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Have Consumers Become More Frugal?

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Have consumers become more frugal?
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Since its peak in 2008Q3, consumer indebtedness has fallen by $922 billion or 7.4%. Over roughly the same period, charge-offs – the removal of obligations from consumers' credit reports because of defaults – have risen sharply, especially on loans secured by residential real estate, which make up about 80% of consumer liabilities. An important question for gauging the behavior of US consumers is how to interpret these two trends. 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?

For non-mortgage debt answering this question is relatively straightforward. Figure 1 shows the 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 mortgage 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 balances down into three categories.

(1) Changes in mortgage debt related to housing transactions, shown in blue in Figure 2, 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.

[1] The views expressed here are those of the authors, and do not necessarily reflect those of the Federal Reserve Bank of New York or the Federal Reserve System. The authors thank Maricar Mabutas for excellent assistance in the preparation of this report.

(2) For convenience, we show the value of charge-offs 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. In future work, we intend to study these questions in more detail.[2]

[2] Evidence from the Fed's Senior Loan Officer Opinion Survey (http://www.federalreserve.gov/boarddocs/snloansurvey/) indicates that credit standards were tight through much of the 2007-2009 period.

Figure 1: Non-mortgage debt change other than charge-offs

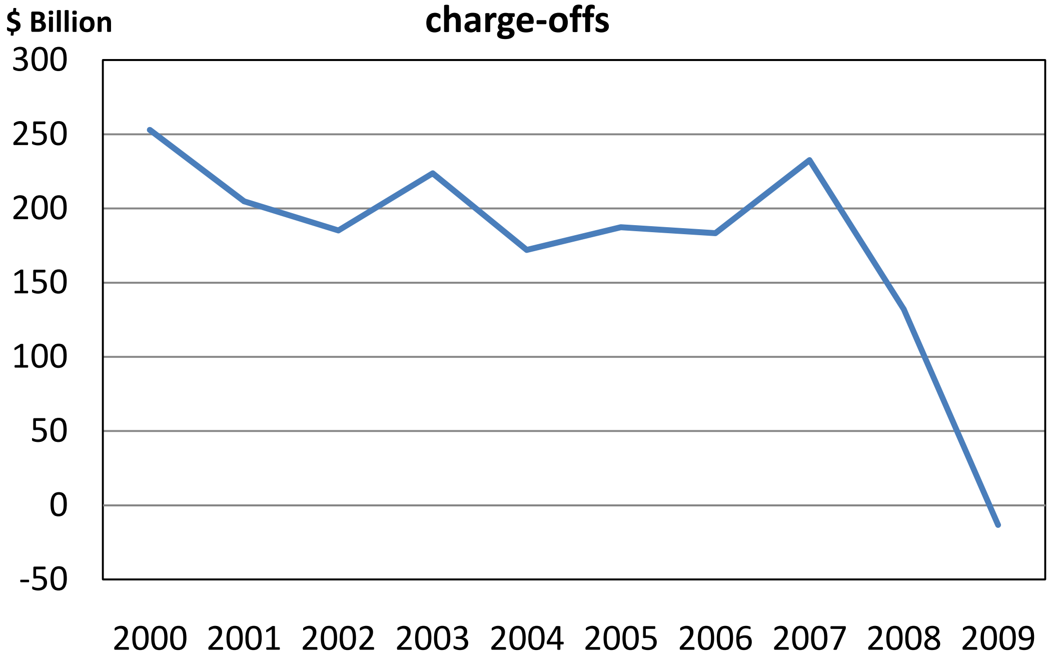

Figure 2: Decomposition of changes in mortgage balance