2010 Topical report series

Experian/Oliver Wyman Market Intelligence Report
Understanding strategic default in mortgages: Q2 2010 update

Experian

OLIVER WYMAN

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About Experian-Oliver Wyman Market Intelligence Reports

Experian and Oliver Wyman have built and analyzed a unique, new data sample from Experian's credit bureau files to develop a range of insights on consumer credit markets. These insights can help lenders understand trends in the broad market and benchmark their portfolios to determine performance improvement opportunities. The Experian-Oliver Wyman Market Intelligence Reports are based on our analysis of these data; this is a one-of-a-kind product that covers the following asset classes:

- Mortgage
- Home equity lines
- Home equity loans
- Auto loans and leases
- Bank cards
- Retail
- Student loans
- Other personal loans

For each asset class, the Market Intelligence Reports provide a comprehensive set of metrics, which are segmented by credit score, geography and type of institution. The metrics include:

- Market size & trends
- Product penetration
- Originations
- Delinquency and attrition
- Utilization

The Market Intelligence Reports are produced quarterly, grant subscribers timely access to ongoing trends of the consumer credit industry dating back to 2006, with vintage-specific trends dating back to 2002. The comprehensive report contains over 400 pages, featuring over 800 charts and tables. The reports are provided through an annual subscription.

A subscription to the Market Intelligence Reports also provides access to 'Topical Reports', which explore hot button issues in consumer credit. This is the third report in the topical report series, and an update to our first report on strategic default, which was released in Aug 2009.

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Executive summary

In our September 2009 report on strategic default in mortgage, we used a large sample of borrower-level credit bureau data to define the phenomenon of 'strategic default', i.e. a borrower choosing to default on his mortgage even though he seemingly has the capacity to make monthly payments. We used the borrower's payment performance on non-real estate tradelines as a proxy for his capacity to pay. Our analysis tracked this phenomenon over time, and its correlation with loan vintage, geography and number of first mortgages. This report updates that analysis with more current data and also tests a stricter definition of strategic default.

Overall, we find that the trends we observed in the first report have continued into the first half of 2009. Strategic defaults as a percentage of all mortgage defaults remain high at 19% in 2009 Q2 (vs. ~18% in 2008 Q4).

We estimate the total *number* of strategic defaults in the first half of 2009 to be ~355,000, a 53% increase over the same period in 2008. The increase reflects both a year-on-year jump in the underlying number of mortgages entering the delinquent pool (as per our definition) and a slight increase in the proportion of strategic defaulters. However, when compared with the second half of 2008, we find that the number of strategic defaults increased only by 4%. This is partly due to seasonal trends (number of mortgages entering delinquency is lower in the first quarter as compared to the fourth), but we also find evidence that the number of strategic defaults and the number of mortgages entering the delinquent pool might have peaked in 2008 Q4. Both these numbers declined in 2009 Q2 vs. 2009 Q1, reflecting a break from the recent historical trend.

Vintage trends continue in the same pattern as seen in the first report on this topic: strategic default in the first two quarters of 2009 was six times more common among mortgages originated in 2006 than among mortgages originated in 2004. Delinquency was generally higher among 2006 originations, but only by a factor of three and a half.

We continue to find more strategic default in geographies such as California and Florida which have suffered more drastic home price declines than the country in general. From 2005 to the first half of 2009, the number of strategic defaulters went up by about 80 times in California and by 53 times in Florida.

Strategic defaulters still consist mostly of borrowers with one mortgage who are likely walking away from their primary homes. They are the most likely out of all kinds of mortgage defaulters to go into late-stage delinquency, foreclosure, or charge-off status. A significant percentage of strategic defaulters, however, own two or more homes – the incidence of dual home ownership among strategic defaulters is far higher than in the population at large. Strategic default also remains the most prevalent form of mortgage default amongst super-prime borrowers.

We also tested our analysis by using a stricter definition of strategic default. We redefined strategic defaulters as borrowers who rolled straight into 180+ dpd on their mortgage while staying *completely current* (less than 30 dpd, the smallest measure of delinquency) on *all* of their non-real estate trades. The previous definition required delinquent borrowers not to be seriously delinquent on their non-real estate trades (less than 60 dpd on auto trades and less than 90 dpd on bank card, retail, and other non-real estate trades). This stricter definition of strategic default only lowered its incidence by ~10%, i.e. from 19% to 17% in 2009 Q2, and likely ended up excluding only some borrowers who forgot to pay their bills on time, but had the intent of doing so.

Background

In Part I of this report, we defined 'strategic default' as default behavior in which the borrower has the ability to make monthly payments on his mortgage, but chooses not to do so, most likely for reasons of negative equity. We argued that understanding strategic default behavior was very important in that context, where public policy – and taxpayer money – has been focused on reducing foreclosures by offering homeowners loan modifications. Such modifications typically reduce monthly payments, giving the borrower more incentive to stay in his home. However, a strategic defaulter is not interested in keeping his current home and will likely re-default on his modified loan. We argued that loan servicers will be better off by pre-screening these borrowers, and developing tactics that attempt to convince them to change their mind.

