

Impact on Consumer VantageScore Credit Scores Due To Various Mortgage Loan Restructuring Options

January 2010

OVERVIEW

The recent economic downturn and the credit market crisis combined to produce immense pressure on American consumers and the financial services industry. Rising unemployment, the continuing decline in property values, together with much tighter credit requirements have resulted in increasing numbers of significantly delinquent mortgages and foreclosure actions. Most recently, prime loans, which represent two-thirds of all mortgages, experienced a 116.2 percent increase in serious delinquencies over the same period one year ago.¹

To mitigate the negative impact caused by the crisis, the U.S. government and mortgage lenders developed multiple programs aimed at helping homeowners better manage their mortgage debt and meet monthly mortgage payments, ultimately hoping to stem foreclosures and allow families to remain in their homes.

These mitigation programs are gaining momentum. As reported by the Office of the Comptroller of the Currency (OCC) and the Office of Thrift Supervision (OTS), for example, newly initiated loan modifications and payment plans rose by 68.7 percent to more than 680,000 new home retention actions when compared with the prior quarter.² It was further reported that these programs resulted in lower monthly principal and interest payments on more than 80 percent of all modified loans.³ While these results are positive, consumers and lenders alike are raising questions about how these programs affect consumers' credit profiles and especially their credit scores.

This study evaluates the effect of various mortgage programs on consumers' VantageScore® credit scores,⁴ along with other consequences homeowners potentially face if unable to make timely mortgage payments: short sale, foreclosure, or bankruptcy. Given the recency of these programs, long-term consumer performance in response to these modifications remains to be seen. However, the initial impact to a consumer's credit score can be effectively modeled by emulating the restructured mortgage on the consumer's trade line. To calculate this effect, an analysis database was created by extracting a representative sample of homeowners from a national database.⁵ In the analysis database, their credit profiles were changed to reflect a given mortgage restructuring program or event. Additionally, further scenarios are designed and evaluated to determine the range of score changes based on the financial magnitude of the restructured events. A final section of the study focuses on how a consumer may rehabilitate their score in order to gain access to reasonably priced credit.

¹ The OCC/OTS Report defines "serious delinquencies" as "loans 60 or more days past due and loans to delinquent bankrupt borrowers." *OCC and OTS Mortgage Metrics Report*, Third Quarter 2009, December 2009, p. 17.

² *Ibid.*, p. 4.

³ *Ibid.*, p. 5.

⁴ VantageScore is a generic credit score developed by the three major credit reporting companies, Equifax, Experian, and TransUnion.

⁵ Personally identifiable information was removed from the consumer data prior to the data being furnished to VantageScore Solutions. VantageScore Solutions does not have nor maintain consumer credit files with personally identifiable information.

OVERVIEW

(Cont.)

KEY OBSERVATIONS

- Consumers and lenders should proactively seek out loan modifications before the consumer experiences a severe delinquency in their credit file. Late payments have a far greater impact on a credit score than loan modifications.
- Certain loan modifications can positively impact the score based on the recapitalization structure of the loan and whether the loan retains its original open date.
- A bankruptcy filing has the greatest impact on a consumer score and will negatively affect the consumer score for a minimum of seven years due to the presence of a public record on the consumer file.
- In order to rehabilitate consumers' scores as quickly as possible, consumers and lenders working toward mortgage restructuring should allow sufficient cash to be available to the consumer so that all other delinquent debts can be brought to current status.
- Consumers can rehabilitate their credit scores relatively quickly. Analysis has shown that even consumers whose credit score has fallen to 625 due to multiple delinquencies prior to a modification can raise their score to over 700 in as little as nine months if they bring all debts current and maintain a current status for the nine months.

SCENARIO DESIGN

Multiple programs are offered by the U.S. government and mortgage lenders to help consumers meet monthly mortgage payment obligations, including forbearance programs, refinance and renegotiation programs, the Making Home Affordable Program, Hope for Homeowners program as well as Fannie Mae and Freddie Mac streamlined loan modification programs, among others.

