**Credit scoring models**

Credit scoring models are statistical tools that evaluate creditworthiness and determine the likelihood of default on credit obligations. These models are used by credit bureaus and lenders to assess the risk of lending money or extending credit to individuals or businesses.

The credit scoring model evaluates various factors, including payment history, credit utilization, length of credit history, types of credit accounts, and recent credit inquiries. Each factor is assigned a weight, and the model’s formula calculates a credit score based on the evaluation.

A credit score typically ranges from 300 to 850, with a higher score indicating a lower risk of default. Lenders use credit scores to make decisions about loan terms, including interest rates, repayment periods, and loan amounts. A good credit score can result in favorable loan terms, while a poor score can lead to higher interest rates and less favorable terms.

**Different Types of Credit Scoring Models Used in Banking**

1. FICO Score:

The FICO score is the most commonly used credit scoring model in the United States.

Each category and the weight it carries in determining the credit score:

* Payment history (35%): This factor evaluates how consistently a borrower has made payments on their debts. A borrower who has always made on-time payments will receive a higher score than one who has missed payments.
* Credit utilization (30%): This factor evaluates the percentage of available credit that’s being used. A borrower who uses less than 30% of their available credit will receive a higher score than one who uses more.
* Length of credit history (15%): This factor evaluates how long a borrower has had credit accounts open. A borrower who has a long history of credit accounts in good standing will receive a higher score than one who is new to credit.
* Types of credit accounts (10%): This factor evaluates the types of credit accounts a borrower has, such as credit cards, loans, and mortgages. A borrower who has a diverse mix of credit accounts will receive a higher score than one who only has one type of account.
* Recent credit inquiries (10%): This factor evaluates how frequently a borrower has applied for credit. A borrower who has made few recent credit inquiries will receive a higher score than one who has made many.

FICO scores are used by a wide variety of lenders, including banks, credit card companies, and mortgage lenders.

2. VantageScore:

The VantageScore is a newer credit scoring model that was developed jointly by the three major credit bureaus.

VantageScore 4.0, the latest version of the model. The VantageScore model puts less emphasis on payment history and more emphasis on credit utilization than the FICO model

Each category and the weight it carries in determining the credit score:

* Payment history (40%): This factor evaluates how consistently a borrower has made payments on their debts, similar to the FICO score.
* Age and type of credit (21%): This factor evaluates the borrower’s credit history, including the age of their oldest and newest credit accounts and the mix of credit types.
* Percentage of credit limit used (20%): This factor evaluates the borrower’s credit utilization, similar to the FICO score.
* Total balances and debt (11%): This factor evaluates the borrower’s total debt, including loans and credit card balances.
* Recent credit behavior and inquiries (5%): This factor evaluates recent credit activity, including the number of new credit accounts and credit inquiries.
* Available credit (3%): This factor evaluates the borrower’s available credit, or the amount of credit they could access if they needed it.

VantageScores are used by a variety of lenders, including banks, credit card companies, and mortgage lenders.

**Other Credit Scoring Models**

* CreditXpert: It is a credit scoring model that’s designed to help lenders evaluate the risk of lending to borrowers with limited credit history. It uses alternative data sources, such as rent and utility payments, to assess creditworthiness.
* TransRisk Score: It is a credit scoring model that uses alternative data sources, such as public records and property records, to assess creditworthiness. It’s often used by lenders in the automotive industry to evaluate the risk of lending to borrowers with limited credit history.
* Experian’s National Equivalency Score: It assigns users a score of 0-1,000 based on payment history, credit length, credit mix, credit utilization, total balances, and the number of inquiries, but the criteria and weight are not publicly disclosed. The scoring system is different from the FICO model, with a score of 100 indicating a 10% chance of at least one account becoming delinquent in the next 24 months and a score of 900 indicating a 90% chance. A more familiar alternative scoring method of 360 to 840 is also provided.

**Emerging Trends in Credit Scoring**

**A diagram of different types of data

Description automatically generated**

1. Big Data:

The use of big data and machine learning algorithms can help lenders analyze vast amounts of data to identify patterns and make more informed lending decisions. According to a study, 76% of lenders are already using machine learning in some capacity to evaluate creditworthiness.

1. Alternative Data:

The use of alternative data sources, such as utility bill payments and rental history, is becoming more prevalent in credit scoring models. This can help lenders evaluate borrowers who may not have a traditional credit history and improve access to credit for underserved populations.

1. Real-Time Scoring:

Real-time credit scoring can provide lenders with up-to-date information on a borrower’s creditworthiness, allowing for more accurate and timely lending decisions. This can be particularly useful for small business owners who need access to credit in a timely manner.

1. Mobile Scoring:

With the rise of mobile banking, lenders are exploring the use of mobile data to evaluate creditworthiness. This includes analyzing a borrower’s mobile phone usage patterns, such as the frequency of calls and text messages.

1. Financial Health Scoring:

Financial health scoring models are emerging as a way to provide a more holistic view of a borrower’s financial health. These models take into account factors such as savings, investments, and debt levels to provide a more comprehensive picture of a borrower’s creditworthiness.

Gen Z, encompassing individuals aged 18 to 26, has [an average credit score of 680](https://www.experian.com/blogs/ask-experian/consumer-credit-review/). On the other end of the spectrum, the Silent Generation, aged 78 and over, boasts the highest average credit score, standing at an impressive 761.

They reflect a trend where older consumers tend to have higher credit scores. This is largely attributed to their longer credit and borrowing history, which allows for a more established and reliable credit profile.

**FICO Scores**

* **Average FICO Score**: 715 in Q3 2023.
* **Percentage with Good Scores**: 71.3% of Americans have a FICO score of 670 or higher.
* **Percentage with Exceptional Scores**: 21.2% of Americans have a FICO score of 800 or above.
* **Score Range**: 300 to 850, with higher scores indicating lower credit risk

**VantageScore**

* **Average VantageScore**: 702 as of March 2024.
* **Percentage with Good Scores**: 61% of Americans have a VantageScore of 661 or higher.
* **Score Range**: 300 to 850, similar to FICO