey on Bank Lending Practices, April 2008-April 2010. Available at http://www.federalreserve.gov/boarddocs/snloansurvey.

Federal Reserve Statistical Release, G.19, Consumer Credit. June 2010. Available at http://www.federalreserve.gov/releases/g19/Current/g19.pdf.

Gross, David B. and Nicholas Souleles. "Do Liquidity Constraints and Interest Rates Matter for Consumer Behavior? Evidence from Credit Card Data," *Quarterly Journal of Economics*, February 2002: 149-185.

Hunt, Robert M. "The Development and Regulation of Consumer Credit Reporting in America." *Federal Reserve Bank of Philadelphia Working Paper* no. 02-21, November 2002.

Lee, Donghoon and Wilbert van der Klaauw. "An Introduction to the FRBNY Consumer Credit Panel," FRBNY Staff Report 479, November 2010.

Morgan, Donald, Benjamin Iverson, and Matthew Botsch. "Seismic Effects of the Bankruptcy Reform." *Federal Reserve Bank of New York Staff Reports*, Number 358, November 2008.

Sullivan, James X. "Borrowing During Unemployment: Unsecured Debt as a Safety Net," *Journal of Human Resources*, 43(2): 383-412, 2008.

Whitehouse, Mark. "Defaults Account for Most of Pared Down Debt," *Real Time Economics blog*, September 18, 2010, available at http://blogs.wsj.com/economics/2010/09/18/number-of-the-week-defaults-account-for-most-of-pared-down-debt/; last accessed October 1, 2010.

Box: Short data description of FRBNY Consumer Credit Panel

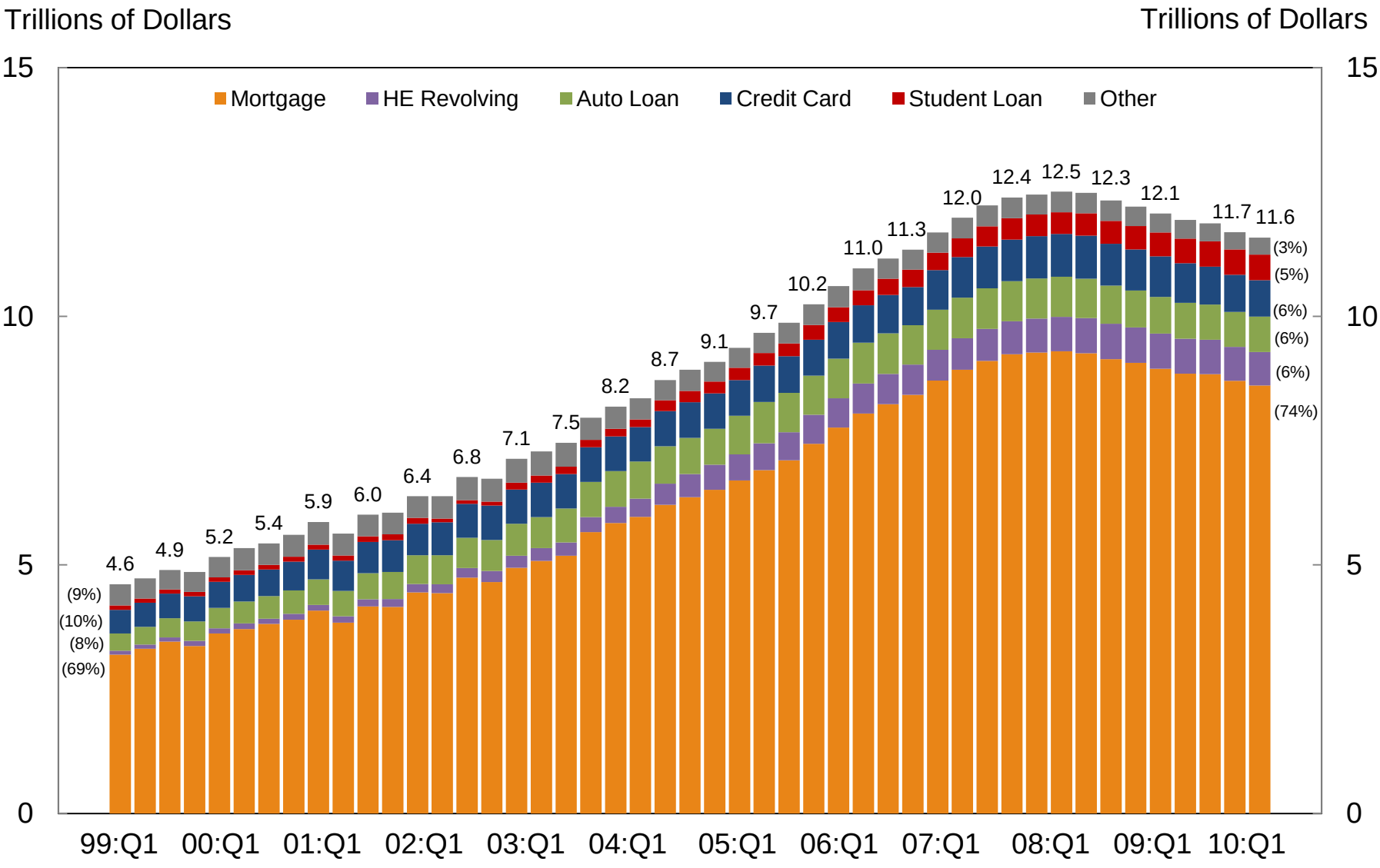
The analysis in this study is based on credit report data from the FRBNY Consumer Credit Panel. The panel comprises a nationally representative 5% random sample of US individuals with credit files, and all of the household members of those 5%. In all, the data set includes files on more than 15% of the adult population (aged 18 or older), or approximately 37 million individuals in each quarter from 1999 to the present. The underlying sampling approach ensures that the panel is dynamically updated in each quarter to reflect new entries into and exits out of the credit markets, with young individuals and immigrants entering the sample and deceased individuals and emigrants leaving the sample at the same rate as in the population of individuals with credit files. In each quarter, the records of all other household members who shared a primary individual's mailing address were also included. Even though all individuals included in the database are anonymous, the panel allows one to track individuals and households consistently over time. In addition to the computation of nationally representative estimates of individual and household level debt and credit in each quarter, the panel therefore permits a rich analysis of the dynamics of consumer debt and related policy issues at both the individual and household levels.

Since the FRBNY Consumer Credit Panel data are collected at the borrower level, they offer a more comprehensive perspective on mortgage debt than is available in standard loan-level datasets. In addition to detailed data on all debts secured by residential real estate, the panel includes information on individuals' and households' other loans, such as credit cards, auto loans and student loans. For example, we know the credit limit on each type of account (e.g., the combined credit limit on all credit cards).[12] More general information available in the panel include the residential location of the borrower at the census block level, the individual's year of birth, the individual's credit experience such as foreclosure, bankruptcy and collection, as well as a consumer credit score that is comparable to the well known FICO score. More details regarding the sample design and data content can be found in Lee and van der Klaauw (2010).[13]

[12] This field is known as the "high credit" amount in the credit report data. It refers to either the credit limit (for credit cards, home equity lines of credit and other revolving debt) or the highest balance (for mortgages, auto loans and other installment debt). There are instances in which credit limits on revolving accounts are unreported, in which case the high credit variable reflects the historical high credit level for the account. Avery et al. (2003) and Hunt (2002) point out that reporting of credit limits in credit reports has improved considerably in recent years.