The overall intent of almost all programs is to lower the homeowner's monthly payment by maintaining or reducing interest rates or extending the term (from 30-year loan to 40-year loan, for example) in order to make the monthly mortgage payment affordable and sustainable. Some programs require a 3-month trial period before a loan modification is made permanent, which is the case with the Making Home Affordable Program.

Despite diverse eligibility requirements (below), programs generally drive toward one of two results:

1. Either a recapitalization of fees and past due amount, resulting in an increase in the principal after refinance or loan modifications. As a component of the recapitalization, the loan terms are often extended and/or interest rates are reduced, thereby lowering the monthly payment.
2. Or lenders agree to forgive part of the original principal, thus alleviating consumers' debt burden by reducing the balance and resulting in a lower monthly payment. The forgiven principal may or may not be recorded as a charge-off event.

SCENARIO DESIGN
(Cont.)

GOVERNMENT PROGRAM ELIGIBILITY REQUIREMENTS

	Primary Residence	Mortgage Origination	Owned or Guaranteed by Fannie Mae or Freddie Mac	Account Status	Mortgage Amount	Financial Hardship (e.g. Jump in interest rate, reduction in income, or unexpected medical bills)	Debt Burden
Making Home Affordable Programs/ Loan Modification	Yes	Before Jan. 1, 2009			<= \$729,750 on first mortgage	Yes	First mortgage payment (including tax and insurance) > 31% of current gross income
Fannie Mae & Freddie Mac	Yes, and must be one unit property	Before Jan. 1, 2008	Yes	90+ days past due		Yes	First mortgage payment (including tax and insurance) > 38% of current gross income
Hope for Homeowners	Yes, and the owner doesn't own a second home	Before Jan. 1, 2008		Have made at least six payments		Yes	First mortgage payment (including tax and insurance) > 31% of gross income as of March 2008

The study uses scenarios designed to capture the relevant elements of mortgage restructuring programs that impact consumers' credit scores. Regardless of the perceived complexity of each program, the structure for recording the mortgage event can be standardized along a relatively straightforward design. The table below documents the fields that may be affected by each mortgage program or event. A comprehensive guideline for trade line documentation (Metro 2 format) can be found at the Consumer Data Industry Association's (CDIA) website: www.cdiaonline.org.

	Monthly Payment	Terms	Original Loan Amount/ Credit Limit	Current Balance	Account Status	Comment/ Status Codes ¹	Amount Past Due	Close Old/ Open New	First Mortgage	Second Mortgage
Forbearance	X					BT/AC	X	No	X	
Making Home Affordable Programs/ Loan Modification	X	X	X	X		AC		Maybe	X	
Refinancing	X	X	X	X		AC/AS/13		No	X	
Fannie Mae & Freddie Mac	X	X	X	X		AC		No	X	
Hope for Homeowners	X	X	X	X		AS/13		Yes	X	X
Short Sale				X	X	AU/13/61-65			X	
Foreclosure			X	X	X	65/89/94/BO	X		X	
Bankruptcy				X	X	Bankruptcy ²	X		X	X

¹ The column represents reporting options which may be reflected in the credit files that are used in the VantageScore algorithm.

² In Metro 2, bankruptcy types are reflected in the 'Consumer Information Indicator.'

SCENARIO DESIGN (Cont.)

The relevant components of each program are translated into a specific set of tradeline adjustments in consumers' credit profiles, described here:

Under forbearance programs, the borrower is permitted to make either substantially reduced monthly payments or postpone making monthly payments altogether during the forbearance period. There are generally three types of forbearance programs: interest only, reduced payment, and deferred payment. Therefore, three scenarios were created that reflect these three forbearance types. For the purposes of the study, the interest-only scenario is simulated by reducing the monthly payment amount to 25 percent of the original monthly payment amount. The reduced payment scenario is structured as 50 percent of the original monthly payment. Under the deferred scenario, no payments are made and the tradeline contains a 'D' in the terms frequency field.

With principal forgiveness, the current balance is reduced by 10 percent, 20 percent and 30 percent from the original current balance. Resulting monthly payment and term length are adjusted. Note however that these fields have immediate impact on the credit score. Scenarios are modeled under two configurations: first, where the new loan details overwrite the existing trade line so that the original age of the loan is maintained, and second where the original loan is closed and a new loan is created with the new terms. If the forgiven principal results in a partial charge-off by the lender, it is recorded as a derogatory event and the score impact is similar to that of a short sale or foreclosure.

