

# Finding Creditworthy Consumers in a Changing Economic Climate

May 2010

## INTRODUCTION

Credit quality deteriorated across the credit spectrum during the recession that began in December, 2007. As the recession winds down, lenders must strategically target creditworthy consumer segments for lending opportunities, while avoiding those segments where consumer credit quality could continue to slip.

Credit scoring remains an obvious and primary gauge of prospective performance. Heightened risk management focus, however, calls for a more in-depth analysis.

A hidden momentum or trajectory in the consumer's environment can serve as a useful barometer of future performance by the borrower when combined with the credit score.

## PURPOSE AND OUTLOOK

Recent score migration profiles for the primary credit tiers of super prime, prime and near prime, reflect a general deterioration in credit quality. Despite this general deterioration, simple analytic methods are presented in this paper that enable lenders to identify borrowers with stable or improving credit quality. Additionally, insights are offered that can help identify those borrowers with credit quality on the verge of deteriorating.

Despite a somewhat gloomy economic environment, VantageScore Solutions studies and analyses demonstrate that there are more than 60 million creditworthy borrowers in the U.S., seven million of whom cannot be identified using standard scoring methods.

Secondly, 11 million consumers are likely to reflect a drop in credit quality over the next 12 months.

As lenders consider how to move beyond recession-based management strategies and intelligently re-enter the world of originations and portfolio profit maximization, leveraging methods using VantageScore in conjunction with consumer credit behaviors can effectively identify profitable opportunities from those segments that require increased risk mitigation.

## SCORES HAVE CHANGED, ALONG WITH RISK: A 24-MONTH VIEW

### APPROACH

To determine the effect of the recession and other macroeconomic factors on consumer scores and credit quality, VantageScore examined how consumers credit scores changed over a 24-month period. VantageScore examined the credit scores of 1.5 million anonymous consumers<sup>1</sup> randomly selected from the U.S. population. Each consumer's score was calculated at June 2007, June 2008 and June 2009.

<sup>1</sup> 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.

**SCORES HAVE CHANGED, ALONG WITH RISK: A 24-MONTH VIEW**  
(Cont.)

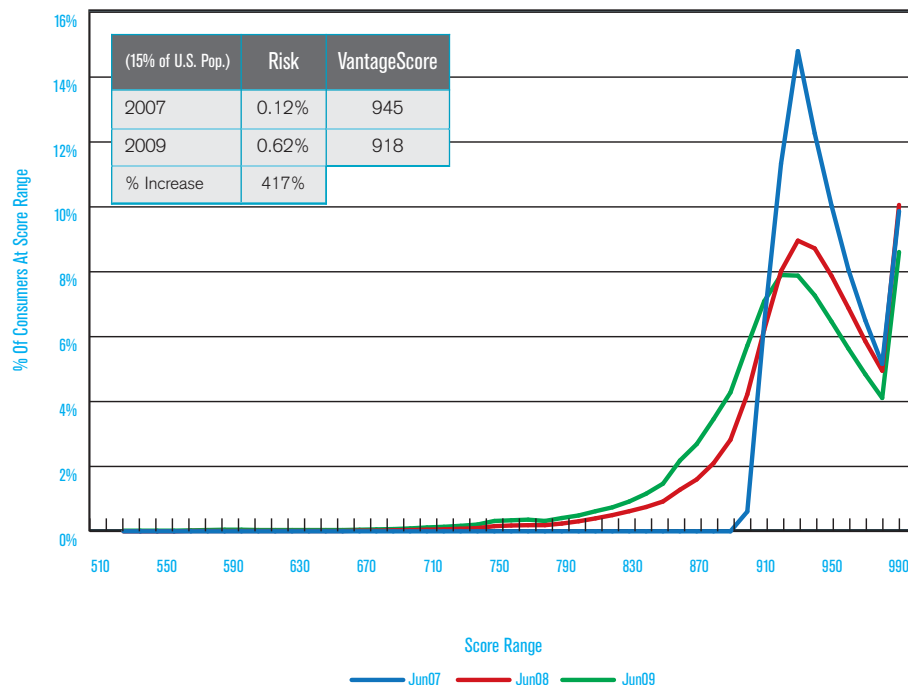
Based on their June 2007 score, consumers were uniquely assigned to one of four credit tiers: super prime consumers scored 900 or higher; prime consumers scored between 700 and 899; near prime consumers scored between 640 and 699; subprime consumers scored between 501 and 639.