In the last six months, there have been efforts to tackle the problem of negative equity. In March, the Obama administration announced a new initiative as part of its Home Affordable Modification Program (HAMP) to reduce the principal on mortgages with significant negative equity. As part of this program, lenders are encouraged to work with underwater borrowers to write down at least 10% of first mortgage principal and reduce total mortgage debt to a maximum of 115% of current home value.[1] In addition to government programs, several large servicers have voluntarily started their own principal reduction programs.

As we've argued previously, while primary market research on homeowner attitudes is insightful, it has certain limitations when it comes to analyzing the national problem of strategic default. One is sample size. Another is that primary research surveys report attitudes that often differ from observed behavior. Just as in previous paper, this Market Intelligence Reports analysis uses a very large sample of credit bureau data showing the actual performance of millions of borrowers over the 2004-09 time period, and uses a direct behavioral definition of mortgage default.

This updated report on strategic default will address the following questions:

- How can we identify 'strategic default' behavior?
- What does this borrower segment look like? How are its members different from other types of mortgage defaulters?
- Can we identify the strategic defaulter early?

[1] Source: "FHA Program Adjustments to Support Refinancings for Underwater Homeowners", March 26, 2010 http://www.financialstability.gov

Defining strategic default in mortgage

We continue to define 'strategic defaulters' as follows: borrowers who rolled straight from 60 dpd to 180+ dpd, while staying less than 60 dpd on their auto loans and less than 90 dpd on their bank cards, retail cards, and other personal loans, for 6 months after they first went 60 dpd on their mortgage. This definition was used to overcome the challenge of not having data on assets, income and LTV. The fact that they made payments on non-real estate trades for 8+ months strongly suggests an absence of distress and availability of some form of income; the real estate default then is solely driven by negative equity.

Such borrowers made up 19% of all borrowers who went 60 dpd on their mortgage in 2009 Q2.

We also used the same definitions for other mortgage delinquency behaviors that do not fit under the "strategic" definition, and these are summarized in Table 1.

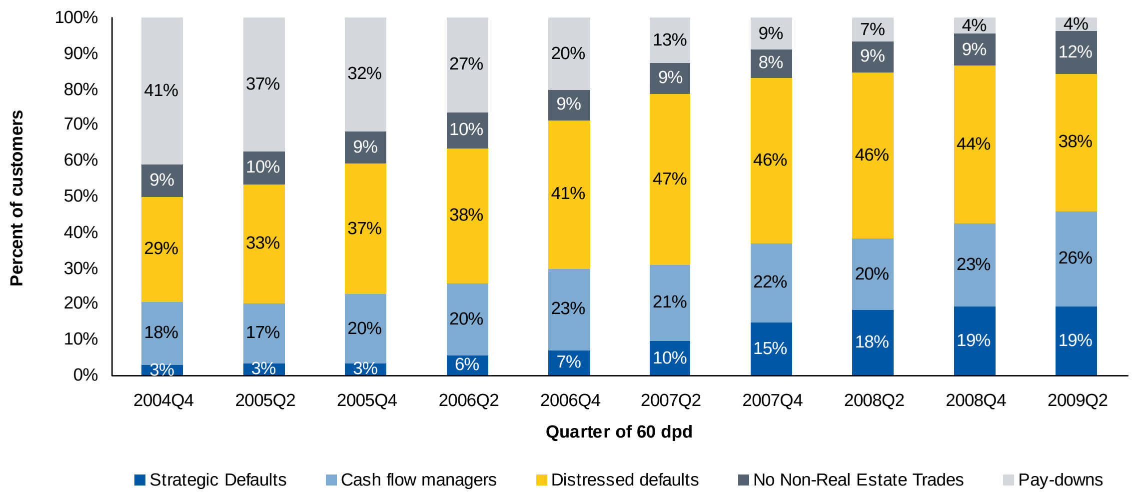
Table 1: Mortgage default customer segments

Segment	Mortgage delinquency behavior	Non-RE delinquency behavior
Strategic default	60 dpd on mortgage, then straight roll to 180+ dpd	No serious delinquency 6 months after 60 dpd on mortgage
Cash flow managers	60 dpd on mortgage; no straight roll	No serious delinquency 6 months after 60 dpd on mortgage
Distressed default	60 dpd on mortgage; including straight roll	Delinquent on at least 1 non-RE trade within 6 months after 60 dpd on mortgage
Pay-downs	60 dpd on mortgage; paid down loan after delinquency	N/A
No non-RE trades	60 dpd on mortgage	No non-RE trades

Strategic default behavior

As expected, we see a high incidence of strategic default in recent time periods when home prices are much lower than they were 12-24 months ago. This supports our negative equity hypothesis, as does the fact that this behavior was barely noticeable as recently as 2004. The incidence of cash flow managers has stayed consistent over time – this again supports our assertion that these are customers who are 'temporarily distressed'. Pay-downs have declined from 41% to 4% – a remarkable yet expected drop, since most of these were likely to be driven by loan refinancing. Distressed borrowers therefore have one fewer option, reflected in the increase in incidence from 29% in 2004 Q4 to 38% in 2009 Q2. Figure 1 shows this in greater detail.