Recapitalization: The original loan amount is increased by 10 percent, 20 percent, and 30 percent to reflect the recapitalizations of fees and past due amount. As with principal forgiveness, two configurations are analyzed – overwriting the existing tradeline while closing the old tradeline and opening a new loan with the new terms.

Analyzing historic mortgage loan size and monthly payment profile shows that the 10 percent forgiveness or recapitalization scenarios align with consumers whose mortgage payments have not been made for six months.

In some cases consumers face extreme financial situations (for example, job loss or severe income reduction) and simply cannot afford to continue paying their mortgage. This can lead to short sale, foreclosure, or bankruptcy. These events have significant impact on consumers' credit scores. This study also considers these events and their implications to the consumers' VantageScore credit scores.

STUDY APPROACH

CONSUMER PROFILES

All mortgage scenarios are evaluated on four consumer behavioral profiles:

- Population One: Consumers with clean credit files (presently current and no delinquency that has ever been greater than 30 days on any trade in the past).
- Population Two: Consumers with first mortgage in clean status, other delinquencies are present.
- Population Three: Consumers are delinquent on first mortgage, no other delinquencies are present.

STUDY APPROACH (Cont.)

- Population Four: Consumers with delinquencies on the first mortgage and a delinquency on at least one other trade.

Approximately 100,000 consumer records¹ were randomly selected for each population according to the above criteria.

SCENARIOS FOR TESTING

Forbearance programs:

1. Interest only: 25 percent of original monthly payment amount
2. Principal plus interest: 50 percent of original monthly payment amount
3. Deferral: No payment is made

Loan modifications:

1. Principal forgiveness (with no partial charge-off). Existing loan is overwritten. Range of forgiven principal is 10 - 30 percent. In other words, the new loan amount is 70 - 90 percent of the original loan amount.
2. Principal forgiveness (with no partial charge off). Original loan is closed, new loan is established. Range of forgiven principal is 10 - 30 percent (new loan amount is 70 - 90 percent of the original)
3. Recapitalize first mortgage. Existing loan is overwritten. Range of recapitalization is 10 - 30 percent. The new loan amount is 110 - 130 percent of the original loan.
4. Recapitalize first mortgage. Original loan is closed, new loan is established. Range of recapitalization is 10 - 30 percent (110 - 130 percent of the original loan).
5. Recapitalization and principal forgiveness (as above) of both primary and subordinate loans.
6. Recapitalization on consumers with first mortgage in 90+ days past due status.

Derogatory Events:

1. Short Sale
2. Foreclosure
3. Foreclosure initiated, payments received after process initiation
4. Bankruptcy

¹ Personally identifiable information was removed from the consumer data prior to the data being furnished to VantageScore Solutions. VantageScore Solutions does not have nor maintain consumer credit files with personally identifiable information.

STUDY APPROACH (Cont.)

For each test the average VantageScore credit score was calculated for each population before any changes were made, which is noted as the starting/benchmark score. Relevant tradeline fields were edited to reflect the scenario designs, and the VantageScore credit score was recalculated after the changes were made. The resulting score changes were then compared to the benchmark score and reported. Tests were run for each scenario and for each of the four consumer populations (except the final loan modification scenario which applies only to highly delinquent consumers).

CONSUMER SCORE REHABILITATION ANALYSIS

A final analysis was run to demonstrate a score rehabilitation process after implementation of one of the mortgage restructuring events (e.g. loan modifications). The intent of the analysis is to provide a general guideline for the time required for a consumer to restore their score to a reasonable credit tier after having become significantly delinquent and then processing a loan modification. Two scenarios are evaluated:

1. Due to the loan modification (reduced monthly mortgage payment), the consumer is able to pay ALL debts on time and continues to pay all debts on time for an extended timeframe; and
2. Due to the loan modification (reduced monthly mortgage payment), the consumer is able to pay only the mortgage on a timely basis and continues to pay the mortgage debt on time for an extended timeframe but remains delinquent with other debts.