A score migration graph was generated for each credit tier. Using the super prime results as an example, the graph in Figure 1 presents three score distributions for the super prime consumers: the blue line reflects the score distribution as of 2007; the red line reflects the score distribution as of 2008; the green line reflects the score distribution for 2009. The score distributions for 2008 and 2009 reveal the new scores as of June 2008 and June 2009, respectively, for those consumers who were super prime in 2007. As observed, some consumer's scores dropped below the super prime cut-off into the prime or even near prime ranges. Most of this migration occurred between June 2007 and 2008, with minor additional migration occurring between 2008 and 2009.

The inset charts on each graph provide additional information on the credit tier population. Specifically, in June 2007, 15% of the U.S. population scored as super prime. The average VantageScore for this population was 945. Using VantageScore performance charts, this population reflected a risk level (likelihood of becoming 90 days or more past due) of approximately 0.12%. As of June 2009, the average VantageScore for this population had dropped to 918 and now represented a risk level of 0.62%. The risk level for this population has increased by 417%.

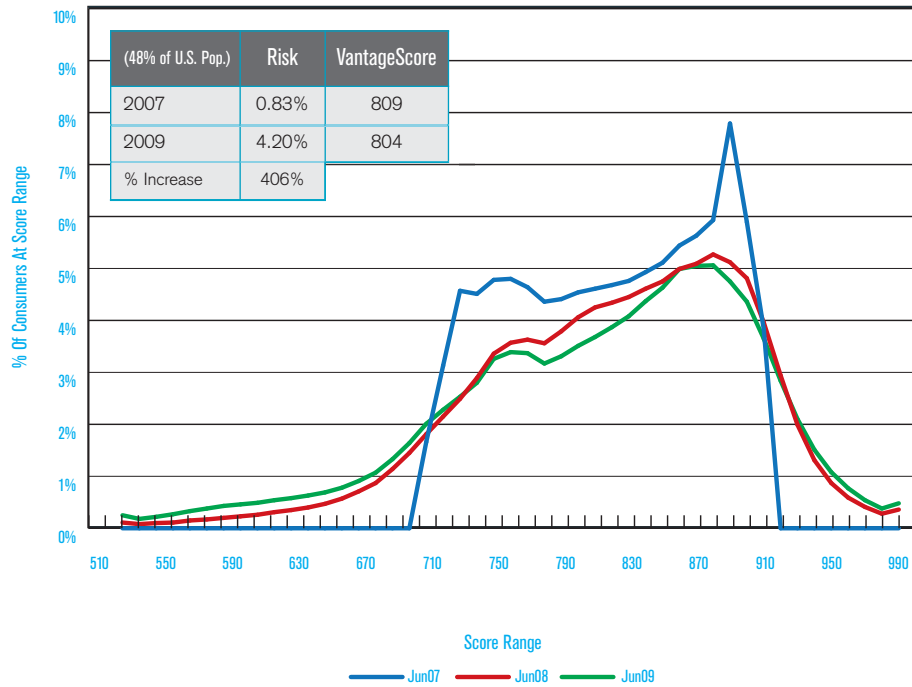
Score migration profiles are presented for each credit tier population—super prime, prime, near prime, and subprime. The resulting data provide a picture of the overall change in credit quality for each population.