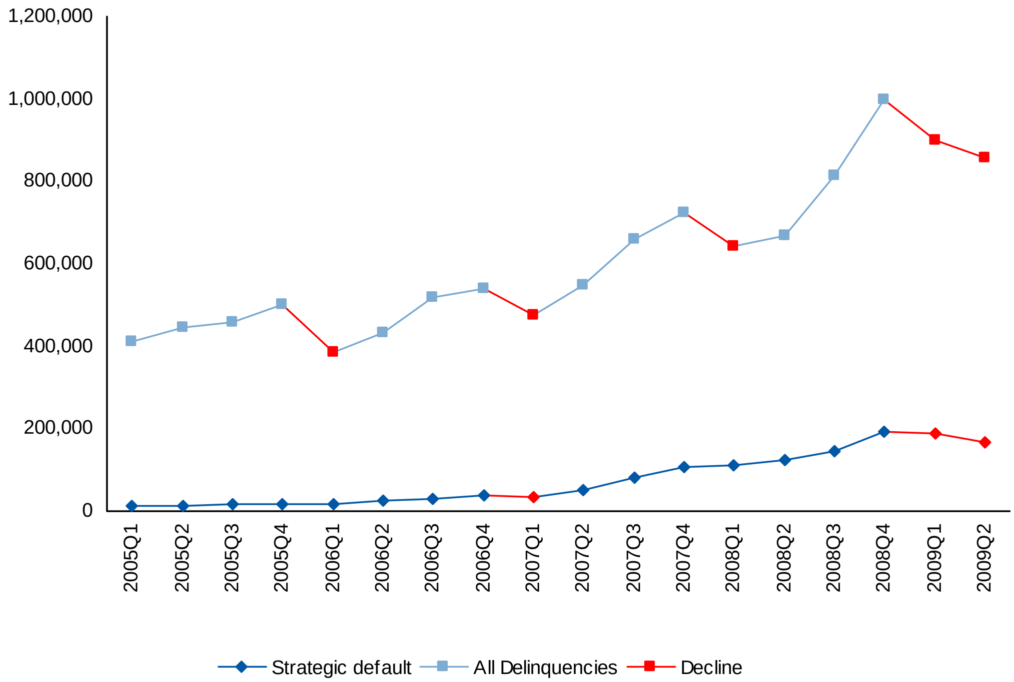
Figure 1: Mortgage default customer segments by quarter of 60 dpd



We estimate that the absolute number of strategic defaulters in the first half of 2009 was ~355,000. This is a 53% increase over the number of strategic defaults in the first half of 2008. However, as Figure 2 shows, 2009 Q1 and Q2 may contain the first signs of a 'break in the clouds'. The total number of strategic defaults declined in 2009 Q1 and Q2 as compared to 2008 Q4, and even the number of first-time mortgage delinquencies declined in 2009 Q2, breaking from its historical trend. This indicates that even though strategic default as a % of total defaults remains high, it is possible that both total mortgage delinquency and number of strategic defaults may have peaked in 2008 Q4; data from subsequent quarters is needed to validate this.

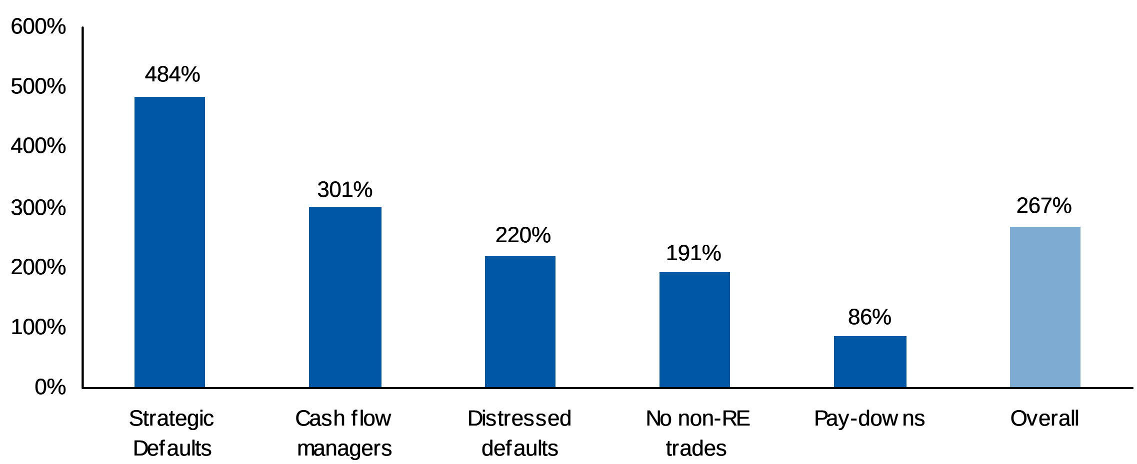
Strategic default behavior

Figure 2: Number of strategic defaulters and mortgage delinquencies (60 dpd)



Consistent with the findings from the first topical report, we see more strategic default among loans from recent vintages. Comparing vintages controls for income distress to a large extent, but not for decline in home prices. So while mortgage delinquencies in the 2006 vintage were more than 250% higher as compared to the 2004 vintage, strategic defaults were almost 500% higher (Figure 3). Cash flow managers and distressed defaults grew roughly in line, and pay-downs showed materially lower growth, as expected.