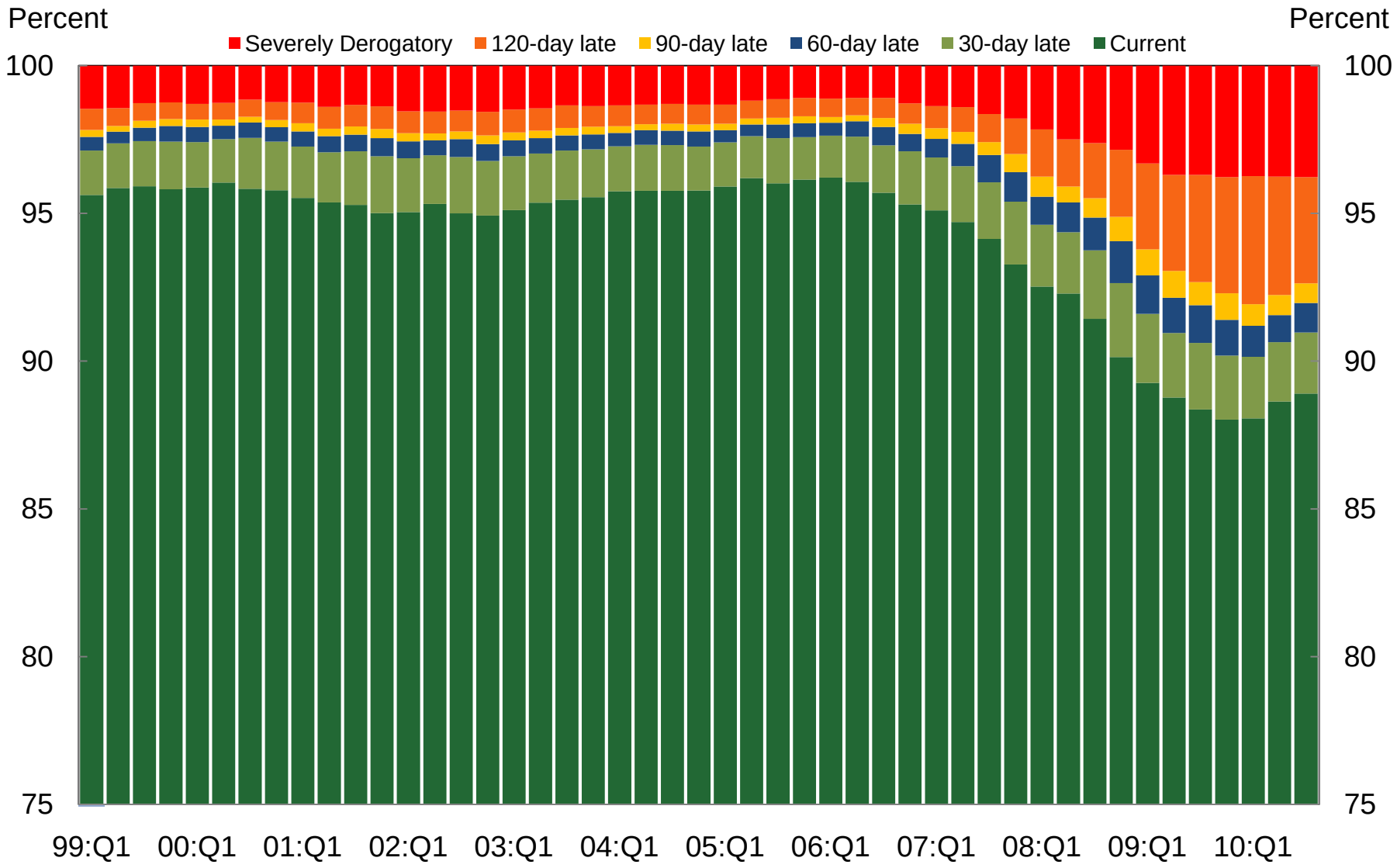
[13] Lee, D. and W. van der Klaauw, "An Introduction to the FRBNY Consumer Credit Panel", Staff Report 479, November 2010.