The consumers' VantageScore credit scores are calculated at three, six, 12 and 24-month intervals after the event.

RESULTS AND OBSERVATIONS

CONSUMER PROFILE DEMOGRAPHICS

Average trade status	All trades clean	First mortgage clean, other trades delinquent	First mortgage delinquent, other trades clean	First mortgage delinquent, other trades delinquent
Total # of Open Trades	10.72	10.89	9.54	6.67
# of Open Trades 30+dpd ¹	0.03	0.15	0.66	1.16
# of Open Trades 90+dpd	0.00	0.02	0.14	0.34
Total # of Open Bankcard Trades	3.56	3.48	2.81	1.75
# of Open Bankcard Trades 30+dpd	0.01	0.04	0.03	0.16
# of Open Bankcard Trades 90+dpd	0.00	0.01	0.00	0.04
Total # of Open Auto Trades	0.61	0.63	0.68	0.65
# of Open Auto Trades 30+dpd	0.00	0.02	0.02	0.13
# of Open Auto Trades 90+dpd	0.00	0.00	0.00	0.01
Total # of Open Mortgage Trades	1.59	1.95	2.04	1.25
# of Open Mortgage Trades 30+dpd	0.01	0.05	0.56	0.64
# of Open Mortgage Trades 90+dpd	0.00	0.01	0.14	0.22
VantageScore	862	830	722	625

¹DPD: Days Past Due.

Two important insights are observed:

1. As consumer behavior reflects greater default levels, their credit score drops significantly. On the VantageScore scale of 501 to 990, the difference between a consumer who has no delinquencies and a consumer who has delinquency and defaults on all primary trades (mortgage, auto and credit card) is an average of 237 points.
2. Comparing the impact of mortgage delinquency to all other delinquencies shows the importance of maintaining the mortgage in current status. Consumers with delinquency on only auto and card trades had an average score of 830, but consumers with their mortgage in delinquent status yet maintained current status on their auto and card trades had an average score of 722.

RESULTS AND OBSERVATIONS (Cont.)

SCORE IMPACT AS MORTGAGE SCENARIO SEVERITY INCREASES

The table below shows the expected point drop or increase to VantageScore credit scores for consumers in Population One (consumers with clean credit files) using the scenarios previously described.

VantageScore Starting Score		All trades clean	
		862	
Forbearance	Interest only	0	
	Reduced principal plus interest	0	
	Deferral	-40 to -30	
Loan Modification	Principal forgiveness, no partial c/o	Loan is overwritten	10 to 30
		Old loan closed, new loan opened	-14 to -20
	Recapitalization	Loan is overwritten	3 to 15
		Old loan closed, new loan opened	2 to 10
	Recap. and forgive subordinate loans		3 to 10
	Recap. and highly delinquent		
Short Sale		-130 to -120	
Foreclosure	Foreclosure initiated	-140 to -130	
	Foreclosure initiated, payments still made	-125 to -115	
Bankruptcy	Filing only for mortgage trade line	-175 to -165	
	All trade lines included in filing	-365 to -355	

The impact to a consumer's VantageScore credit score increases as programs reflect more severe restructuring. Loan modification programs have relatively small impacts on consumers' VantageScore credit scores, whereas derogatory events such as short sale, foreclosure, and bankruptcy have much more significant negative impacts. Loan modification ranges are presented for the 10 percent and 30 percent scenario, e.g. a 10 percent recapitalization with an overwritten loan increases the score by 3 points. A 30 percent recapitalization with an overwritten loan increases the score by 15 points.

UNDERLYING DRIVERS FOR RESULTING IMPACT TO VANTAGESCORE CREDIT SCORES

In the above table, the first two forbearance cases have no impact on scores since the consumer is still paying on time (just with reduced monthly payment amount). In the third forbearance case, where no payment is made during the forbearance period, the trade line is temporarily excluded from active trade line calculations. This will lower the consumer's score by 30 to 40 points.

For loan modifications with principal forgiveness, the partial forgiveness of principal will reduce the overall utilization level and help the score if the existing loan is modified, whereas the creation of a new account will reduce the average age of trades on file and have a negative impact on score. In the recapitalization case, the scores are generally higher due to higher credit amounts on open real estate trades. Again, if a new account is created, the positive effect is

RESULTS AND OBSERVATIONS (Cont.)

partially offset. Similar observations can be seen for recapitalization with forgiveness of subordinate loans.