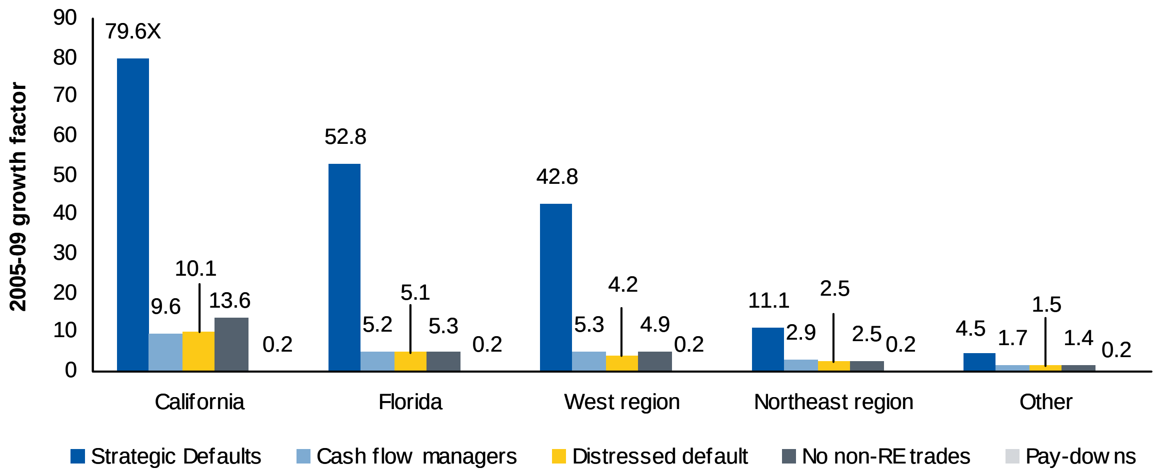
Figure 3: Vintage differences by segment
2006 vs. 2004 vintages



Strategic default behavior

Additionally, we should continue to see a higher incidence of strategic default in geographies like California and Florida which suffered a high decline in home prices, but not equivalently higher unemployment. Figure 4 shows this to be the case – strategic defaults in California were about *80 times higher* in the first two quarters of 2009 as compared to 2005. Cash flow managers and distressed defaults increased too, but by much lower factors, and closer in line with overall growth in delinquencies. These segments are less affected by negative equity; hence we would expect them to keep pace with the overall increase in delinquencies, which seems to be the case. Florida shows a similar trend, though slightly lower in magnitude.

Figure 4: Growth in mortgages entering delinquency (60 dpd) by segment and geography
2009Q1-Q2 vs. 2005

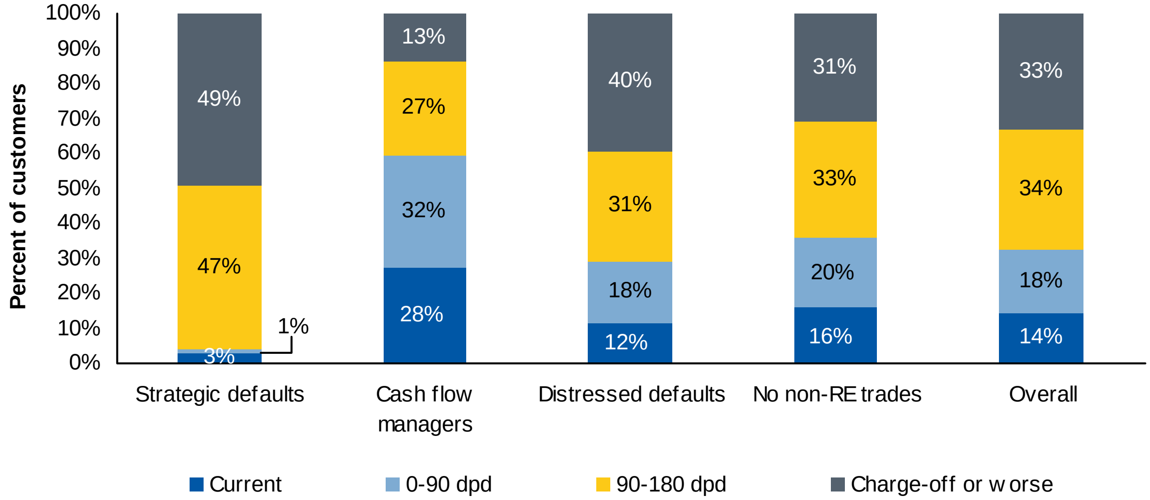


Finally, consistent with their definition, strategic defaulters are more likely to charge-off on their mortgage as compared to other segments. As shown in

Figure 5, 96% of strategic defaulters had charged off or were in late-stage delinquency, 6 months post-60 dpd. The remaining 4% are potentially the beneficiaries of a loan modification or have re-defaulted on a loss mitigation action. Additionally, 60% of cash flow managers cured or didn't get materially worse; even those who eventually charged off made at least one payment. This is consistent with behavior we would expect of this segment – trying to get their finances back on track, and with the clear intention to keep possession of their home.