Fig 1. Total Debt Balance and its Composition



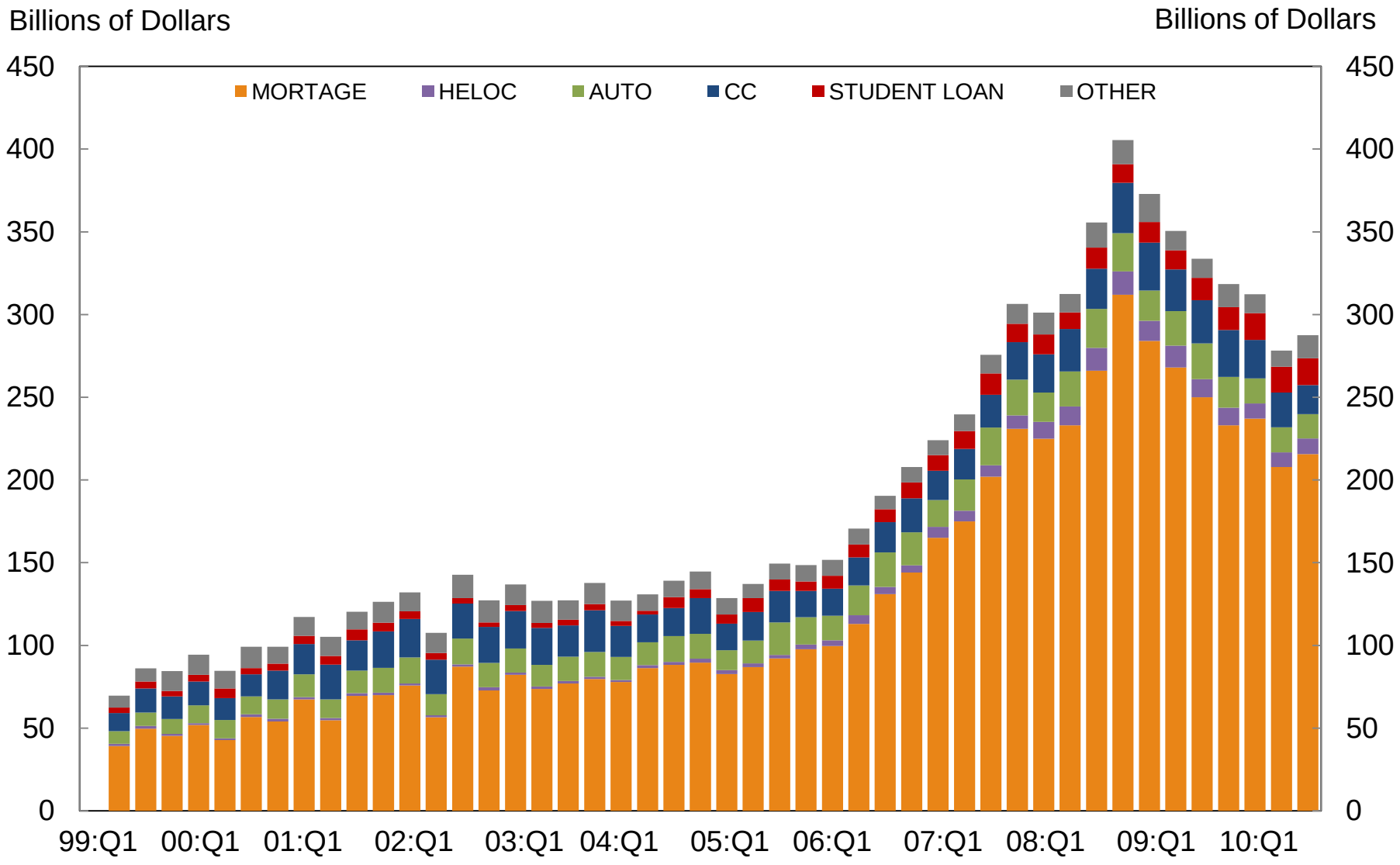
Source: FRBNY Consumer Credit Panel

Fig 2. Total Balance by Delinquency Status



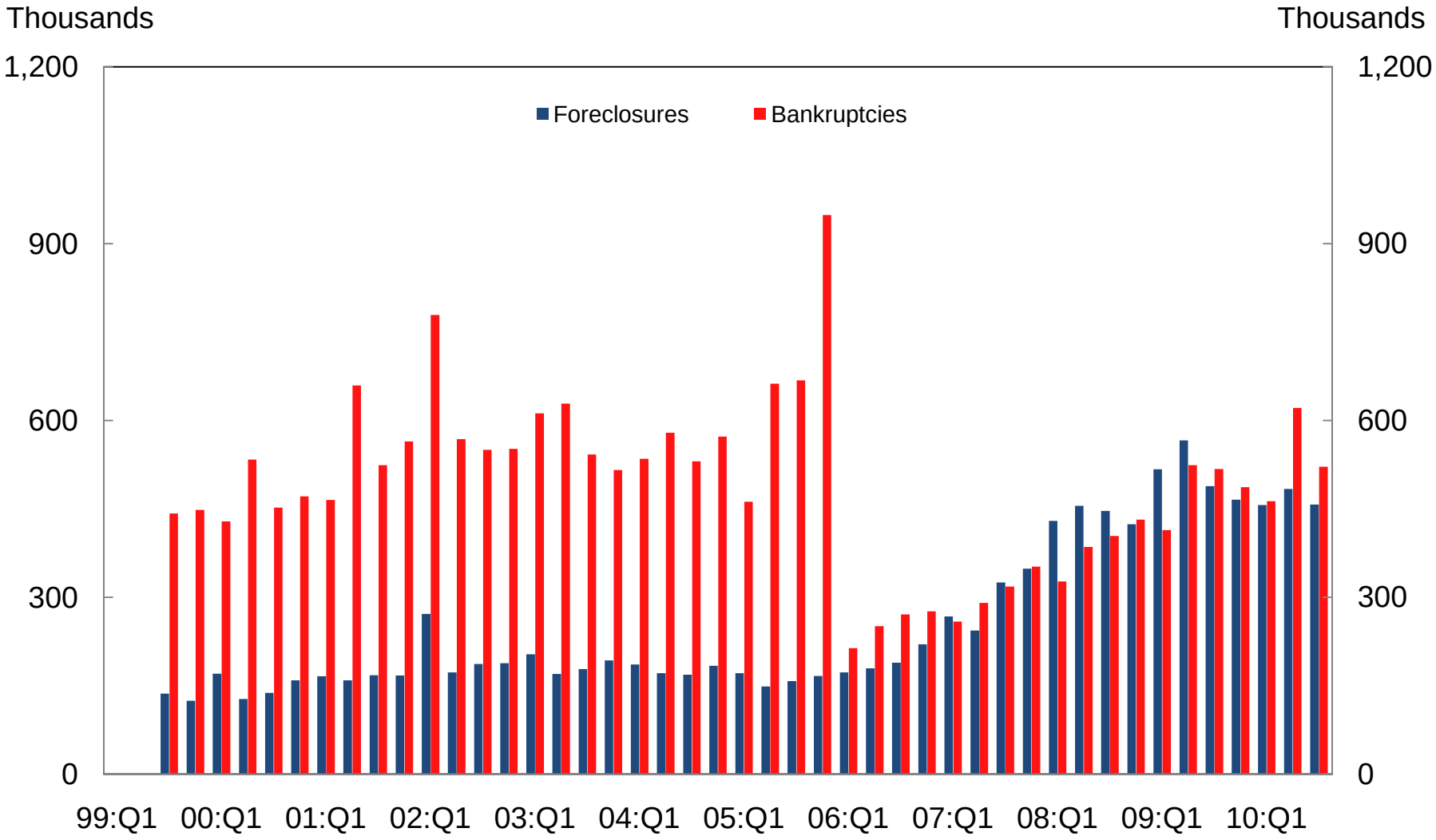
Source: FRBNY Consumer Credit Panel