**FIGURE 1: CONSUMER MIGRATION - Super Prime**

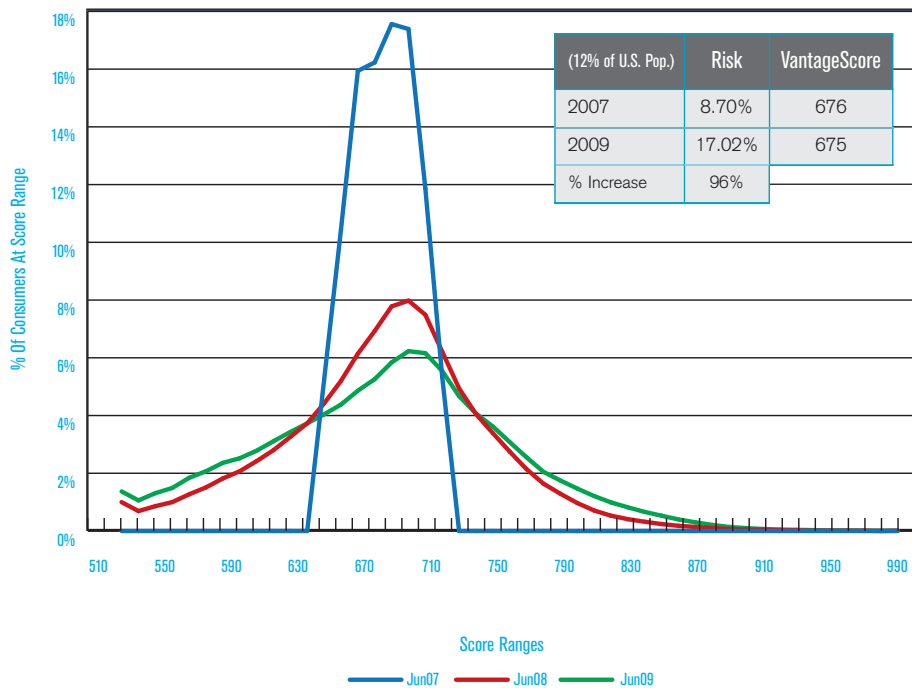


**SCORES HAVE CHANGED, ALONG WITH RISK: A 24-MONTH VIEW (Cont.)**

**FIGURE 2: CONSUMER MIGRATION - Prime**



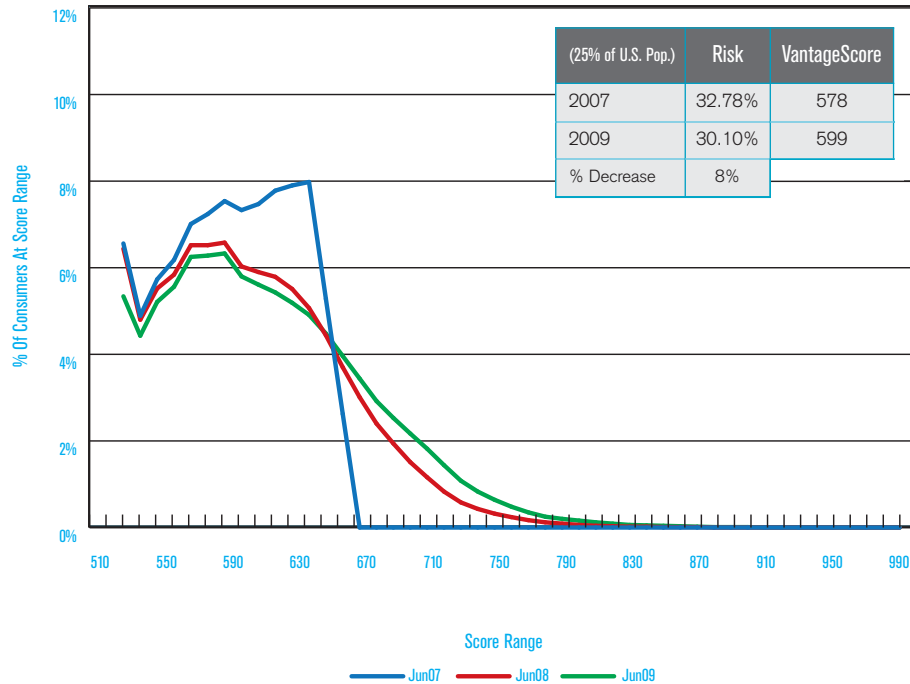
**FIGURE 3: CONSUMER MIGRATION - Near Prime**



**SCORES HAVE CHANGED, ALONG WITH RISK: A 24-MONTH VIEW**  
(Cont.)

For prime and near prime credit tiers, substantive score migration is observed. The overall risk of these populations increased by 400 percent and 96 percent respectively. Note however that the majority of the score migration occurred from 2007 to 2008, with relatively minor further migration occurring from 2008 to 2009, raising the question as to whether major credit deterioration has significantly slowed. (Figures 2, 3).