In the cases of derogatory events (short sale, foreclosure, and bankruptcy), the impact to the score is much more serious. The VantageScore credit score is reduced by 115 to 140 points for short sale and foreclosures, and by 165 to 365 in the event of bankruptcy.

SCORE IMPACT TRENDS FOR CONSUMER PROFILES EXHIBITING INCREASINGLY SEVERE DELINQUENCY

The impact to VantageScore credit scores for consumers with delinquent tradelines on their files (Populations Two, Three and Four) is less than for consumers with all clean tradelines (Population One). Given that the more delinquent populations already have some negative reporting in their credit profile, adding an additional delinquent event will not be as serious as changing from a clean profile to a delinquent profile. As observed, the Short Sale scenario reduces the credit score of the 'all clean' population by 130 to 120 points but only 25 to 15 points for the population who have delinquency on all trades (first mortgage delinquent, other trades delinquent).

		All trades clean	First mortgage clean, other trades delinquent	First mortgage delinquent, other trades clean	First mortgage delinquent, other trades delinquent	First Mortgage 90+dpd
VantageScore Starting Score		862	830	722	625	587
Forbearance	Interest only	0	0	0	0	
	Reduced principal plus interest	0	0	0	0	
	Deferral	-40 to -30	-35 to -25	-10 to 0	0 to 10	
Loan Modification	Forgive, no partial c/o, overwrite	10 to 30	10 to 30	5 to 20	0 to 15	
	Forgive, no partial c/o, new loan	-14 to -20	-10 to -15	-9 to -12	-2 to -5	
	Recapitalization, overwrite	3 to 15	2 to 10	2 to 7	0 to 5	
	Recap., new loan	2 to 10	1 to 5	1 to 5	0 to 3	
	Recap. and forgive subord. loans	3 to 10	3 to 8	5 to 12	12 to 18	
	Recap. and highly delinquent					~ 0
Short Sale		-130 to -120	-110 to -100	-50 to -40	-25 to -15	
Foreclosure	Foreclosure initiated	-140 to -130	-130 to -120	-55 to -45	-20 to -10	
	Foreclosure initiated, payment made	-125 to -115	-115 to -105	-40 to -30	-10 to -5	
Bankruptcy	Filing only for mortgage trade line	-175 to -165	-160 to -150	-70 to -60	-30 to -20	
	All trade lines included in filing	-365 to -355	-330 to -320	-220 to -210	-120 to -110	

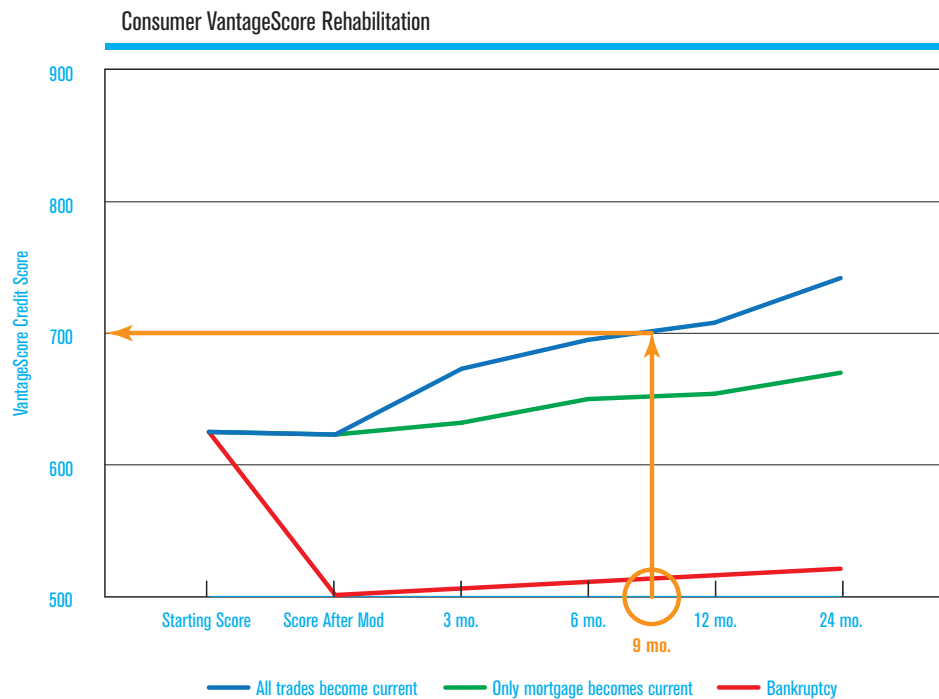
RESULTS AND OBSERVATIONS (Cont.)