Fig 3. New Delinquent Balances by Loan Type



Source: FRBNY Consumer Credit Panel

Fig 4. Number of Consumers with New Foreclosures and Bankruptcies



Source: FRBNY Consumer Credit Panel

Fig 5. Non-mortgage debt change other than charge-offs

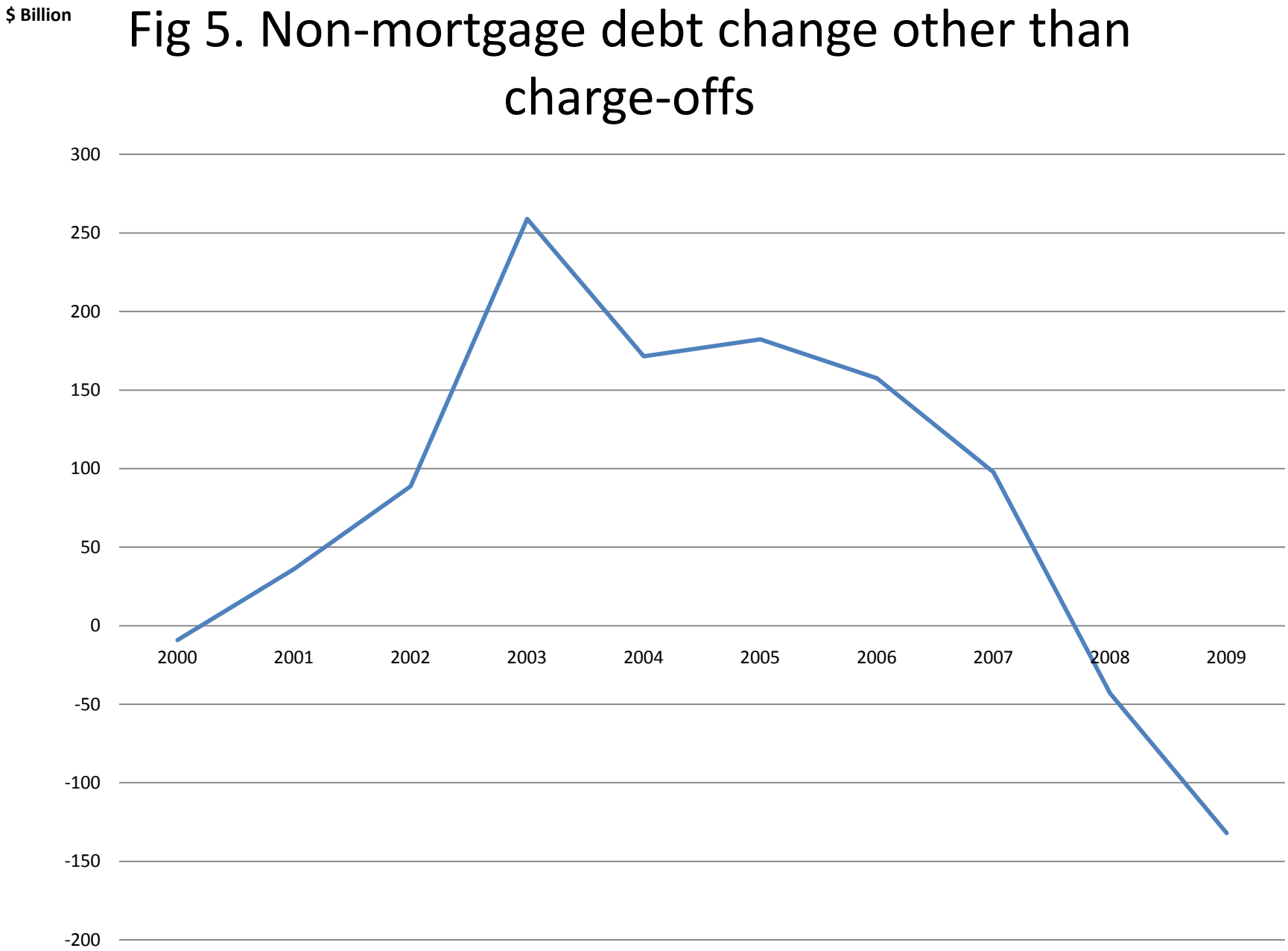


Fig 6. Decomposition of changes in mortgage balance

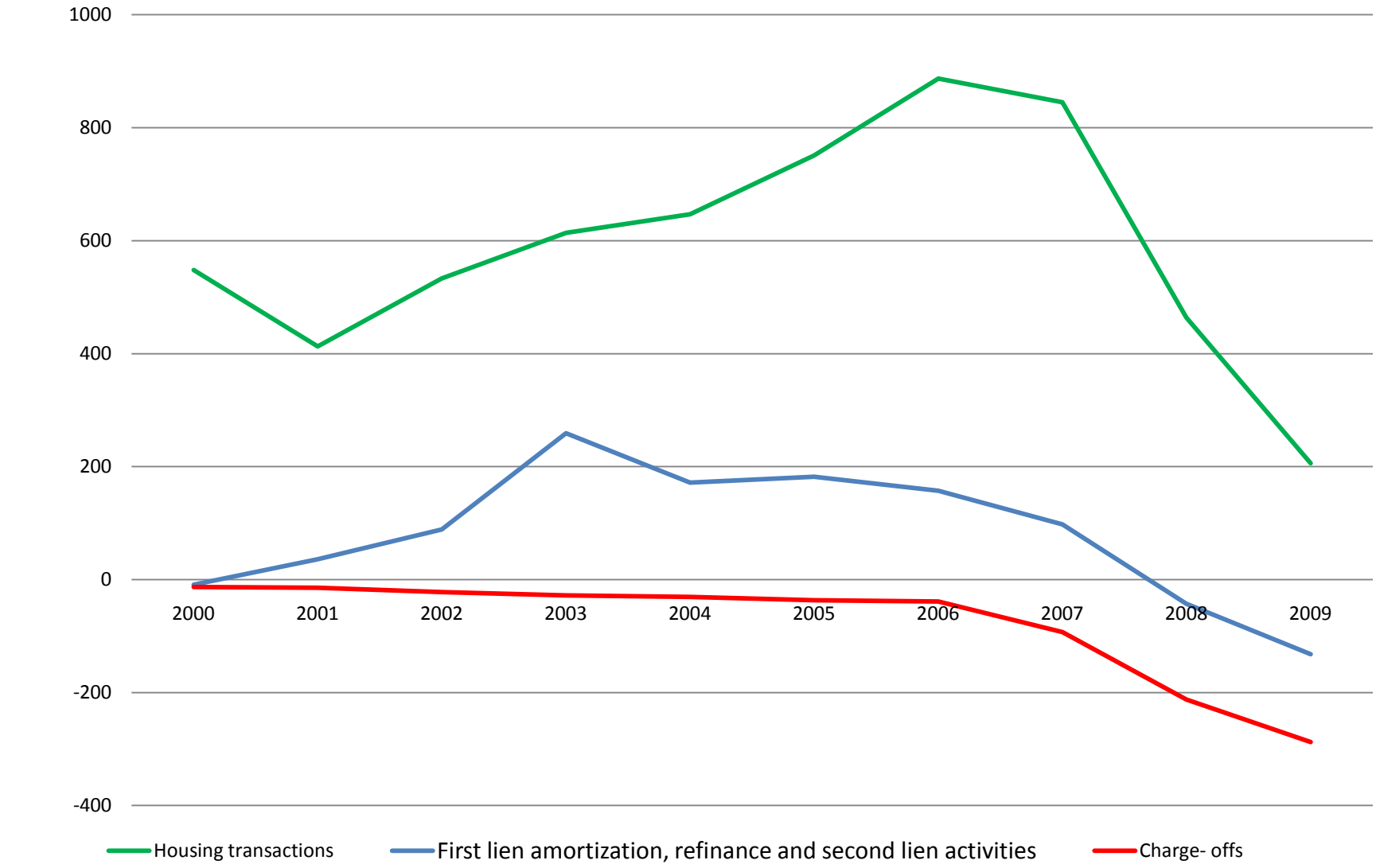
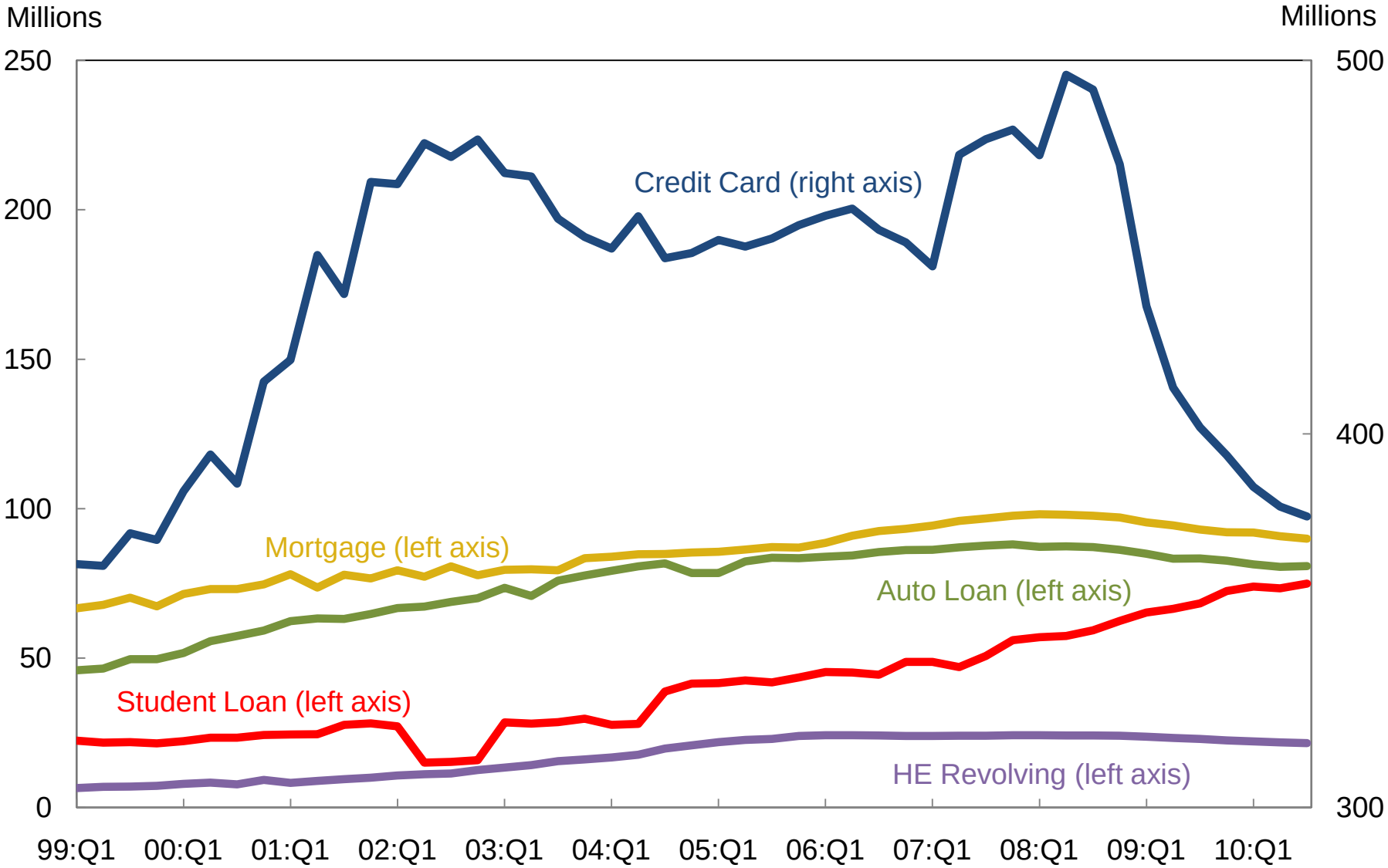
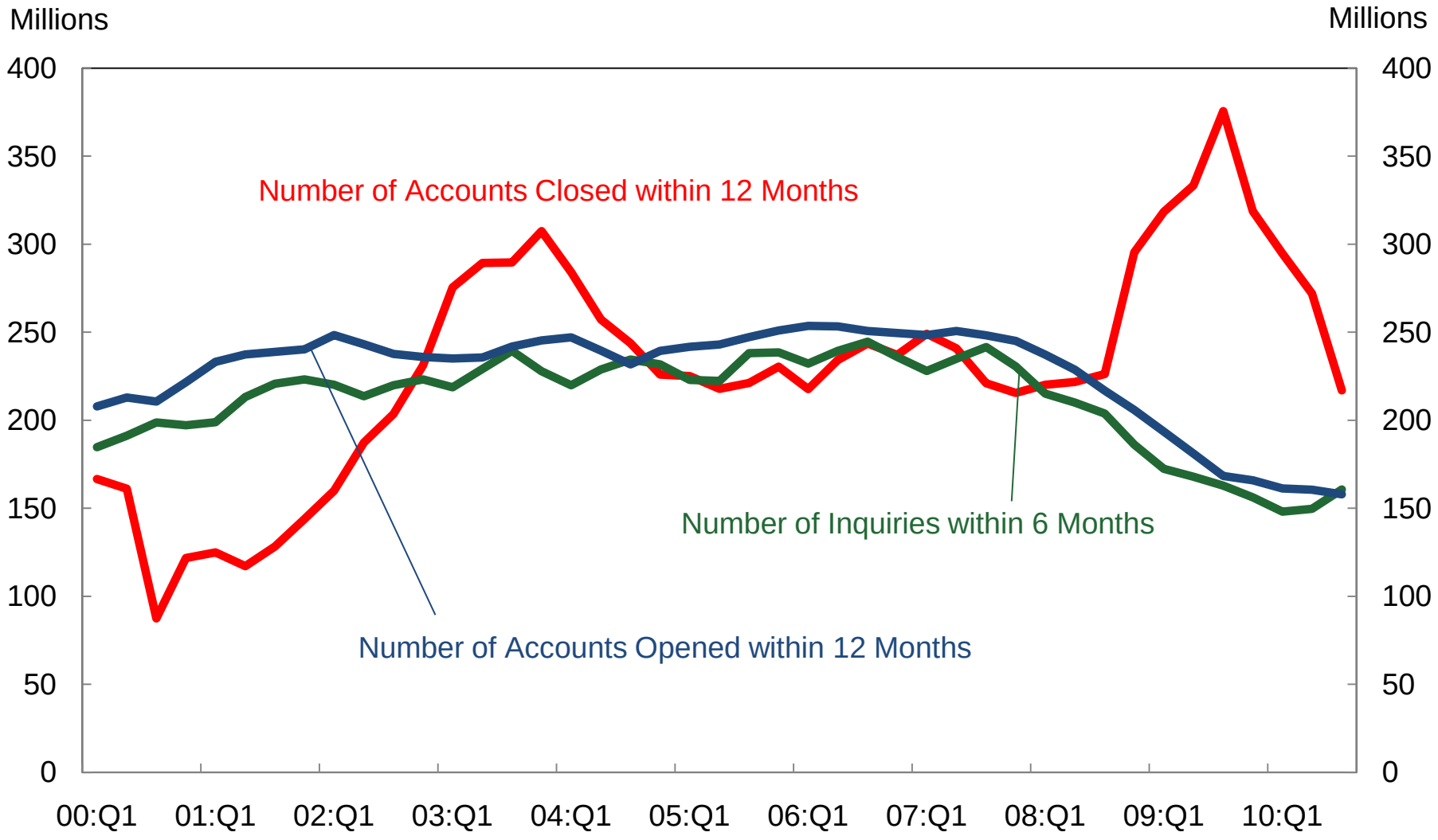


