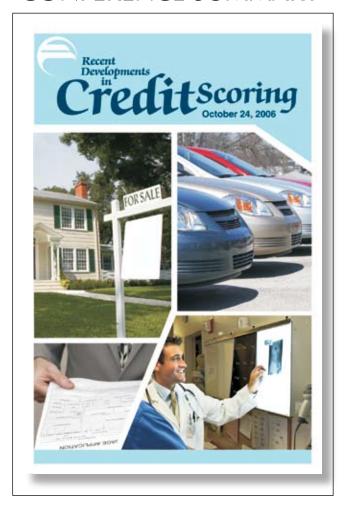
CONFERENCE SUMMARY



Recent Developments in Credit Scoring:

A Summary

October 24, 2006



FEDERAL RESERVE BANK OF PHILADELPHIA

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Acknowledgment: I would especially like to thank Christy Chung Hevener. This symposium would not have been possible without her untiring efforts.

The views expressed here are those of the author and do not necessarily represent the views of the Federal Reserve Bank of Philadelphia or the Federal Reserve System.

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I. Introduction

Credit scores are important indicators of consumers' credit profiles, and they are used by mortgage lenders, credit card issuers, and many other financial institutions to assess consumers' willingness and ability to repay their financial obligations. Over the past decade, they have become the main factor that determines borrowers' access to capital and the cost that borrowers will ultimately bear. But how do consumers make sense of three credit scores, one from each of the three major credit reporting agencies? What about those consumers who have little or no credit history and thus no traditional credit score? And what about consumers with high-deductible health plans who need credit to pay for costly medical procedures?

To shed some light on these questions, the Community Affairs Department of the Federal Reserve Bank of Philadelphia hosted a symposium entitled "Recent Developments in Credit Scoring" on October 24, 2006. This symposium was conceived in order to explore developments in the industry that are making credit scoring a more accurate and predictive tool. The symposium highlighted three important developments that address the concerns outlined above by refining or augmenting current credit scoring techniques.

II. Overview of Credit Scoring

Patricia Hasson of the Consumer Credit Counseling Service of Delaware Valley opened the symposium by providing an overview of credit scoring. Hasson traced its origins and offered a synopsis of the current credit scoring system, which, she stressed, is designed to make lending and borrowing more fair and efficient. She also alluded to the industry experts who would follow her on the program to discuss the latest innovations in credit scoring — innovations devised to further improve the process for lenders while further leveling the playing field for borrowers.

Hasson began, however, by drawing on her experience as a commercial lender earlier in her career. She recalled originating loans that ranged from automobile to home equity to unsecured consumer loans. What was especially memorable to her was looking in one of her first files with a credit history dating back to the 1960s and finding interviews with the applicant's neighbors, attesting to his character. She mused that not many loans would be made today if lenders based their decisions on the character references of someone's neighbors. Clearly, such subjective information, according to Hasson, is an ill-advised way to gauge someone's creditworthiness today.

Credit Reporting

Turning to the origins of credit reporting and the credit scoring system, Hasson pointed out that credit reporting began just over 100 years ago. It started with small merchants sharing information on their customers' payment patterns and the likelihood that a customer would repay the loan. This was an expedient way of mitigating risks. These collaborative efforts led to the establishment of merchant associations, which, with the advent of computerization and through consolidation, developed into larger credit bureaus. However, the system was far from advantageous to borrowers whose information was maintained by these bureaus. The bureaus lacked safeguards for ensuring the privacy of the information they held on consumers. They also recorded some types of information that were not good predictors of a consumer's creditworthiness. Moreover, consumers were unable to access the information credit bureaus had collected about their credit behavior.

Hasson noted that these shortcomings weren't addressed until Congress passed the Fair Credit Reporting Act (FCRA) in 1971. The FCRA delineates standards governing consumer privacy and accuracy in reporting. As a result of the act, credit reports began including positive financial information. Furthermore, consumers were afforded the right to obtain copies of their credit reports and dispute information they believe is inaccurate.

Credit Score

According to Hasson, most people associate credit scores with the FICO score. In fact, the Fair Isaac Corporation, the developer of the FICO score, began its path-breaking work with credit scoring in the late 1950s. Fair Isaac built its first credit scoring system for American Investments in 1958. In the early 1960s, the company built a credit scoring system for Montgomery Ward and later developed a credit scoring system for a bank credit card for Connecticut Bank and Trust (1970). These early scoring systems were specific to each company. Hasson added that the first general-purpose FICO score was developed in 1989 in partnership with the credit bureau Equifax and continues to be a popularly used score today. She observed that the FICO model has become the standard most widely used for determining consumers' credit risk.

Fair Isaac developed a mathematical algorithm that uses financial information on a consumer to calculate a credit score. This score, in turn, is compared with the scores of other consumers with similar financial profiles, along with their repayment behavior, to determine a consumer's creditworthiness. Hasson pointed out that the use of a credit score makes it possible to receive an instant response for a credit request at retail stores or to get a 30-minute approval on home equity lines. However, she cautioned that while a credit score is an assessment of risk, it is only one of many factors considered when evaluating whether someone is granted credit; other factors might include income or collateral. But a credit score is increasingly being used to determine the terms of consumer credit, such as the interest rate on a loan.