Strategic default behavior

Figure 5: Status of mortgage trade 6 months after entry into delinquency (60 dpd): 2009Q1-Q2



Characteristics of strategic defaulters

As we discussed in Part One of this report, strategic defaulters and cash flow managers look very similar in early-stage mortgage delinquency – both are delinquent on their mortgage and are not delinquent on any other trades. However, it is critical to distinguish between these segments at that point since cash flow managers are more likely to cure and may well benefit from a loan modification. Strategic defaulters, on the other hand, are most likely to charge-off and a loan modification will probably result in wasted effort and unnecessary cost.

While comprehensively identifying borrower characteristics that can predict strategic default is beyond the scope of this report, we have analyzed certain characteristics that may be used as predictive attributes. These include:

- Number of first mortgages (as a proxy for identifying investors)
- Origination VantageScore
- Home equity line default behavior
- Origination mortgage balance

In addition, current LTV should be a good predictor, consistent with our hypothesis.

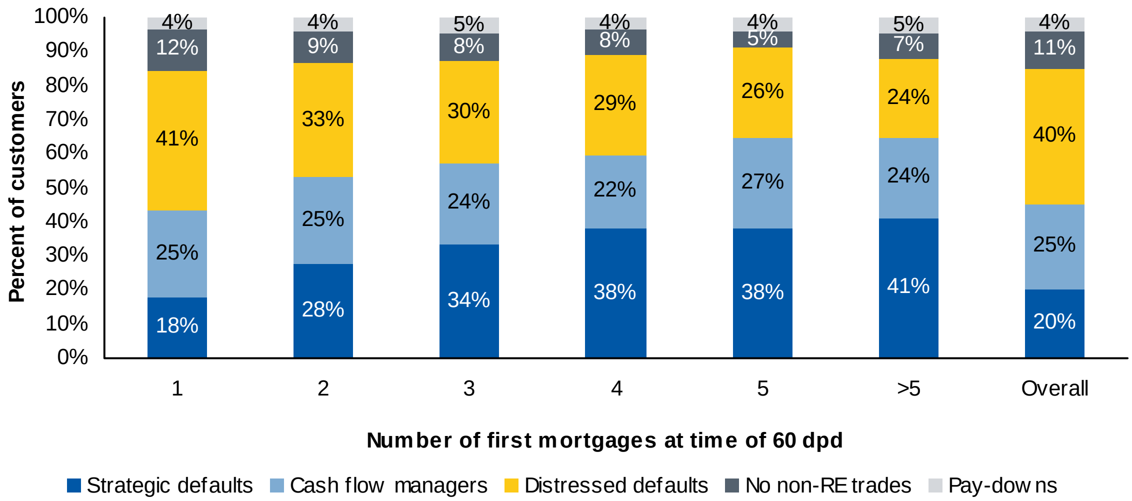
a) Number of first mortgages

We again find that borrowers with multiple first mortgages, i.e. investors, show higher incidence of strategic default (see Figure 6). The presence of multiple first mortgages – while a sign of greater wealth and hence ability to pay – also increases the likelihood that one or more of them is an investment property, whereby the owner is speculating the property value will increase. If a borrower is underwater on an investment property, he is more likely to default on it and continue to fulfill his other obligations, including the first mortgage on his primary residence. Consistent with this hypothesis, we find that of borrowers with multiple first mortgages, more than 80% stay current on at least one of them, which is likely to be the one secured by their primary residence.

However, strategic default is not limited to investors: 68% of all strategic defaulters had one mortgage only, implying that they were walking away from their primary residence. Part One of this report showed that this number was 64% of all strategic defaults in 2008 – meaning that a declining share of strategic defaulters are investors and proportionally more homeowners are walking away from their primary residence.