**FIGURE 4: CONSUMER MIGRATION - Subprime**



Given that subprime consumers have only one of two options, to remain as subprime or to improve, it is not surprising that a small volume of sub-prime borrowers were able to improve their scores to higher credit tiers. (Figure 4).

The second part of this paper will focus on the underlying consumer behaviors associated with migrating scores and present a methodology for identifying these consumers for targeting strategies.

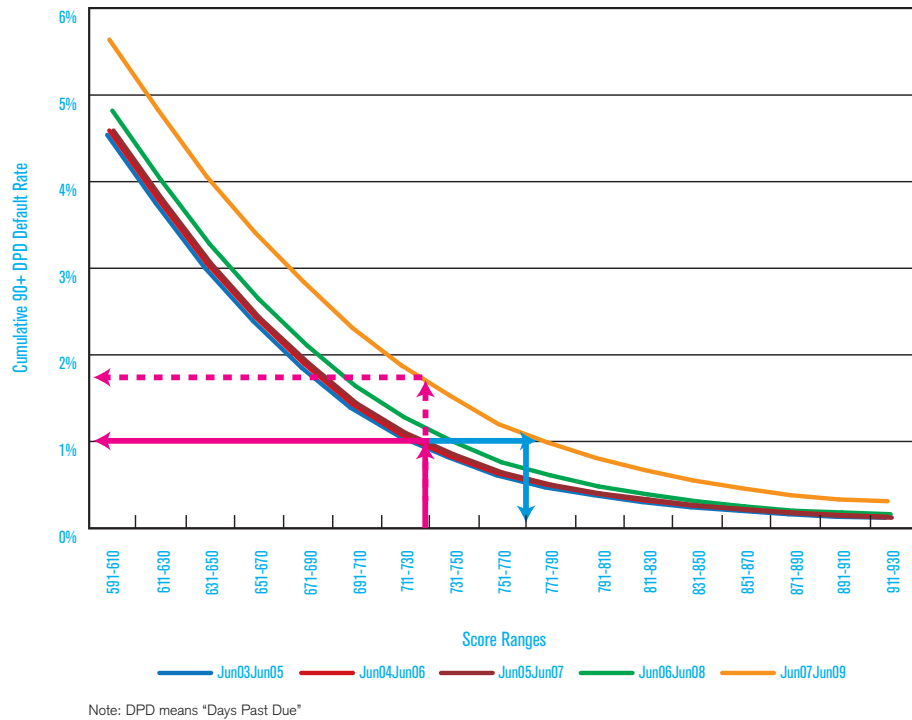
**MANAGING RISK**

Using the definition of risk as “the presence of 90-day or more late payments on the credit report,” risk increased across nearly all credit tiers during the study period.

This overall increase in risk calls first for score cut-offs to be reviewed and revised. Logically, the widespread increase in risk means that fewer creditworthy consumers are available at acceptable risk levels. Figure 5 reflects the risk to score relationship of the U.S. population over five timeframes (June 2003 to June 2005, June 2004 to June 2006, and so on up to June 2007 to June 2009), generated from VantageScore performance charts. Each point on a given curve represents the risk associated with the particular score band for the timeframe in question. As credit quality has deteriorated in recent years across the U.S. population, the risk associated with a specific score band has increased, hence the rise in the shape of the curve over time, most significantly June 07 to June 09.