Fig 7. Number of Accounts by Loan Type



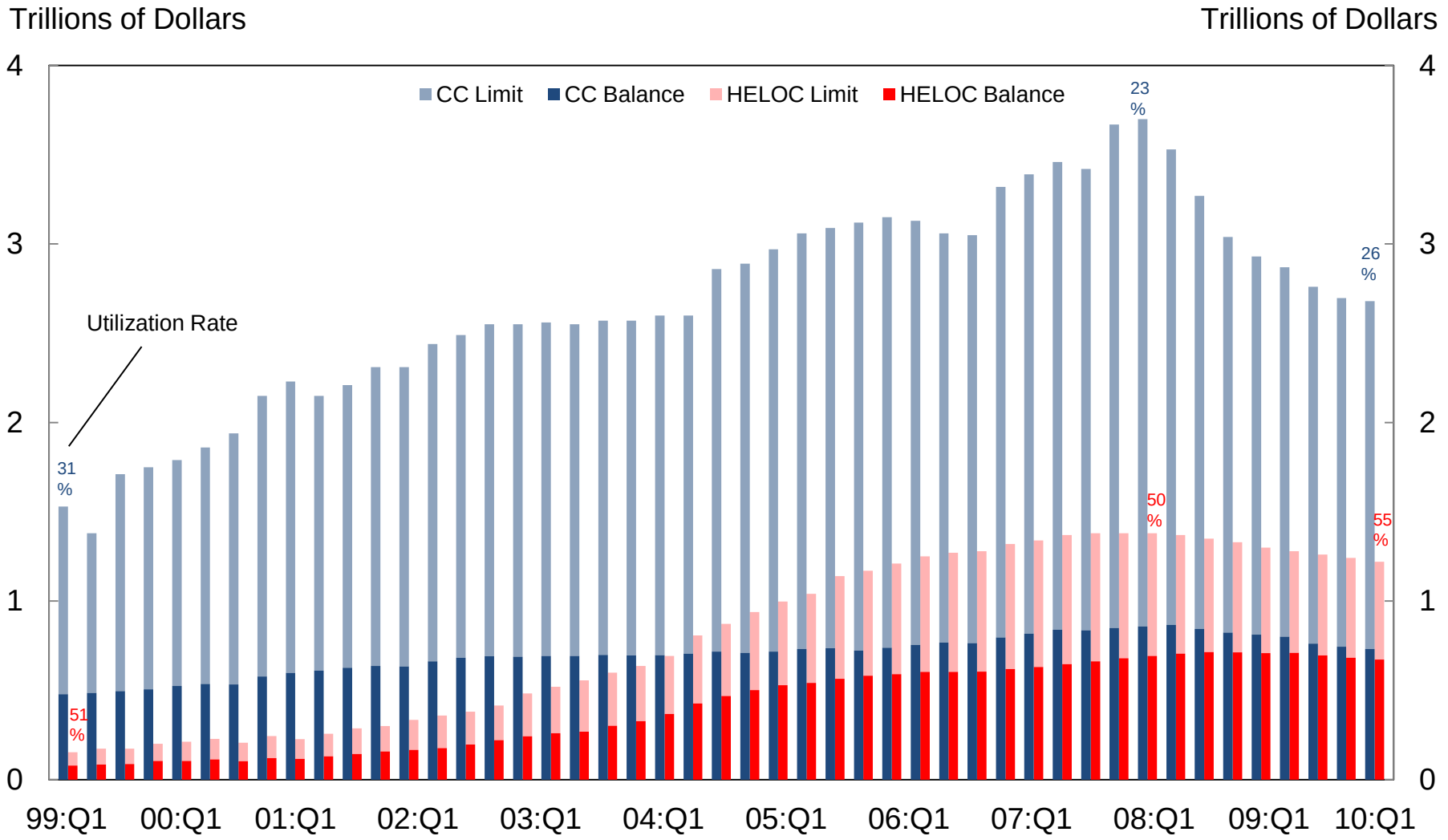
Source: FRBNY Consumer Credit Panel

Fig 8. Total Number of New and Closed Accounts and Inquiries



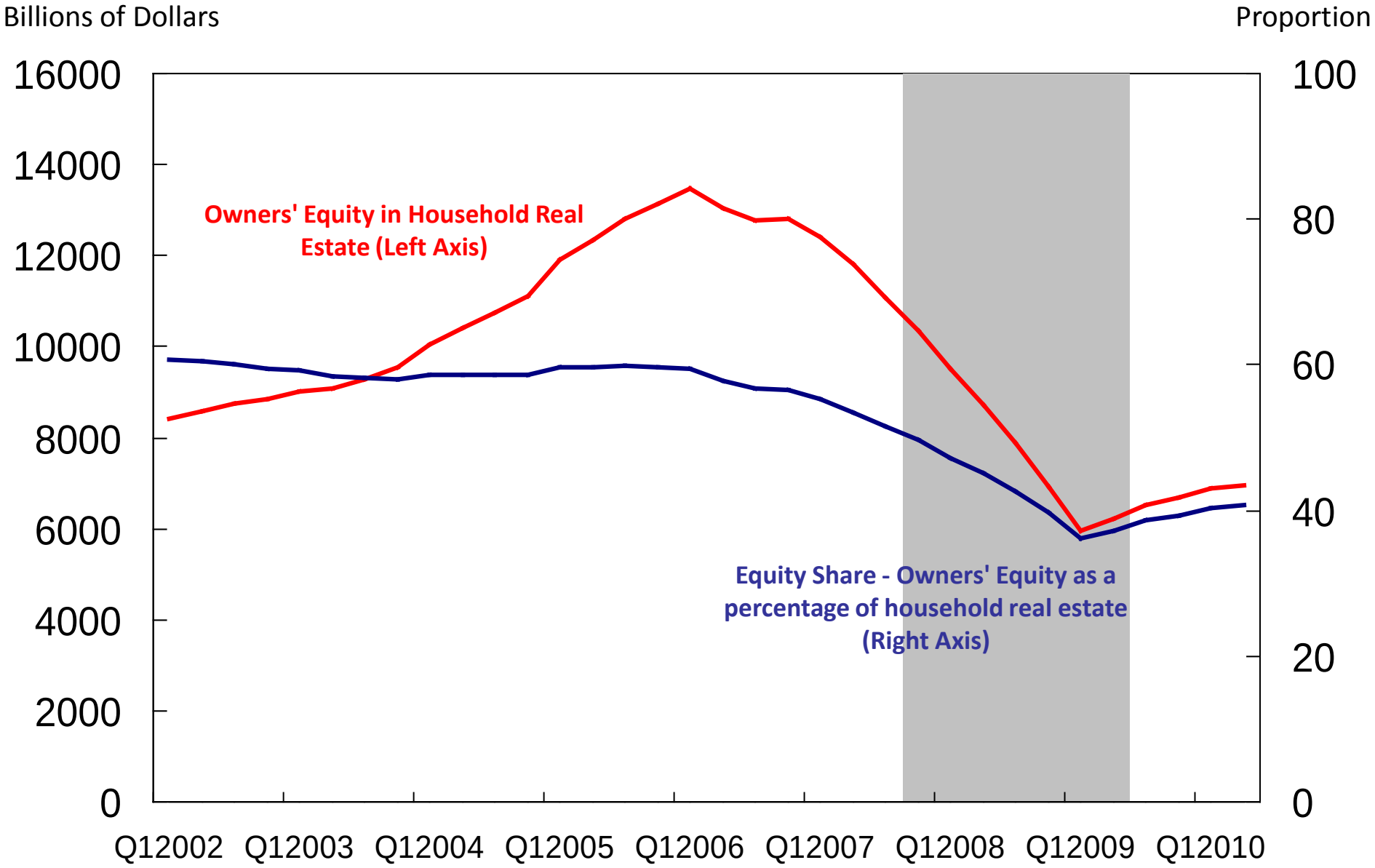
Source: FRBNY Consumer Credit Panel

Fig 9. Credit Limit and Balance for Credit Cards and HE Revolving



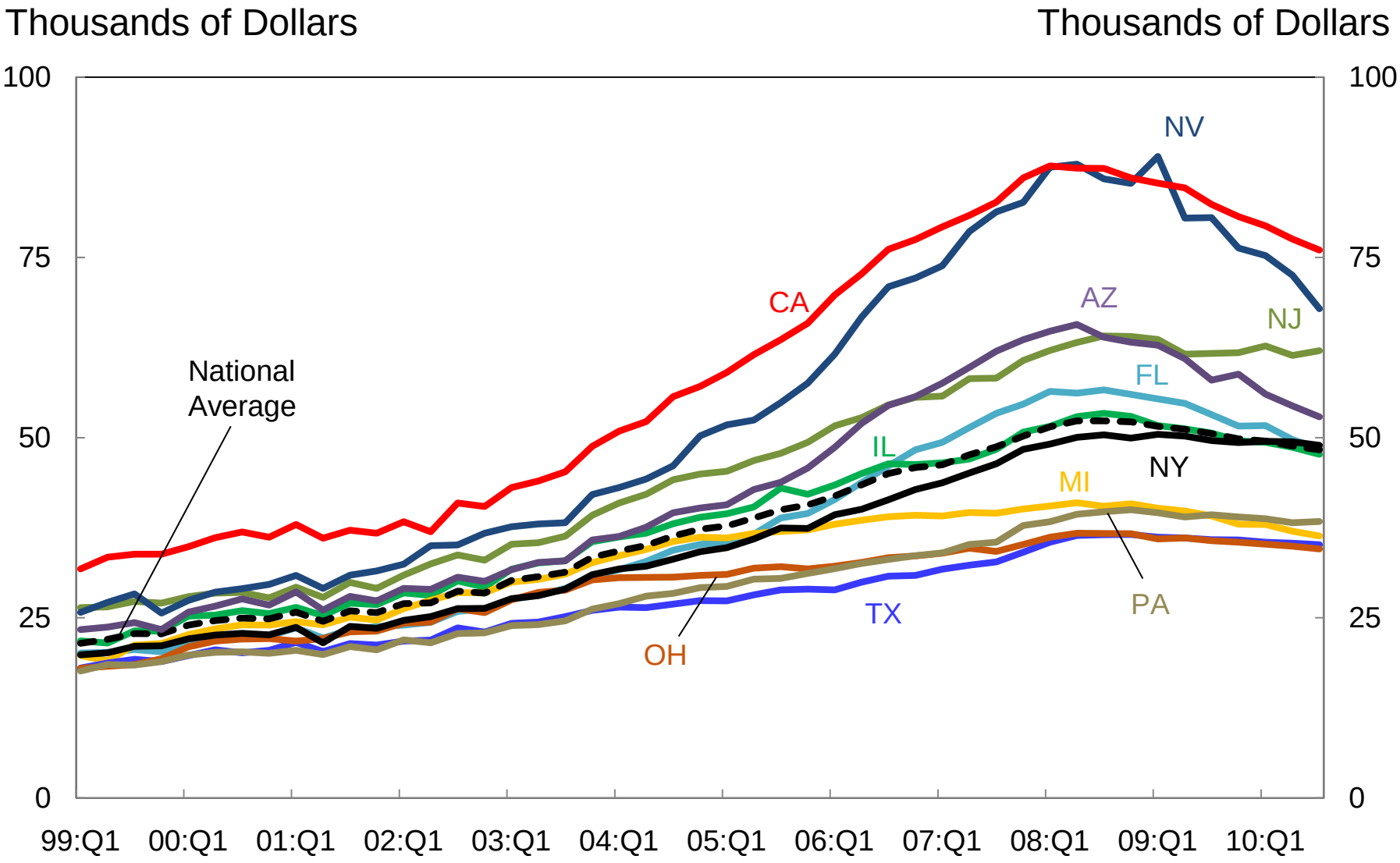