Characteristics of strategic defaulters

Figure 6: Distribution of mortgage default customer segments by number of first mortgages: 2009 Q1-Q2



b) Origination VantageScore

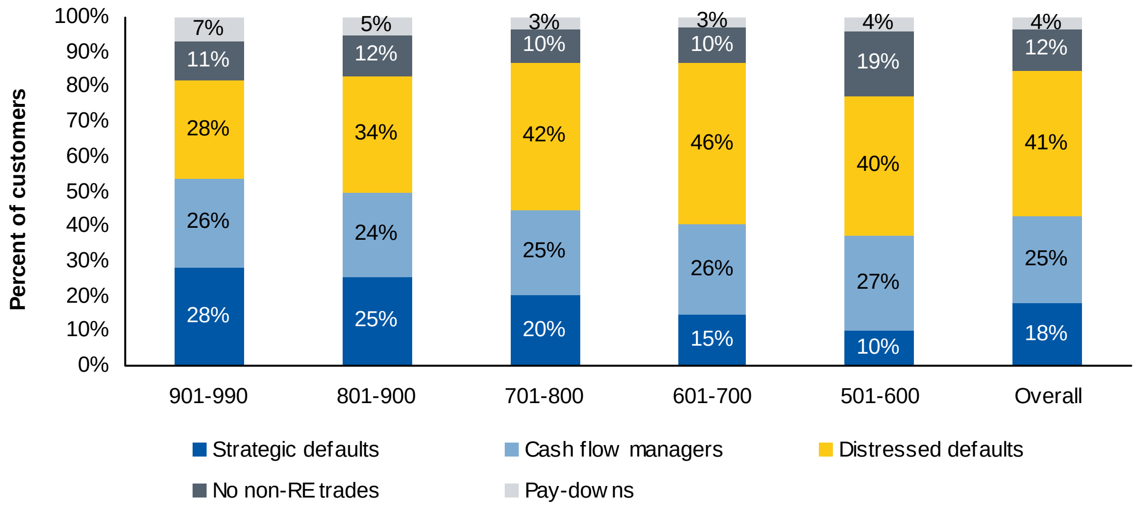
In the first part of this report, we observed that strategic defaulters are more likely to be credit-worthy borrowers, though such borrowers have lower default rates overall. For example, customers with VantageScores between 901 and 990 (super-prime) had 30% of all mortgage trades in 2009 Q2[3] but accounted for only 5% of all mortgages entering delinquency (60 dpd) in the same time period. However, in the first half of 2009, 28% of these defaulters were strategic, as compared to 18% for the overall population (Figure 7). This is after excluding investors, since they're likely to be more credit-worthy and hence may bias the sample. In this particular population, the overall incidence of strategic default is 18%, as seen in the prior section.

Note that we have considered VantageScore at the time of origination, so this conclusion has potential implications for underwriting, in that credit-worthy borrowers are more likely to make the financially strategic decision of walking away from their home should a real estate correction put the deal underwater. Borrowers with higher origination VantageScores were more likely to be approved for mortgages with high LTVs and are therefore more likely to be deep underwater in the current market. This borrower segment is also more likely to be financially savvy and capable of realizing the cost of continuing to hold an underwater mortgage. That said, a very small percentage of these high credit score borrowers are likely to default in most scenarios; the strategic default behavior would only be evident in a severe environment, as we are facing now. More work needs to be done to analyze whether the propensity to strategically default can be predicted independently from credit quality at the point of origination.

[3] Source: Experian-Oliver Wyman Market Intelligence Report Q4 2009

Characteristics of strategic defaulters

Figure 7: Distribution of 2009Q1-Q2 mortgage default customer segments by VantageScore bands (customers with 1 mortgage only)

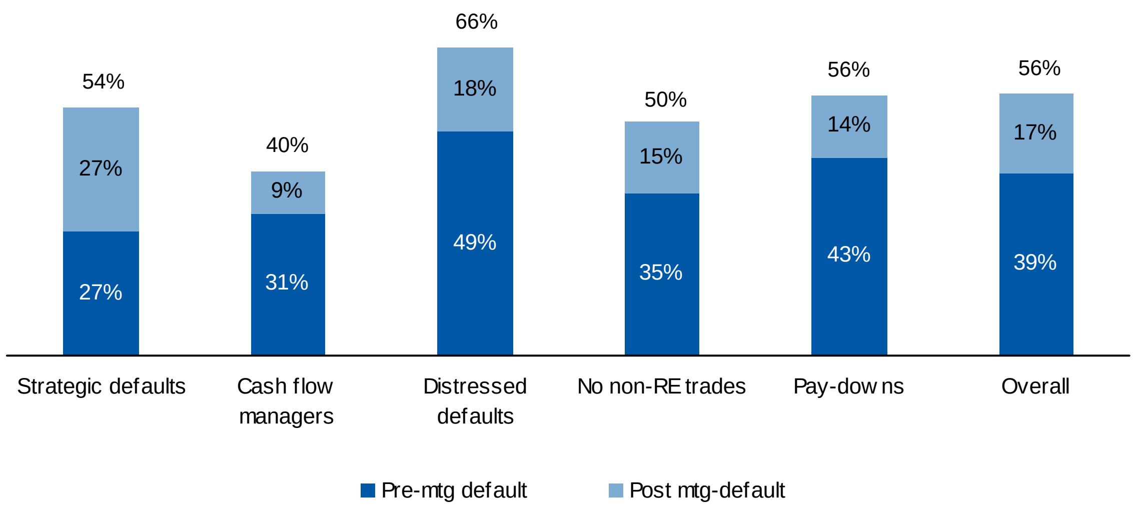


c) Home equity line default behavior

Strategic defaulters are more likely to stay current on their home equity lines prior to mortgage default. After controlling for the investor effect (an investor may not default on the home equity line tied to their primary residence but default on the first mortgage on their investor property), we find that 50% of strategic defaulters who went delinquent on their HELOC did so before they went delinquent on their mortgage, as compared to 70% for the overall population (see Figure 8). A borrower in distress would likely default on the HELOC before the first mortgage, in the hope of salvaging the home. Fewer strategic defaulters show this behavior, implying that they're potentially waiting to draw down their line even more. This is further evidence of strategic default behavior.