## MANAGING RISK (Cont.)

FIGURE 5: EXISTING ACCOUNTS - 90+ DPD Rates: All Industries



For example, 90+ days past due for a consumer with a score of 730 has increased by 80 percent (from 1.0 percent to 1.8 percent). To maintain a similar portfolio risk profile, lenders must increase score cut-offs to 770. However, while risk remains in-line, fewer consumers are now considered creditworthy, defined as scoring in the prime or super prime credit tiers. (Figure 5).

The challenge then is to identify as many creditworthy consumers while minimizing risk exposure.

## IDENTIFYING CREDITWORTHY CONSUMERS

VantageScore Solutions has applied a simple segmentation process that utilizes the VantageScore credit score in conjunction with consumer financial management behaviors (available on the consumer credit files) to successfully identify consumers who, over the next 12 months, significantly improve in score, significantly deteriorate in score or whose scores remain stable. Note that a meaningful portion of these consumers are actually unscorable using conventional scoring algorithms.<sup>2</sup>

Using a similar segmentation process, a lender's target universe and portfolio can be analyzed to identify pockets of opportunity and focus using VantageScore and consumer credit file behaviors as the defining variables.

<sup>2</sup> "Conventional scoring algorithms" means any credit score model that uses the traditional industry exclusion criteria requiring a credit file history of greater than six months where the most recent tradeline activity is not older than six months.

## IDENTIFYING CREDITWORTHY CONSUMERS

(Cont.)

The approach recognizes that certain current behaviors provide insight into the consumers' prospective behavior. The study focused on three areas of consumer behavior:

- **Signaling Through Debt Management:** Consumers with a high percentage of inquiries on their credit file, in other words consumers seeking credit, could be signaling that they're anticipating credit challenges in the near future. Combining a high number of inquiries with a large number of open trade and recently opened trades, and overlaying this information on the consumer credit score, can isolate a segment of consumers that are likely to have deteriorating scores.
- **Credit Footprint On Secured Debt:** Consumers with fewer real estate and auto trade lines and reasonable credit scores are more able to effectively manage their debt with a smaller credit footprint and therefore likely to have stable or improving credit scores.
- **Utility On Unsecured Debt:** Consumers with lower bank card balances or lower utilization demonstrate less need for unsecured debt to manage their monthly debt picture, again pointing to stable and improving quality consumers.

### ZEROING IN

Although proper underwriting standards tied to appropriate criteria are still needed when evaluating a loan request, we can now say that the safest borrowers therefore have strong credit scores (prime or super prime), along with stable or improving credit. Using consumer credit scores and combining that with the underlying behaviors described above, three populations can be isolated:

- **Stable:** Consumers that stay within the same credit tier for one year.
- **Improving:** Defined as consumers that move to a higher credit tier in any quarter and remain at a higher credit tier for the remainder of the timeframe.
- **Deteriorating:** Consumers that move to a lower credit tier in a quarter and remain at a lower credit tier for the remainder of the timeframe.

Analyzing the U.S. population by credit quality tier and these three behaviors, a picture emerges of the consumers that fall into each of the three populations.

### FOCUSING ON CONSUMERS WHO DEMONSTRATE STABLE CREDIT BEHAVIOR

The credit behaviors outlined below in Figure 6, in conjunction with VantageScore credit scores, can be used to locate a significant volume of creditworthy consumers.

**IDENTIFYING  
CREDITWORTHY  
CONSUMERS**

(Cont.)

**Figure 6: Stable Population Behaviors** - Behaviors are statistically significant and uniquely different than the average behavior for consumers in the credit tier.

Credit Tier	Debt Management Experience (Signaling)	Secured Debt (Credit footprint)	Unsecured Debt (Utility)
Near Prime	19% fewer trades	51% lower real estate balances	11% fewer high balance bankcards 27% lower bankcard utilization
Prime	23% fewer trades 30% less recently opened trades 37% less inquiries	30% fewer real estate trades 24% fewer auto trades	21% less bankcard trades 36% less bankcard utilization
Super Prime	15% fewer inquiries	21% more real estate trades 22% less real estate delinquencies 37% higher real estate balances	n/a

For example, as seen in Figure 6, consumers in the super prime tier that are deemed stable are identified as having 15 percent fewer inquiries on their credit report, 21 percent more real estate trades and 22 percent fewer real estate delinquencies.