Hasson briefly discussed the basic components of a credit score. She indicated that a credit score is based on the information contained on a consumer's credit report, which is broken down into five categories. Each category contributes a certain percentage to the total score. Generally speaking, payment history accounts for 35 percent, outstanding debt for 30 percent, length of credit history for 15 percent, new credit 10 percent, and how many and what types of credit used (installment versus revolv-

ing credit) another 10 percent. The more favorable the information in each category, the more points that category contributes to the total score. Scores range from 300 to 850, and consumers with higher scores receive better credit terms. Hasson noted that the breakdown of credit scores across the nation reveals that the largest percentage of Americans (29 percent) fall into the 750 to 799 range.

Hasson then identified ways that might help improve a credit score, including paying down credit card and other debt, making payments on time, refraining from closing credit card accounts that have been held for a long period of time and that help to establish a long payment history, avoiding opening new accounts, and, in general, establishing a longterm, positive credit history. She also warned of actions that would hurt a credit score, including missing payments, using a credit card to its maximum limit, excessive shopping for credit, and having a greater number of revolving loans compared to installment loans. But she hastened to add that adopting a strategy to improve a credit score is an individual matter and there isn't a "one size fits all" solution. Hasson thought that it would be prudent to consult someone with experience with and knowledge of credit scoring for assistance in charting a course of action.

Hasson emphasized that the credit scoring system has been beneficial to both creditors and borrowers by creating efficiency in the marketplace. She recalled a time when only the wealthy were able to obtain loans. Now access to credit by borrowers of different income levels has increased. The automation of financial information and credit decision-making has made possible a faster extension of credit at cheaper prices. Furthermore, the Internet affords borrowers the opportunity to look beyond their neighborhood and seek the best credit terms nationwide. Hasson also suggested that the scoring system has leveled the playing field for those who have ex-

¹ This category has an inverse relationship between the amount of debt and the number of points contributed to the credit score — namely, the lower the debt, the higher the points and vice versa.

perienced financial difficulties in the past. It enables them to repair their credit and raise their score in order to seek better credit terms.

However, Hasson pointed out that lenders are not the only ones using credit scores today. Others, such as landlords, utility companies, and potential employers, also rely on them. Hasson referred to a 2005 report by Spherion, a U.S. recruiting firm, which revealed that the number of employers using credit scores and credit reports to determine the suitability of a candidate had increased 55 percent over the previous five years.²

Given the important role that financial behavior and the three little numbers in a credit score play in our lives, Hasson called attention to the need for consumers to be more aware of their financial profile. She pointed to a recent survey by Capital One, which disclosed that 27 percent of the consumers surveyed had never looked at their credit report.³ Here, she noted that consumers have been aided by the Fair and Accurate Credit Transactions (FACT) Act of 2003. In addition to providing more safeguards regarding credit reporting and provisions governing identity theft, the FACT Act also granted all Americans the right to obtain a free copy of their credit report annually from each of the three national credit reporting agencies (Equifax, Experian, and TransUnion). But consumers must pay a fee to obtain their credit score. However, Hasson wondered whether consumers who do obtain a copy of their credit report are able to understand it and use it to improve their financial situation. On this point she touted the virtue of financial education and making use of the services offered by credit or housing counseling organizations. Hasson also challenged consumers to be more proactive when it comes to their credit report and credit score. She emphasized that a credit score is only as good as the

Hasson's view of the impact of the credit scoring system on the financial landscape is that it is both a blessing and a curse. While the scoring system has greatly eased the process of obtaining credit, that very ease of access to credit has contributed to our becoming a nation of debtors, not savers. She observed that credit card debt in the U.S. exceeds \$820 billion, while total nonmortgage debt is roughly \$2.2 trillion.⁴ She also cited a study by the U.S. General Accountability Office that reported that late fees on credit cards increased from \$13 in 1995 to \$34 in 2005, while interest rates charged for late payments and exceeding credit limits increased more than 30 percent.⁵ Furthermore, 55 percent of college students obtain a credit card in their freshman year, and the average college graduate leaves school with \$2,700 in credit card debt, not including student loans. Hasson thought that promoting financial literacy earlier in people's lives might address the overall debt situation and help decrease the number of delinquencies, bankruptcies, and other financial difficulties that adults may encounter.

All told, Hasson thought that improvements are being made in the credit scoring system. She alluded to one of the innovations — discussed by a later speaker — that gives consumers who historically have not been included in the traditional credit system an opportunity to obtain credit scores. She held out hope that other innovations might also allow businesses to expand and extend their financial services with lesser risk involved.

data it is based on. Errors on a credit report (which are reflected in the credit score) can adversely affect a consumer's ability to obtain credit or favorable credit terms. Hasson urged consumers to be vigilant in monitoring their credit report for errors and taking corrective action when errors are detected.

² Findings from Spherion *Emerging Workforce Study*, Spherion Corporation, 2006.

³ See the Second Annual America's Financial IQ survey, October 5, 2006, at http://www.consumer-action.org/press/articles/second_annual_americas_financial_iq_survey/.

⁴ These figures have since changed. As of March 2007, they are \$888.2 billion and \$2.4 trillion, respectively. See http://www.federalreserve.gov/releases/g19/current/default.htm.

⁵ U.S. General Accountability Office, Credit Cards: Increased Complexity in Rates and Fees Heightens Need for More Effective Disclosures to Consumers, GAO-06-929.