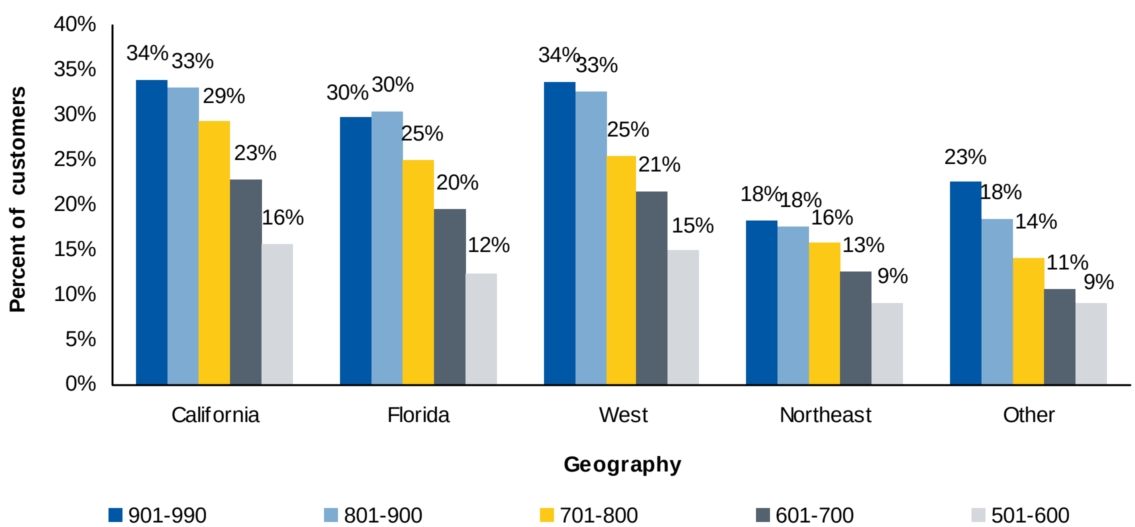
Characteristics of strategic defaulters

Figure 8: Home equity line default behavior of borrowers entering mortgage delinquency (60 dpd) in 2009Q1-Q2 (customers with one mortgage only)
% of customers



Additionally, even though the higher VantageScore bands are concentrated in geographies such as California and Florida (which we have shown as having a higher incidence of strategic default), this trend holds within these specific geographies too (Figure 9).

Figure 9: Incidence of strategic default by geography and VantageScore bands for 2009 Q1-Q2 (customers with 1 mortgage only)