Continuing the example, consumers with prime credit scores and who are considered “stable” exhibit these specific behaviors in their credit profile when compared to the average prime credit-quality consumer:

- 23 percent fewer trades
- 30 percent fewer recently trades opened
- 37 percent fewer inquiries
- 30 percent fewer real estate trades
- 24 percent fewer auto trades
- 21 percent fewer bankcard trades
- 36 percent lower bankcard utilization

Based on these criteria, 39.4 million consumers (Figure 7) are likely to maintain their credit score within the prime credit tier.

**IDENTIFYING CREDITWORTHY CONSUMERS**  
(Cont.)

Figure 7: Stable Population Volumes

Credit Tier	% of Credit Tier	U.S. Population Size (million)	Average Score	Emerging Populations (million)	Risk Profile (Avg. 90+ DPD Rate: 12 months)	Compared to Average Risk Profile for Credit Tier
Subprime	77%	23.0	560	5.4	40.4%	5% lower
Near Prime	26%	3.4	670	0.8	1.3%	75% lower
Prime	74%	39.4	810	5.6	0.1%	75% lower
Super Prime	62%	11.3	953	0.0	0.001%	95% lower
		54.1		6.4		

Extending the logic to all credit tiers, more than 50 million consumers are considered stable, with strong credit scores, representing 74 percent and 62 percent of the prime and super prime scoring bands, respectively (Figure 7). Among these 50 million consumers, the risk for those in the prime category is 0.1 percent (one-tenth of one percent) or less, as determined by the average 90-days plus rate in the most recent twelve months. This risk level is approximately 75% lower than the average risk level for the credit tier. In the super prime category, the risk among those with stable credit improves to an average of 0.001 percent.

**EMERGING POPULATIONS**

Six million consumers in the prime, stable category could not previously be scored using traditional scoring methods, which require a minimum of six months of credit history and updates to their credit file at least every 6 months. Often these are consumers who have recently entered the credit market such as immigrants, young adults or who use credit infrequently. Traditional scoring methods are unable to score these individuals, however the proprietary VantageScore technology identifies and delivers highly accurate scores for these consumers. (See the VantageScore whitepaper titled, *Identifying Credit-Worthy Consumers in Underserved Populations*, available on VantageScore.com).

**ELEVEN MILLION POTENTIAL NEW CUSTOMERS WITH 'IMPROVING' CREDIT**

Along with the stable segment of consumers, VantageScore identifies an additional 10.6 million consumers whose overall credit quality is improving and whose risk profile is consequently very attractive. One million of these consumers would not be identified using traditional scoring methods.<sup>3</sup>

<sup>3</sup> “Traditional scoring methods” means any credit score model that uses the traditional industry exclusion criteria requiring a credit file history of greater than six months where the most recent tradeline activity is not older than six months.

**IDENTIFYING CREDITWORTHY CONSUMERS**

(Cont.)

The VantageScore algorithm accounts for a range of such factors for identifying creditworthy consumers. For example, the improving prime population is identified as having 20 percent older trades, 11 percent less auto delinquency, 64 percent fewer high utilization bankcards—among other things—when compared with all other behavior categories. (Figure 8).

**Figure 8: Improving Population Behaviors** - Behaviors are statistically significant and uniquely different than the average behavior for consumers in the credit tier.

Credit Tier	Debt Management Experience (Signaling)	Secured Debt (Credit footprint)	Unsecured Debt (Utility)
Subprime	7% older trades 8% fewer inquiries	n/a	14% fewer high utilization bankcards
Near Prime	34% less collections activity	n/a	n/a
Prime	13% more trades 20% older trades	35% more real estate trades 41% less real estate delinquencies 11% less auto delinquency	17% more bankcard trades 64% fewer high utilization bankcards 25% less bankcard delinquency

Risk to the lender is low for these consumers, especially in the prime scoring bands. With an average score of 864, the prime, improving consumer has a risk profile of 0.01 percent. There are 3.4 million consumers in this category. Similar low risk is present in near prime and subprime categories of improving consumers—0.7 percent and 7.8 percent respectively, representing a total of 7.2 million consumers. (Figure 9).