Discussion

In the discussion that followed Hasson's presentation, symposium participants focused on several aspects of the credit report and its companion credit score. A number of attendees expressed concern about the price of obtaining a credit score and that the fee may be prohibitive for a segment of the population. Although the FACT Act of 2003 allows consumers to obtain one free credit report each year, obtaining the credit score that corresponds with that report can cost about \$14.95 for an individual score or \$44.85 for the three scores from the three major credit reporting agencies, according to a representative from Fair Isaac. While the industry currently has no plans to offer free credit scores, Hasson suggested that consumer groups could place the issue on their agendas.⁶ Also, Fair Isaac is willing to work with groups that require discounts in cases where the costs of obtaining credit scores are prohibitive. However, charging a reasonable fee for a credit score is permissible under the FACT Act because Congress acknowledges that credit bureaus incur costs in obtaining data and producing a score.

Audience members were also concerned about the number and types of inquiries on an individual's credit report and how they may affect an individual's score. As with most issues concerning credit scoring, the impact of inquiries depends on the individual's credit file. There might be little or negligible impact for those with a long and established credit history but a more substantial impact for those with a relatively short or new credit history. In general, inquiries that demonstrate that the individual is seeking credit are regarded as "hard" inquiries and will have a negative effect on a credit score.⁷ How-

Audience members also raised concerns about removing inaccuracies from a credit report and the effect of these actions on the credit score. In particular, audience members said that they had not immediately seen the expected increase in their credit score after negative information was corrected and, in some cases, had even seen a decrease in their credit score. The speakers stressed the importance of allowing enough time for the changes in the credit report to flow through the system, which can take up to a minimum of a month for the necessary changes to be updated and shared with the relevant parties. If inaccuracies persist, the major credit bureaus should be contacted, since they are the repositories of credit data. Hasson also cautioned against comparing scores from different credit bureaus, since these scores may differ because of differences in the underlying data and credit scoring methods.

III. FICO Expansion Score

Ianice Horan of the Fair Isaac Corporation made a presentation on the FICO Expansion Score. She explained that the FICO Expansion Score was created to serve the segment of the population who were unable to obtain a credit score calculated from traditional credit data. Members of this credit-underserved market fall into two groups. One group consists of those individuals about whom credit bureaus

ever, because the FICO model acknowledges the importance of comparison shopping, inquiries made within a two-week period are considered a single inquiry. Also, when the FICO model is constructing the score, it doesn't consider inquiries made in the last 30 days. Unlike hard inquiries, "soft" inquiries do not get factored into an individual's credit score. Examples of soft inquiries include a consumer's request for his or her credit report, lenders' requests for "pre-approved" credit offers, and requests from prospective employers.8

⁶ In fact, one of the presenters mentioned that support for that position was echoed by Liz Pulliam Weston, a nationally syndicated columnist who has written on the topic and suggested that Congress should provide free credit scores once See http://articles.moneycentral.msn.com/Banking/ a year. YourCreditRating/DemandYourFICOScoreNow.aspx

Although inquiries remain on a credit report for up to two years, many creditors generally ignore those inquiries that have been on the report for six months or more.

⁸ Soft inquiries also include requests by current lenders for a review of a consumer's account and requests by landlords for purposes of screening tenants.

have no information and hence no record; they are dubbed "no-hit" individuals. The other group is composed of those individuals about whom credit bureaus have very little information; they are called "thin-file" individuals. Horan noted, however, that thin-file individuals may have extensive payment histories, but their thin-file status may be the result of making payments to creditors who do not report payment history to the traditional credit reporting agencies.

Fair Isaac estimates that about 50 million individuals in the United States, or one in four adults. are in the underserved credit market. The company arrived at this number by subtracting the number of individuals with a full credit record (160 million) from the adult population in the U.S. as of the last census (210 million). Of the 50 million in the underserved credit market, Fair Isaac estimates that 30 million are thin-file and 20 million are no-hit individuals.

Horan further described the underserved population as a nonhomogeneous group, consisting of immigrants, minorities, students, recently divorced or widowed individuals, and that segment of the population, such as the elderly, that is culturally resistant to credit and which continues to embrace cash.

According to Horan, the underserved credit market presents both a problem and an opportunity. On the one hand, individuals with little or no credit history at the traditional credit bureaus (and hence less likely to have FICO scores) are typically left out of the mainstream lending programs, are charged high rates if they can get credit products at all, and end up as part of the underserved credit market. On the other hand, lenders look upon this segment as an opportunity to generate significant revenue through the marketing of their financial products while providing much deserved credit to an underserved population. In fact, Horan indicated that lenders took the initiative and approached Fair Isaac for assistance in tapping that portion of the underserved market for potential low-risk customers.

In response to requests by lenders, Fair Isaac developed the FICO Expansion Score, which is a credit risk score based on alternative credit data. The challenge was to identify the types of data available

on the experiences of the underserved population in nontraditional credit-granting institutions, scale the data in a manner similar to that used in the classic FICO score, develop a score comparable to the classic FICO score, and offer the same score range as the classic FICO score. Moreover, the FICO Expansion Score had to have the same consumer-friendly features that the classic FICO score has, namely, sufficient information to indicate which sources were used and which data were gathered to assess an individual's payment history, statements that explain why an individual's score is not higher, a built-in and operational consumer dispute process, and a scoring method that fully complies with regulations (i.e., meets the requirements of the Fair Credit Reporting Act, Gramm-Leach-Bliley Act, Equal Credit Opportunity Act, and Fair and Accurate Credit Transactions Act).