CONSUMER VANTAGESCORE REHABILITATION

Analysis shows that consumers can bring their score to a reasonable credit tier (such that they are potentially eligible for prime credit quality interest rates) if they are able to pay their debts on time after the loan modifications.

Consumers in Population Four (consumers with a delinquent mortgage and at least one other trade whose credit score has fallen to 625) can rehabilitate their score if they bring all debts current and maintain current status for approximately nine months. In that scenario, their score can rise to over 700. (Blue line on the graph). If the consumer brings only their mortgage debt current and maintains that status but other debts remain delinquent, their score could rise to 660, near prime quality after 24 months. (Green line on the graph)

Finally, a derogatory event such as bankruptcy significantly reduces the consumer's score (the red line in the graph below) and further, raising the score is extremely challenging until the public record identifying the bankruptcy filing is removed from the credit file. This is seven years for Chapter 12 and Chapter 13 bankruptcy, 10 years for a Chapter 7 bankruptcy.



RESULTS AND OBSERVATIONS
(Cont.)

NEW LOAN MODIFICATION COMMENT CODES

Historically, loan modifications have been documented on the tradeline with the code ‘AC’ (see CDIA Guidelines for the Metro 2 format). This code has been used for any loan modification regardless of the nature of the restructuring event. In November, 2009, CDIA announced that the comment codes used to identify loan modification events is expanded and refined to allow lenders to document modifications with greater clarity. The following code is now available:

Special Comment Code CN:

Text: “Loan modified under a federal government plan”

Description: The Special Comment Code is designed to be used for Mortgage accounts that have been modified under one of the federal government loan modification plans.

As statistically adequate volumes of these events are observed in consumer trade files along with the commensurate performance period, VantageScore Solutions LLC will determine the optimal method for utilizing these data to provide analysis to the industry.

CONCLUSION

Housing loans were the epicenter of the national economic crisis. Millions of American families are considering loan restructuring options from a mix of public and private efforts with a goal of saving their homes. Both traditional avenues, such as foreclosure or bankruptcy, as well as new government initiatives such as the Making Home Affordable Program are available to homeowners today. Given the broad reach of the crisis and newly introduced loan modification programs, it is important for consumers, lenders, government leaders and counselors to find the best immediate and long-term solution for these consumers. One factor to consider is the effect that various restructuring options have on consumers’ credit scores. This paper addresses both the short term impact to consumers’ scores from these various options and then provides a longer term perspective on scores in an effort to highlight the steps consumers can take both during and immediately following a restructuring event to rehabilitate their score should they see a drop.

Clearly, the greatest impact to a consumer score is driven by increasing delinquency rather than changes to the consumer’s mortgage trade from a mortgage loan modification. Therefore consumers should proactively work with lenders as early as possible to address potential mortgage payment issues in order to avoid serious deterioration in their score generated from the reporting of several late payments to their credit file. It is no surprise that bankruptcy remains as causing the most severe and longest lasting negative impact on a consumer’s credit score. One strategy that consumers can employ to more quickly rehabilitate their score after a severe delinquency is to restructure their mortgage loan in such a fashion to allow them sufficient monthly cash flow to bring other delinquent debts to paid status as quickly as possible.

Finally, as new data fields and comment codes are added to the Metro 2 reporting format, a repeat of this study will need to be conducted to determine the effect of those new elements on a consumer credit score. Such research will be initiated when there is enough evidence of these loan modifications and ensuing consumer behavior in consumer credit files to produce a meaningful result.