**IDENTIFYING CREDITWORTHY CONSUMERS**  
(Cont.)

**Figure 9: Improving Population Volumes**

Credit Tier	% of Credit Tier	U.S. Population Size (million)	Average Score	Emerging Populations (million)	Risk Profile (Avg. 90+ DPD Rate: 12 months)
Subprime	14%	4.1	605	0.6	7.8%
Near Prime	23%	3.1	678	0.4	0.7%
Prime	6%	3.4	864	0.03	0.01%
		10.6		1.0	

**STEERING CLEAR: IDENTIFYING NON-CREDITWORTHY CONSUMER SEGMENTS**

As the economy transitions out of the recession, a full range of tools must be used to help identify new credit customers. In this paper we've identified over 60 million consumers whose credit scores are stable or improving and who represent potential opportunities for lenders. Seven million of those borrowers were identified using the proprietary VantageScore in combination with traditional credit scoring tools.

At the same time, VantageScore has determined that there are 11 million consumers whose credit quality is declining. Of these 11 million, more than 8 million are currently considered prime and super prime quality when reviewed using credit scoring methods alone.

The deteriorating population can be identified using underlying behavior along with credit score. For example, prime borrowers who have 14 percent more recently opened trades and 65 percent higher bankcard utilization—among other things—when compared against all other behavior categories, can be seen as declining in credit quality. (Figure 10).

**STEERING CLEAR:  
IDENTIFYING NON-  
CREDITWORTHY  
CONSUMER  
SEGMENTS**  
(Cont.)

**Figure 10: Deteriorating Population Behaviors** - Behaviors are statistically significant and uniquely different than the average behavior for consumers in the credit tier.

Credit Tier	Debt Management Experience (Signaling)	Secured Debt (Credit footprint)	Unsecured Debt (Utility)
Near Prime	43% more collections activity	n/a	13% more high balance bankcards
Prime	14% more recently opened trades 18% younger trades 27% more inquiries	n/a	65% more high utilization bankcards 40% higher bankcard utilization
Super Prime	11% less recently opened trades	n/a	n/a

As seen in Figure 11, eight percent of the prime category, or 4.3 million consumers, have an average credit score of 747, and yet the risk profile, as determined by an average of 90-plus days late over the preceding 12 months, is 10.9 percent. Similarly, 22 percent of the near prime credit tier has deteriorating credit, creating a risk profile of more than 23 percent.

**Figure 11: Deteriorating Population Volumes**

Credit Tier	% of Credit Tier	U.S. Population Size (million)	Average Score	Emerging Populations (million)	Risk Profile (Avg. 90+ DPD Rate: 12 months)
Near Prime	22%	2.9	664	0.3	23.7%
Prime	8%	4.3	747	0.5	10.9%
Super Prime	25%	4.5	926	0.0	0.5%
		11.7		0.8	

## SUMMARY

This analysis was conducted on a sample reflecting the entire U.S. adult population. Using VantageScore in combination with additional key consumer behaviors, nearly 63 million consumers in the U.S. are determined to be creditworthy, defined as stable scores in the prime and super prime credit tiers or improving to prime or super prime in the next 12 months. Of these 63 million, nearly six million stable, prime consumers cannot be scored using traditional scoring methods and an additional one million are 'Improving' consumers that also heretofore have been unscorable.

Conversely, VantageScore Solutions has determined that there are approximately 11 million consumers who are likely to experience continuing deterioration in credit quality.

Given recent trends of slowed deterioration in credit quality and optimism that the U.S. is rebounding from the recession, this is an opportune time for lenders to turn their attention to growth strategies.

Using the segmentation approach outlined above, lenders can intelligently and effectively target eligible populations to isolate profitable segments for acquisition and existing account management strategies with VantageScore and credit file.