Horan further explained that the FICO Expansion Score is derived from data that reflect the consumer's bill-paying performance on obligations with credit characteristics but such performance is not currently reported to the traditional credit reporting agencies. The desired data sources are national in scale and contain large volumes of records that offer both positive and negative information. These data are supplemented with other information, if available, including thin-file information from the credit reporting agencies, information from public records, and application data with characteristics that may have predictive value.

According to Horan, Fair Isaac recognized that a new credit score introduced in the market would have to be able to demonstrate that it can perform on par with proven scores, such as the classic FICO score. In anticipation of such a challenge, Fair Isaac, she reported, subjected the FICO Expansion Score to many tests, including retro-validation and key performance measures in order to ensure its viability as a predictive product in the marketplace. Among the main performance metrics lenders are concerned about are the product's scorability — the percent of the lender's target population for which the product will provide scores; score distribution — the score's ability to sort the population into varying levels of risk (captured in different score ranges),

which will allow the lender to distinguish low-risk consumers from high-risk ones; score rank ordering — a score that reflects the fact that people with higher scores should perform better than those with lower scores; and score alignment — the ability of any FICO Expansion Score (say, 700) to reflect the same risk assessment as its identical (700) classic FICO score.

One approach to gauging all of these factors is to undertake a retrospective validation (or retrovalidation). Retro-validation uses accounts that have been on the books for a period of time because the accounts' performance is already documented. The FICO Expansion Score is used to score the account holders, and then the score's predictive ability is observed by scrutinizing the actual payment performance of the accounts. The score's efficacy can be determined by charting its performance with respect to the performance metrics mentioned above. Essentially, you are posing the following question: If you had had the FICO Expansion Score at the time these accounts were opened, would it have accurately predicted their performance? Horan reported that this procedure was undertaken with the cooperation of several companies from the credit card, auto finance, and mortgage industries, including American Express and HSBC from bankcard issuers; Daimler-Chrysler, Drive Time, and Ford Motor Credit from auto finance lenders; and Credit Suisse, First Franklin, Freddie Mac, HSBC Mortgage, and Option One from the mortgage industry.9 Thus, Fair Isaac used application information from January 2004 to June 2004 to score account holders using the FICO Expansion Score and then observed the accounts' payment performance through the spring of 2006, approximately 24 months. The performance criterion for the FICO Expansion Score was the likelihood that an account would be delinquent 90 days or more within a 24month period.

In the scorability analysis, Horan indicated that two criteria were evaluated: whether a consumer would be scorable and whether the FICO Expansion data sources supplied sufficient information to generate a predictive score. She reported that the scorability rates varied by, but were not limited to, the industry examined, the product considered, and the marketing channel that served as the source of the original application. The overall scorable rate for consumer account holders across all of the participating companies was 68 percent. The auto companies registered the highest scorable rate, while the mortgage companies had the lowest. According to Horan, this was primarily because Fair Isaac essentially had access to all of the application data from the auto companies, but the compilation of rental histories is highly segmented and all of the data are not included in the national repositories Fair Isaac is able to access. 10

Horan thought that the resulting score distribution of the thin-file and no-hit underserved population over the credit score ranges was quite revealing.¹¹ The credit scores were distributed fully across the risk spectrum. This means that there were applicants in the underserved market who were a low credit risk and who had the potential to qualify for prime credit products with lower prices and fees than are generally available to those in this underserved market. Horan noted that this demonstrated the possibility that lenders in the three participating industries (credit card, auto finance, and mortgage) could increase their portfolios by marketing their prime products to the low-risk consumers in the underserved market. Moreover, the FICO Expansion Score would also enable lenders to price the riskiness of other consumers in the underserved segment. Horan stressed that part of the philosophy behind the FICO Expansion Score is that once a consumer receives a mainstream credit product, the lender is expected to start reporting the consumer's credit

⁹ Horan indicated that other lenders also participated and their outcomes were reflected in the results she reported.

She further pointed out that many of the mortgage programs — particularly subprime and nontraditional — already manually review rental histories.

The credit score ranges are: not scorable; 300-549; 550-599; 600-619; 620-623; 640-649; 650-659; 660-679; 680-699; 700-749; and 750-850.

behavior to a mainstream credit reporting agency. Thus, the FICO Expansion Score would not create a two-tiered system but would help consumers make the transition into the mainstream credit market. Consequently, the next time that consumer applies for credit he or she can receive a classic FICO score from Equifax, Experian, or TransUnion.

The final stage of the validation process is to consider the rank ordering of risk across the range of credit scores. In the case of the credit card industry, for a FICO Expansion Score in the 530 to 559 range, the odds of favorable repayment were 2.6 to 1 — or for every 3.6 applicants considered, 2.6 of them are going to pay as previously agreed and one is not. Similarly in the 700 to 749 range, the odds were 22 to 1. Thus, the rank ordering of risk had the desirable features of having a significant difference in the odds between the highest and lowest score bands, and the progression of odds increased as the score increased. The final test was to compare the rank ordering ability of the FICO Expansion Score with that of the classic FICO score. Fair Isaac found that the rank ordering of the FICO Expansion Score aligned quite well with the ranking in the classic FICO score.

