



Insight

# Credit Scores: A Primer

THOMAS KINGSLEY | APRIL 7, 2020

## Executive Summary

- Fundamental to the financial-services industry’s stability is the creditworthiness of borrowers.
- Credit-scoring models quantify that likelihood of default, and credit-rating agencies, or credit bureaus, then package the results of those models for lenders.
- This impartial, third-party credit reporting service has vastly decreased due-diligence costs for lenders and as a result made credit both [cheaper and more available](#), creating efficient sources of funding for borrowers.

## Introduction

Perhaps the most crucial question banks and other lenders face is whether a prospective borrower, an individual or business, is likely to default on, or not pay back, a loan. The need to quantify creditworthiness led to the creation of credit scoring and the credit-reporting industry. The goal of a credit score is to provide a quantifiable prediction of the likelihood of [default in the next 24 months](#).

Typically, your bank or other lender will use your credit score to determine whether to offer you a line of credit, e.g., for a mortgage or credit card. Your credit score also will be used in assessing what interest rate should be applied or what your credit limit should be. All this, and you may not even be aware of what your credit score is, as credit-reporting agencies do not require your active participation to generate a score. So, who are the actors in this sector, how are credit scores calculated, and how are credit scores used?

## History and Actors

The terms “credit score” and “FICO score” are often used interchangeably, although a FICO score is simply the best known and most widely used example of a credit score. The Fair Isaac Corporation—known more simply as FICO—was founded in 1956 to provide lenders a quantifiable measure of creditworthiness. Today, FICO remains the chief provider of credit scores, with the company estimating that [90 percent of lenders](#) use a FICO score to make lending decisions. Further, FICO’s model is currently the only one approved for use by the [government-sponsored entities Fannie Mae and Freddie Mac](#).

FICO assesses the likelihood a consumer will repay a credit obligation and provides a personalized credit score (more on this below), and that credit score is calculated for the three major credit-reporting agencies: Equifax; Experian; and Trans Union. These credit reporting agencies, also known as credit bureaus, assemble a wide-ranging credit report that incorporates a credit score in addition to other factors they deem to impact creditworthiness. Lenders then use these credit reports as a basis for lending decisions. Equifax, Experian, and Trans Union compete to provide this data-capture service to lenders, and an individual’s FICO score may differ as provided from bureau to bureau, usually as a result of [timing differences or access to different underlying data](#).

In 2006 the three major credit bureaus launched their own credit-scoring model under the name of VantageScore to act as competition to FICO. VantageScore is both owned and controlled by the credit rating agencies.

It is important to note that although FICO and the credit bureaus can be seen as “gatekeepers” to credit, they do not make lending decisions themselves. Think instead of the credit rating agencies as data aggregators, and FICO as an independent analytic provider; the choice as to whether to extend credit [remains with lenders](#). This division allows individual lenders to choose their risk tolerance, with lenders accepting a lower or higher credit score, depending on their business needs.

## How the FICO Score is Calculated

FICO assesses an individual’s or business’s creditworthiness on the basis of past credit history, considering factors including the type of debt, total debt, and also payment history. The final three-digit FICO score is determined as follows.

- *35 percent* is based on payment history, and in particular the timeliness of repayments. Even [unpaid medical bills or parking tickets](#) may be considered here.
- *30 percent* is based on not just total outstanding debt but also the proportion of that outstanding balance against total credit available. Consistently borrowing at the maximum of available credit demonstrates more risk and may adversely impact a credit score, and most experts advise that the utilization rate remain below [30 percent of total available credit](#).
- *15 percent* is based on the length of credit history, both in terms of how long a particular line of credit has been open and how recent any activity was.
- *10 percent* is based on how many accounts the borrower has recently opened as a proportion of total open accounts. A more recent flurry of activity is usually a sign of the search for credit precipitated by financial distress.
- *10 percent* is based on the class and character of debt held. Although a mortgage is good evidence that a borrower can be trusted with substantial sums of money, credit card debt is an outsize factor here, as it is considered a better indication of future creditworthiness since it relates to fluctuating debt.

Despite [popular misconception](#), FICO does not factor into its assessment an individual’s income, age, or employment status.

FICO provides the credit bureaus a three-digit score between 300 and 850, [with anything above 670 usually considered a good credit score](#). VantageScore uses a six rather than five metric assessment system and does not provide percentage weighting. Despite these differences, both systems consider broadly the same factors to assess creditworthiness, and VantageScore also provide a score between 300 and 850 – although very different metrics guarantees that the same score may mean very different things depending on provider.

Due to the size of a typical mortgage (and thus the increased exposure to risk), it is common for mortgage lenders to obtain what is called a “tri-merge” report. A tri-merge, or residential mortgage credit report (RMCR), is a single report that merges the credit reports of all three major credit bureaus. The tri-merge report combines [all three credit reports but not all three FICO credit scores](#), which remain unique to each bureau.

Note that FICO and VantageScore both provide a number of credit models to consumers and lenders. Currently the most widely used credit model is FICO 8; an updated version, FICO 9, is now available, although it is not

yet in as wide of use. The company also recently announced the [rollout of FICO 10 and FICO 10T](#), expected for summer 2020. Different iterations of models weigh factors differently; for example, FICO 9 decreases the impact of [medical debt](#) on an individual's FICO score. As a result, even at one point in time with perfect information a FICO score may differ depending on which FICO model a lender uses. FICO also [provides industry-specific models](#), for example a mortgage-lending specific model.

The most recent VantageScore model is version 4.0. VantageScore models consider [historical credit utilization](#) in a more expansive manner than FICO, which simply captures a point-in-time snapshot. Additionally, a FICO score requires at least six months of credit history, and [VantageScore does not](#).

Individuals and businesses can pay FICO and the credit bureaus to obtain their credit score. The credit bureaus are required by law to provide a free copy of an individual's credit report once a year.

## **Conclusions**

Prior to the invention of the FICO model, lenders were forced to rely on a wide series of standards, some of which also considered [gender and political affiliation](#). The provision of an impartial third-party credit reporting service has vastly decreased lenders' due-diligence costs and as a result made credit both [cheaper and more available](#). The Federal Reserve [noted in a report to Congress](#) that "The large savings in cost and time that have accompanied the use of credit scoring are generally believed to have increased access to credit, promoted competition, and improved market efficiency." Because the financial-services industry relies nearly entirely on assumptions about the basic likelihood of default, FICO and the credit bureaus are some of the most important actors in the economy.