Source: FRBNY Consumer Credit Panel

Fig 10. Owner's Equity



Source: Flow of Funds

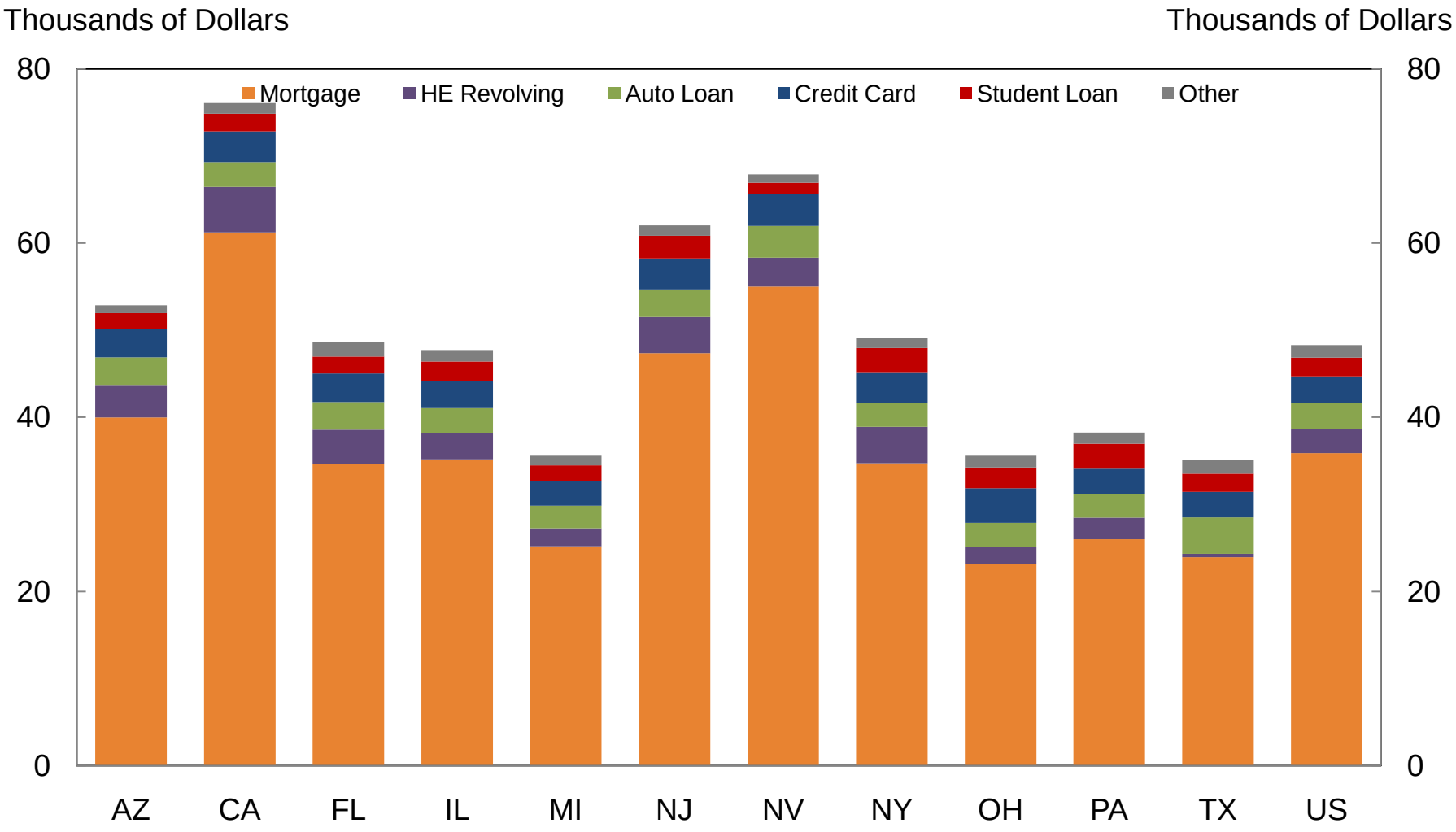
Fig A1. Total Debt Balance per Capita* by State



Source: FRBNY Consumer Credit Panel

* Based on the population with a credit report

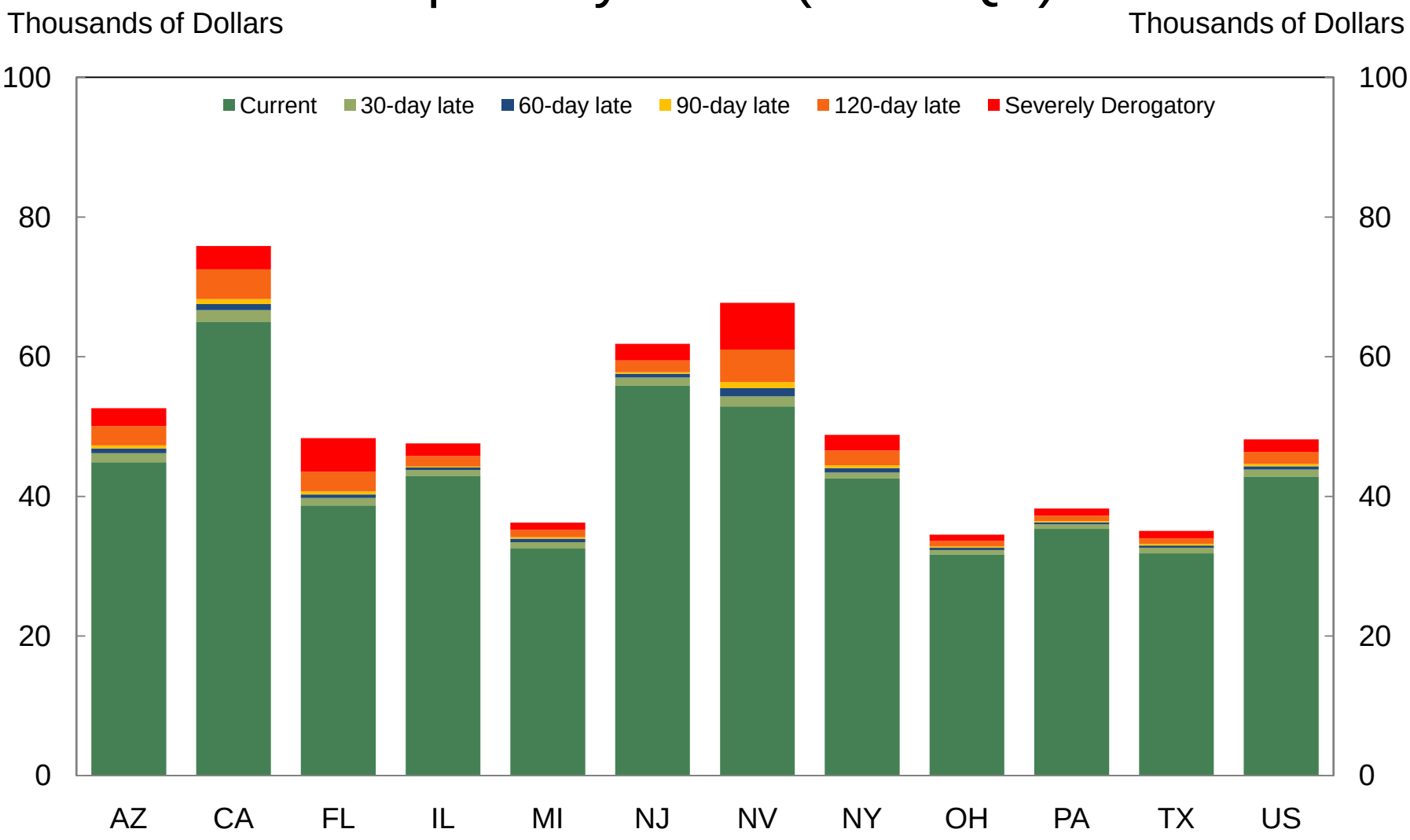
Fig A2. Composition of Debt Balance per Capita* by State (2010 Q3)