Horan closed by pointing out that the FICO Expansion Score complies with all regulatory requirements and provides consumers with the appropriate disclosures comparable to those that accompany the classic FICO score, as well as a copy of their Expansion credit report.¹²

Discussion

The discussion of the FICO Expansion Score focused on clarification of its use and availability. One symposium participant asked which lenders were currently using the FICO Expansion Score. Horan responded that the FICO Expansion Score has been in existence for approximately three years and its greatest use has been in the credit card industry, followed closely by the automobile industrv. She expressed hope that the FICO Expansion Score will gain greater acceptance in the mortgage industry, especially once the secondary market and the government sponsored enterprises (GSEs) give mortgage lenders guidance regarding acceptance of this risk score by those entities.

Another attendee wanted to know when a lender should use the FICO Expansion Score rather than the classic FICO score. Horan indicated that such a decision would typically be made by a credit policy officer in a company's home office rather than at the underwriter level. Presumably, companies would establish a policy that outlines the criteria that must be met in using one of the two scores. Horan speculated that some lenders might experiment with using both types of scores until they are satisfied as to which score provides the best fit for different segments of the population.

A related issue concerns where all the data from the nontraditional credit sources will ultimately be used. According to Horan, if these data are obtained through an exclusive contractual agreement for the FICO Expansion Score, they will be used only in connection with the FICO Expansion Score. However, she noted that some state legislatures are contemplating whether they should mandate that these nontraditional data be reported to the major credit reporting agencies. If that occurs, these data might also be reflected in the classic FICO score as well. She pointed out that, in fact, some utility companies are already sending information to the major credit reporting agencies.¹³

One attendee questioned the wisdom of using a credit score as part of the employment process. Horan responded that although the FICO score was not developed as an employment indicator, she was well aware that it was being used to make hiring decisions. However, she noted that this practice did not represent a significant volume of FICO score

¹² This also includes reason codes (and explanations of the codes), which are required by law and indicate where consumers lost points in their overall Expansion score.

¹³ Horan gave the example of WE, the Wisconsin Energy company.

usage. She also mentioned that a separate version — the credit-based insurance score — was being used in decisions about insurance, and such use is the subject of a study by the Federal Trade Commission. Another speaker on the program added that using credit scores in employment and insurance decisions constitutes permissible purposes under the Fair Credit Reporting Act.

In addressing several questions concerning the availability of the FICO Expansion Score to consumers, Horan stated that consumers can request a copy of their Expansion credit report with accompanying explanatory codes and their FICO Expansion Score from First Advantage, when their alternative credit information has been scored using this tool.¹⁴

IV. VantageScore

Maxine Sweet of Experian introduced the new VantageScore and also provided some general information about credit scores and credit scoring that dovetailed with earlier presentations. Sweet began her remarks by noting that a de facto scoring existed even before the first scoring model was developed. During the pre-scoring days, creditors devised their own "rules-of-thumb" sheets to guide their lending decisions. They took into account individuals' financial behavior, such as the number of times they were 30 or 60 days late in making payments, as well as the amount of their debt and other factors. Unfortunately, the lending decision was vulnerable to the personal bias of the individual evaluating the credit application. Consequently, the evaluators' biases toward women, minorities, or other population subgroups could influence their judgment.

The advent of formal scoring via scoring models helped to make the lending decision more objective and curbed the injection of personal bias in the process. But Sweet cautioned that although a credit score is a valuable risk management tool that supplants a manual scoring sheet, it is only a tool. It reflects the information in a credit report, which should be the primary object of concern. While different scoring models might generate different credit scores from the same credit report, the fact remains that what is contained in the credit report is of utmost importance. Thus, a credit score without any means of interpretation can be deceiving. She illustrated this point by referring to her company's scoring model known as the Experian Plus Score. According to Sweet, the original scoring range for the Experian Plus Score was from 0 to 500, and in this model, 500 is a bad score — that is, the lower the score, the better the risk. This ran counter to the classic FICO score, where a higher score means a consumer is more creditworthy. The range was subsequently converted to a scale similar to that used in the classic FICO score. However, Sweet further noted that many consumers are still under the misperception that there is only *one* score.

Sweet observed that although the three major credit reporting agencies (Equifax, Experian, and TransUnion) partnered with Fair Isaac to develop their scoring models, these models can use different scoring ranges. This has led to some confusion among consumers when they receive different credit scores from different credit reporting agencies. Given the number of credit scoring models that exist, Sweet urged that consumers should not be so fixated on the number per se but instead pay attention to where their score falls in the model's range of risk.

This was a convenient segue into Sweet's discussion of VantageScore. However, before focusing on VantageScore, she briefly outlined the roles of the three parties involved in risk scoring. First are the lenders, who define the lending criteria and interpret the risk scores. They choose the scoring model they will use, and some use more than one model. Moreover, their ranges of approval may vary, and their product pricing may vary across different ranges of scores. Second are the risk score modelers. They develop the underlying algorithm in a model that produces a credit score. Currently, the largest and best known is Fair Isaac's FICO scoring model.

Consumers can call 1-866-838-3427 to request a copy of their Expansion credit report or Expansion score. Although the FICO Expansion report might be available, the FICO Expansion Score can be provided only when it has been calculated and previously used in a lender's decision process.

The third party is the credit reporting agencies, such as Equifax, Experian, and TransUnion, that provide credit history information on individuals. These credit reports are "scored," and the credit reporting agencies make both the credit reports and credit scores available to consumers, along with guidance to assist consumers in assessing their risk factors.

Sweet indicated that VantageScore is a new credit score developed by a third-party company in collaboration with the three major credit reporting agencies. These entities created VantageScore with an eye toward having a score that would be highly predictive but easy for consumers to understand and lenders to use. The resulting score was designed to have several desirable features.