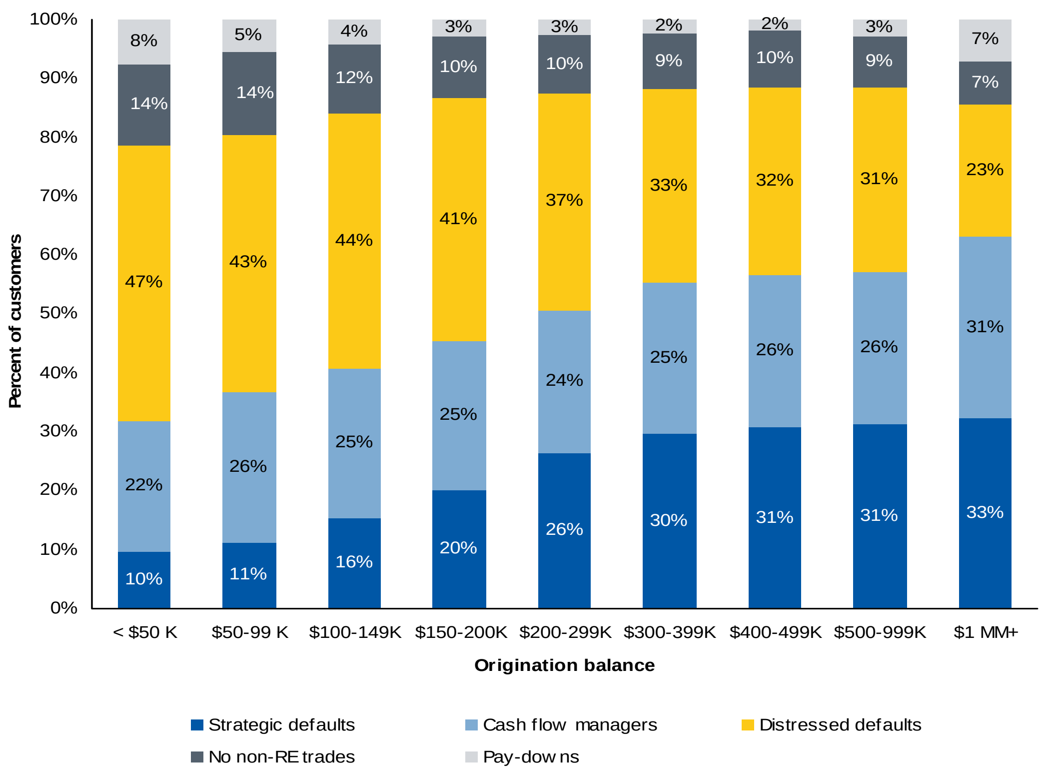


Characteristics of strategic defaulters

d) Origination mortgage balance

Customers with higher mortgage origination balances are more likely to be strategic defaulters, even after controlling for geography, VantageScore and number of first mortgages (Figure 10). This result is intuitive because otherwise good customers would have a greater incentive to walk away from their mortgage if the dollar amount of the "loss", or difference between their mortgage balance and home value, they are facing is higher. Additionally, higher mortgage origination balances are likely to be correlated with higher LTVs, which is a key driver of strategic default.

Figure 10: Distribution of 2009Q1-Q2 mortgage default customer segments by origination balance



Implications

Many of the implications from the first strategic default topical report are still relevant. Strategic defaulters are a big problem for lenders; they seem not to fit the profile of the "confused borrower" and are likely to take advantage of loan modification programs, trying to stay in their homes as long as possible while making as few payments as possible. They will have a high propensity to re-default, and design of a loan modification program should attempt to limit such abuse. Servicers should develop screening algorithms for such borrowers, based on analysis of characteristics that can predict this behavior as early as possible. This becomes even more important as servicers introduce principal reductions in their loan modification programs.

Cash flow managers, on the other hand, should be key targets of loan modification programs. They are likely to be in temporary distress, and may also have financial resources which allow them to continue to pay their non-mortgage obligations. This clearly demonstrates willingness to pay, and a loan modification that makes their mortgage payments more affordable is likely to be very effective.

Distressed defaulters will likely require more aggressive modifications and help managing finances. They're likely to have been recently unemployed or be facing some other form of distress. Modifications for these borrowers will require aggressive reductions in monthly payments and even these may not be sufficient to prevent re-default.

These borrower segments raise some interesting questions for non-real estate lenders too. For example, if a credit card issuer knows that a particular customer is a strategic defaulter, should it reduce the customer's line on his card based on the mortgage default? In addition to unemployment or some other form of income distress, under what conditions will these customers default on their card? In today's environment, all card issuers are devoting a lot of time and energy to such pre-delinquency actions, and they need to determine the best course of action for each of these segments.

Additional analysis

To test the sensitivity of our original definition of strategic default, we also looked at a more stringent definition. The original definition required a borrower to first go 60 dpd on their first mortgage during the observation period (i.e. a quarter) and then straight roll into 180+ dpd on the mortgage while remaining less than 60 dpd on auto trades and less than 90 dpd on bank card, retail, and other non-real estate trades. In the stricter definition, a borrower must still go 60 dpd and then straight roll into 180+ dpd on the mortgage, but must also remain less than 30 dpd on all other non-real estate trades.

This stricter definition does decrease the incidence of ‘strategic defaults’, as expected, but only to 17% from 19%. The proportion of cash flow managers has also gone down from 26% to 20%, while the percentage of distressed defaults has gone up from 38% to 47%. The more stringent definition likely considers borrowers who forgot to pay their bills on time as distressed, which our original definition attempted to exclude.

Furthermore, we recommend that loan servicers and investors replicate and extend the strategic default analysis on their own portfolios. They should use current LTV data for a more accurate read on whether the borrower has negative equity. They should also use income data collected during the collections process, and use that to validate the definition we have proposed.

Subsequently, servicers should develop strategies and offers that can convince strategic defaulters to change their behavior, e.g. equity risk-sharing arrangements. A carrot-and-stick approach may also work well, e.g. borrower agrees to provide a deed in lieu of foreclosure in case he re-defaults on modified loan.

Data changes

We created the analysis for this update with the newest Experian data extract. Readers will find some differences in the same-quarter numbers between the two reports, reflecting slight differences between the two data extracts. There are several reasons why same-quarter numbers can change, including:

1. Loan modifications in the marketplace have led to file changes and status changes
2. Lower interest rates have led to an increase in refinance activity, resulting in an increase in the incidence of pay-downs
3. Revised lender reporting
    - Reporting changes can occur when one company acquires another and there have been some significant changes of ownership over these time periods
    - Lenders at times revise previous historical status reports
    - Lenders change reporting standards and methods as widespread changes continue to occur in the financial industry

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