Source: FRBNY Consumer Credit Panel

* Based on the population with a credit report

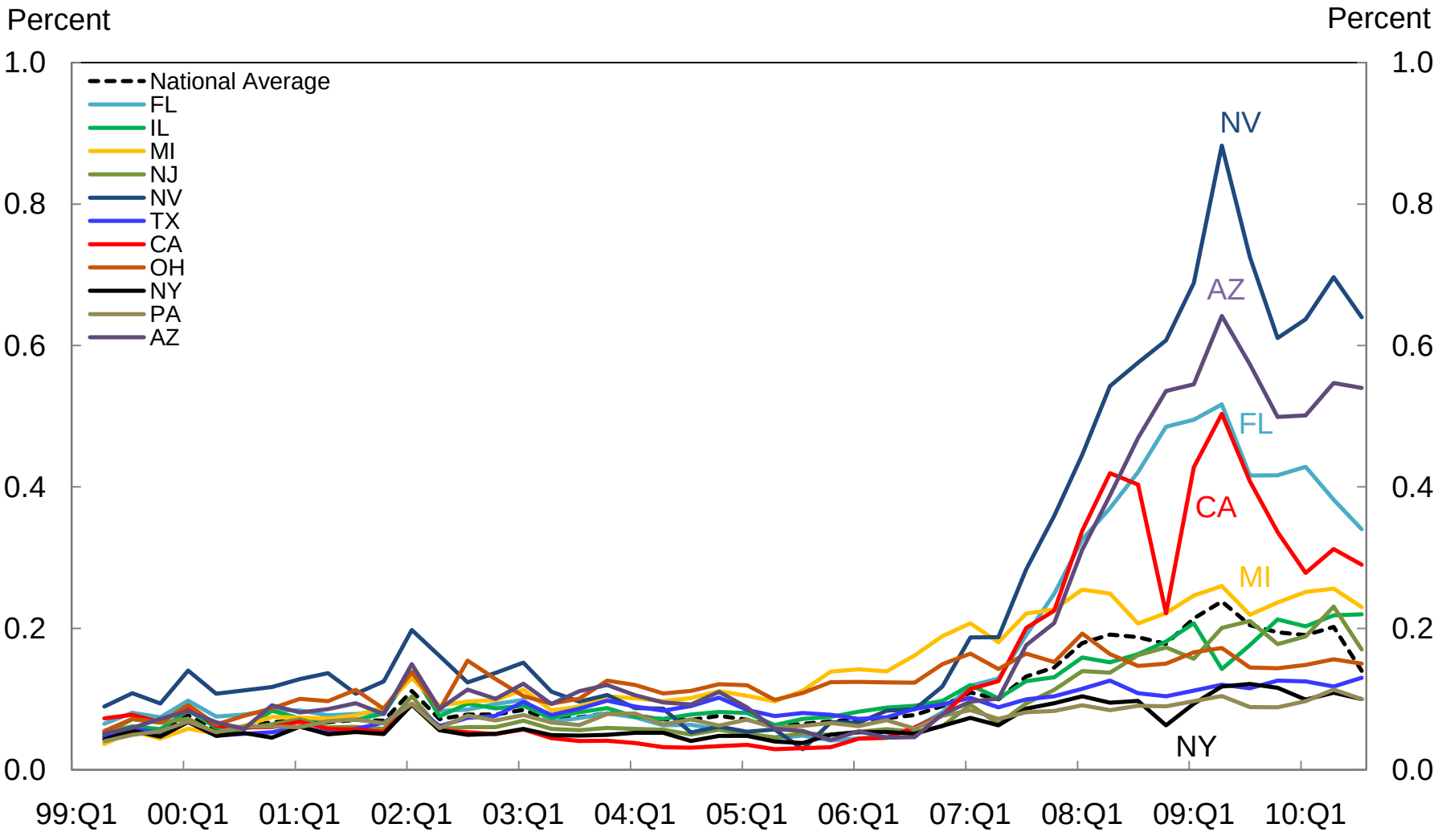
Fig A3. Delinquency Status of Debt Balance per Capita* by State (2010 Q3)



Source: FRBNY Consumer Credit Panel

* Based on the population with a credit report

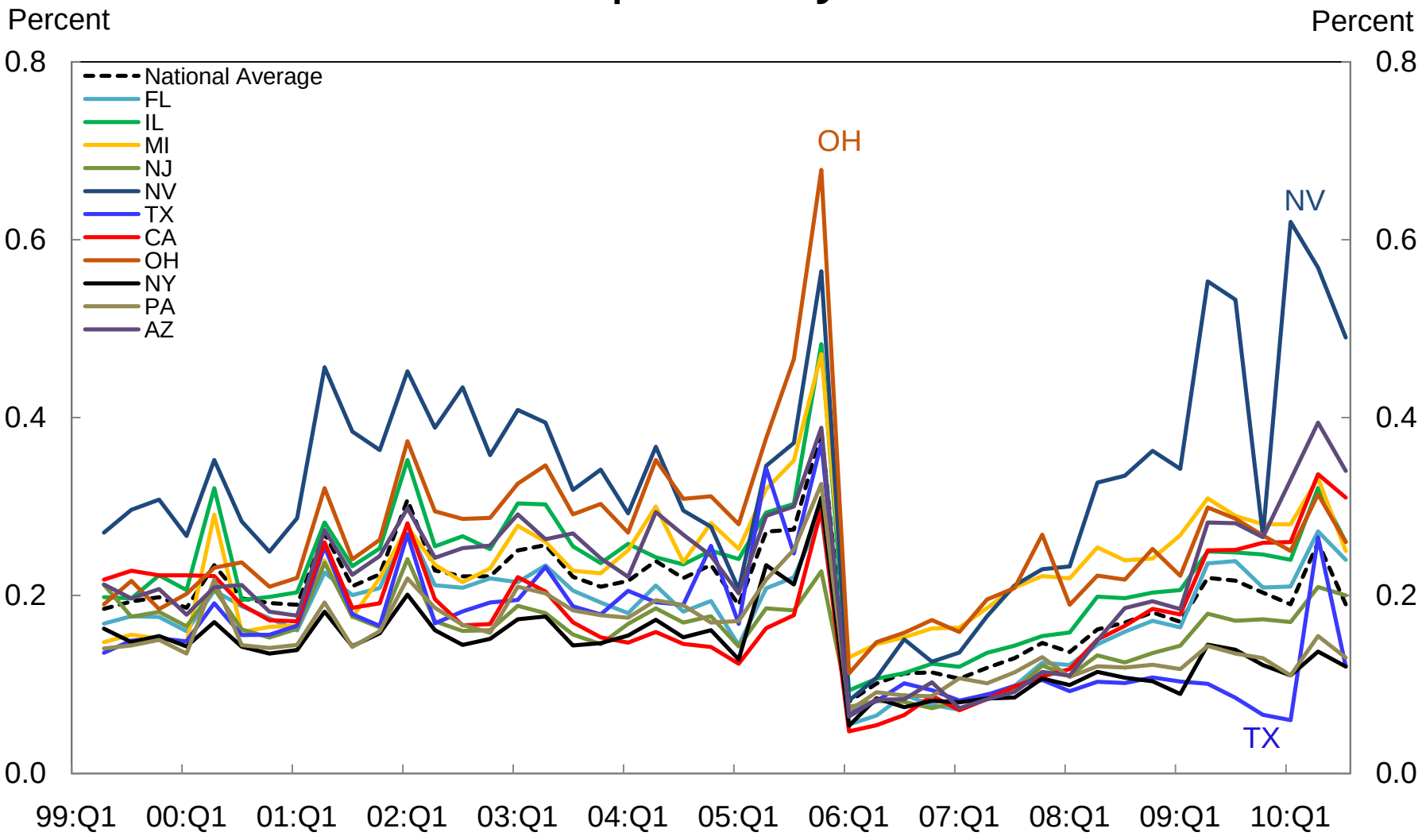
Fig A4. Percent of Consumers* with New Foreclosures by State



Source: FRBNY Consumer Credit Panel

* Based on the population with a credit report

Fig A5. Percent of Consumers* with New Bankruptcies by State



Source: FRBNY Consumer Credit Panel

* Based on the population with a credit report