First, VantageScore is consistent across the major credit reporting agencies. Thus, if a consumer's information is the same in the credit reports at the three major credit reporting agencies, his or her VantageScore would be the same at all three agencies.¹⁵ Under these circumstances, different scores on the VantageScore would emerge only if there were differences in the underlying data in the credit reports.

Second, VantageScore's scale was devised to be more intuitive. VantageScore's developers thought that adopting the equivalent of the familiar grading system of 90-100 = A, 80-89 = B, etc. would be more meaningful to consumers. Thus, the scale for VantageScore is 901-990 = A, 801-900 = B, 701-800 = C, 601-700 = D, and 501-600 = F. Corresponding to these ranges are the categories super prime, prime plus, prime, nonprime, and high risk, respectively.

Sweet also noted that VantageScore provides more predictive scores for consumers with thin files. This feature offers more effective risk management to lenders when working with this segment of consum-

ers. In addition, she mentioned that VantageScore, like the FICO score, is based on a consumer's behavior in the areas of payment history (32 percent), credit usage (23 percent), balances (15 percent), types and age of credit (13 percent), recent credit (10 percent), and available credit (7 percent); it also informs consumers about both positive and negative factors that contribute to their score.

Sweet returned to a point she raised earlier, namely, that a number of credit scoring models in the public domain have different scales. Thus, consumers should avoid trying to compare different credit scores from alternative credit scoring systems. Instead, she advised consumers to focus on the level of risk a credit score conveys. To underscore this point, Sweet offered the following example. A consumer obtains his credit scores from three different sources: a score of 863 from VantageScore, 770 from Experian, and a 758 score from Equifax. The individual numbers by themselves are not very revealing. However, once the consumer looks closely at the ranges associated with each score, the scores' meaning becomes clear. In this example, the VantageScore falls in the 801 to 900 range, which is a B, and also in the top 40 percent. Similarly, since the Experian and Equifax scores share the same range, they are both in the 750 to 800 range of risk and are also equal to the top 40 percent. While Sweet acknowledged that many consumers should strive to increase their credit score, they should also be quite cognizant of the range of risk in which they fall.

In closing, Sweet cautioned attendees that when it comes to improving a credit score, there is no silver bullet. Consumers should address the negative risk factors included on their credit report and allow some time for the changes to be reflected in a higher score. She observed that consumers don't change their credit history overnight; they have to change their credit usage over time. According to Sweet, time is the key.¹⁶

This is because the algorithm that was developed cooperatively is used by the three credit reporting agencies without modification. In contrast, the popular FICO scoring model might be applied differently by the major reporting agencies and result in different credit scores even if the underlying information is the same.

Sweet gave attendees a list of useful resources related to credit reports and credit scores. These resources can be found on the Federal Reserve Bank of Philadelphia's website at: www. philadelphiafed.org/cca/index.html.

Discussion

The questions Sweet fielded concerned specific situations that some of the attendees encountered while counseling their clients. One attendee inquired about the accuracy of credit reports in light of the "boomeranging" of negative information. Sweet explained that boomeranging typically occurs when a consumer formally disputes an entry on a credit report and the credit reporting agency (CRA) checks with the creditor, who, in turn, fails to respond (or agrees that the item should be deleted), prompting the CRA to remove the entry from the report. However, in the interim, the creditor neglects to change its records. Thus, when the CRA receives the creditor's monthly account updates, the negative entry reappears on the consumer's report, resulting in a boomerang. Sweet indicated that Experian instituted a procedure to deal with this situation. When Experian deletes an entry from a credit report, a marker is placed in its system to prevent that entry from returning. However, she noted that if the creditor provides valid proof — beyond the usual update — that the negative item should appear on the consumer's credit report, Experian is required by law to reinstate it on the consumer's report and notify the consumer that it was reinstated.

Another question dealt with whether the credit report received by a creditor on a potential client contains the same information that appears on the report obtained by the individual. Sweet pointed out that there is indeed some information that appears on an individual's report but that is not included on the report received by a creditor. According to Sweet, a primary example is "soft" inquiries. She reminded the attendees that these inquiries are requests for a consumer's credit report that do not affect the credit score. She also indicated that a consumer's account numbers, date of birth, and marital status do not appear on a credit report received by a company for employment purposes.

Finally, there was some discussion about the length of time that a collection item remains on a credit report and whether a collection agency can extend the life of the chargeoff on the report. Sweet and another presenter offered a joint response. They indicated that, in accordance with the Fair Credit Reporting Act, a collection or chargeoff remains on a credit report for seven years from the date of the delinquency that precipitated the chargeoff as recorded by the original creditor. While some collection agencies would like to restart the clock when they purchase the charged-off debt, they are prevented by law from doing so. Therefore, the starting date for the seven-year period remains the original delinquency date, regardless of any subsequent collection accounts associated with that debt.

V. HealthScore

The final speaker was Jeremy Blackburn of Canopy Financial, who introduced a new credit score, the HealthScore. Blackburn set the stage for the discussion of HealthScore by presenting some statistics that emphasized the rising cost of health care and its consequences. He pointed out that since 2000, the employee share of medical insurance premiums has increased 143 percent and outof-pocket expenses increased 115 percent, while wages have increased only 15 percent. According to Blackburn, health-care-related expenses are now the country's number one cause of bankruptcies. Indeed, he reported that every 30 seconds, someone files for bankruptcy as a result of a serious health problem.17

Blackburn indicated that various efforts are underway to restrain the rising cost of health care. Some of the approaches being taken include the following: investing in technology, such as electronic medical records, to improve the efficiency of time management and the administration of patients' visits to a doctor's office; using pay for performance to encourage improvements in the quality of care by physicians and hospitals with an eye toward reducing costly malpractice suits, and offering high-deductible health plans. He noted that the increased use of high-deductible plans by consumers is actu-

Blackburn further noted that the average out-of-pocket medical debt for a filer of bankruptcy was \$12,000. Both of these points can be found at: www.nchc.org/facts/cost.shtml.

ally proving to be effective in stemming the tide of rising health-care expenses.

The deductible in a traditional health insurance plan, according to Blackburn, is inversely related to the amount of the premium. Thus, to demonstrate how savings might be realized by switching to a plan with a higher deductible, he offered the following example. A consumer has a health plan with a \$200 deductible, which the consumer is responsible for paying in full, and a monthly premium of \$950, of which the consumer pays \$350 and the employer pays the remaining \$600.18 Suppose the consumer elects to have a higher deductible of \$1,200. The monthly premium is lowered to \$295, of which the consumer pays \$125 and the employer pays \$170. Blackburn points out that the difference between the monthly premiums represents real savings enjoyed by both the consumer and the employer.¹⁹ But the consumer now faces a new, higher financial obligation that accompanies the higher deductible. Blackburn stressed that the motivation to move to a high-deductible health plan is effective only if the employer shares the gain with the employee. This is often done by placing a portion of the savings in a tax-advantaged account known as a health savings account, or HSA. HSAs help employees offset part of the extra expense incurred with high insurance deductibles. However, if employers are reluctant to share the gain, employees would have to bridge the entire gap between the two deductibles on day one of the high-deductible plan, thus providing a possible deterrence to adopting the plan.

While there has been considerable growth in HSAs, Blackburn noted that a sizable gap exists between those with high-deductible health plans and no HSAs and those with similar plans but with HSAs. He sees this gap as an opportunity for financial institutions to step in and provide some type of line of credit that consumers could draw on when they have unexpected medical problems and face paying medical bills up to their high-deductible amounts. The availability of such a line of credit might allay consumers' fears when contemplating a move to high-deductible health plans.

Blackburn then turned his attention to the discussion of HealthScore. According to Blackburn, HealthScore can play a vital role in assisting potential lenders in assessing the financial risk associated with extending credit to consumers who have no HSAs or insufficient funds in their HSAs to meet their health plan's high deductible when they have medical expenses. He noted that currently credit reports from the major credit reporting bureaus and their affiliated credit scores do not include the yearly financial obligation associated with a consumer's health-care plan, even though the plan's cost (including the deductible) can have a rather significant impact on the consumer's credit risk profile. However, Blackburn pointed out that HealthScore gives potential lenders a clearer picture of a consumer's healthcare plan, thus making a consumer's creditworthiness more transparent. He is hopeful that lenders will be encouraged to make lines of credit available to consumers with health-related financial needs, given the assistance of HealthScore to assess credit risk and the existence of regular employer contributions into a dedicated account as security for a loan — contributions that would come from sharing the employer's reduced costs when employees choose a high-deductible plan.

In addition to being a valuable tool to gauge credit risk associated with health-care lending, HealthScore, Blackburn noted, affords more transparency when assessing a consumer's overall risk picture and thus would be beneficial in underwriting automobile, credit card, and mortgage loans. This would be prudent, since health-care expenses are a cause of 60 percent of all delinquent automobile payments and 45 percent of all delinquent housing payments, whether for rent or mortgage.

Blackburn also used this example to underscore the financial difficulty that employers encounter when offering health benefits to employees. Thus, the cost to an employer would be \$600 multiplied by the number of employees. He asked the attendees to consider the cost involved if an employer had 10,000 employees, 50,000 employees, or 300,000 employees.

In fact, he indicated that the switch to high-deductible health plans has resulted in employers' realizing, on average, savings of 40 to 60 percent.

As a backdrop to further discussing the virtues of HealthScore, Blackburn's presentation included a PowerPoint slide that compared a traditional credit score and the HealthScore for the same consumer. In his example, the consumer is a full-time worker with a salary of \$45,000, who pays bills on time and has a \$5,000 credit card limit. Based on the use of retail credit services, the consumer has a traditional credit score of 778. In contrast, a HealthScore of 662 is attained once the additional information about the consumer's high-deductible health plan is taken into account — namely, a \$4,000 deductible and an annual out-of-pocket cost of \$10,000. Even though both the traditional credit score and the HealthScore are in the same range. Blackburn stressed that the added data included in HealthScore helps segment the population to better identify those most likely to take advantage of credit designed to cover health-related expenses. He demonstrated this by pointing out the differences in the location of profit pools associated with a traditional credit score and HealthScore. In the case of traditional scores, the profit pool (or optimal lending window) for those seeking loans for retail-credit-related services lies in the range between 711 and 791, while the optimal profit pool for HealthScore is between 590 and 711.

In view of the billions of dollars of bad debt incurred by hospitals and medical providers, Blackburn suggested that a consumer armed with a HealthScore might be in a better position to negotiate discounts for health-care services from a healthcare provider. Furthermore, he emphasized that the added information in HealthScore can assist lenders in pricing their health-care-specific line of credit by better determining the parameters of the loan terms.

Blackburn concluded his presentation with two overriding points he wanted to make to the symposium's attendees. First, he wanted to impress upon them that, notwithstanding its virtues, HealthScore should not be regarded as a stand-alone score. Instead, Blackburn thinks that HealthScore should be an essential input in the VantageScore, FICO Expansion Score, or the traditional FICO score. In particular, he believes that the responsible management of a high-deductible health-care plan with its accompanying HSA should be included as a positive entry on a consumer's credit report, particularly consumers with low incomes or thin files. Second, Blackburn wanted to emphasize the fact that, ultimately, a credit score is only a number. However, given the impact a credit score can have on a consumer, he urged that it be based on the major factors affecting a consumer's creditworthiness. Yet, information pertaining to health insurance, which is a key influence on a consumer's credit profile, is not currently reflected in any of the credit scores of the major credit reporting agencies. According to Blackburn, HealthScore provides lenders with the necessary information about the influence of health insurance when assessing lending risk.

Discussion

Blackburn entertained several questions, all of which dealt with some aspect of the data used in HealthScore or how it is derived. Without divulging any proprietary information, he offered general responses that addressed the questions. Blackburn pointed out that the data used to construct Health-Score are gleaned from the information a consumer provides on an application for health insurance coupled with the specifics of the health plan's design. Of particular importance are the plan's deductible, premium, and maximum out-of-pocket costs. These data are augmented with the consumer's income, employment status, and length of employment. Employment status serves to distinguish between fulland part-time employment, since employers do not contribute to HSAs for part-time employees. Moreover, the length of employment gauges the likely balance in an HSA. Without getting into specifics of the derivation of HealthScore — since it is proprietary — Blackburn indicated that HealthScore uses ratios of certain items to income, and these ratios help to scale the importance of these factors in terms of their affordability to the consumer. Blackburn also stressed that HealthScore is not based on any medical data.

VI. Concluding Note

Consumers should be aware that a credit score is a very powerful number. Consequently, it is incumbent on them to know as much as possible about credit scores and credit scoring. The symposium introduced the attendees to three new creditscoring products that will no doubt play a role in the financial arena. Those in attendance heard that VantageScore offers greater consistency in scoring methods among the three major credit reporting agencies; the FICO Expansion Score uses nontraditional data to increase the number of individuals

receiving scores; and the HealthScore incorporates health-plan and other information in order to provide the health-care industry and lenders with an instrument to better gauge an individual's overall credit risk.

All told, the symposium was very informative. The attendees left with a newfound understanding of credit reports and credit scores, as well as insights into new credit score instruments that will possibly affect their lives and the lives of the constituents they serve.

Exhibit 1:

Symposium Agenda

9:00 a.m.	Continental Breakfast
9:30 a.m.	Welcome Dede Myers, Federal Reserve Bank of Philadelphia
9:35 a.m.	Overview of Credit Scoring Patricia Hasson, Consumer Credit Counseling Service of Delaware Valley
10:15 a.m.	FICO Expansion Score Janice Horan, Fair Isaac Corporation
10:55 a.m.	Break
11:10 a.m.	VantageScore Maxine Sweet, Experian
11:50 a.m.	HealthScore Jeremy Blackburn, Canopy Financial

Exhibit 2: **Institutions Represented at the Symposium**

AHOME, Inc.

American Credit Alliance, Inc.

Asian Bank

Beneficial Savings Bank

Bucks County Housing Group

Canopy Financial

CCCS of Delaware Valley

Citicorp Trust Bank, FSB

Citizens Mortgage Corp

Community Action Agency of Delaware County, Inc.

Community Action Commission

Community First Fund

Consumer Credit Education & Protection Cooperative

Cooperative Business Assistance Corporation

Delaware County Office of Housing & Community Development

Delaware County OHCD

Delaware Money Management Program

Excalibur Financial, Inc

Experian

Fair Isaac Corporation

Federal Reserve Bank of Philadelphia

Fern Rock-Ogontz-Belfield CDC

Fidelity Savings of Bucks County

First Keystone Bank

Franklin Mint Federal Credit Union

Fulton Bank

Fulton Financial Corporation

Genesis Housing Corporation

Greater Philadelphia Urban Affairs Coalition

Housing Association

Housing Partnership of Chester County

ING Direct

IEVS Human Resources

Institutions Represented at the Symposium

JP Morgan Chase

KPMG Banking Insider

Liberty Resources

LISC

Malvern Federal Savings

Maryland Cooperative Extension

Media Fellowship House

MidPenn Legal Services

Mortgage and Credit Center

National Penn Bank

NCALL Research, Inc.

Neighborhood House, Inc.

Neighborhood Transformation Initiative/EZ

NeighborWorks America

New Kensington CDC

Newfield National Bank

Norris Square Civic Association

OHCD - City of Philadelphia

PA Department of Banking

PA Department of Revenue

PathWaysPA

PBCIP, Inc.

Penn State Cooperative Extension

Pennsylvania Housing Finance Agency

Pennsylvania Insurance Department

Philadelphia Federal Credit Union

Project H.O.M.E.

Select Bank

Southwest CDC

Sovereign Bank

St. Edmond's Federal Savings Bank

Sterling Financial Corporation

Susquehanna Patriot Bank

Institutions Represented at the Symposium

Temple University School of Podiatric Medicine

The Housing Association Information Program

The Partnership CDC

The Philadelphia Trust Company

Third Federal Bank

Transitions

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