Understanding Credit Score Algorithm - FinSearch

With the rapid rise of P2P lending platforms and other FinTechs focusing on credit products in India, there has been a fundamental shift in how credit is evaluated, extended, and managed. We can see a rapid growth in digital lending driven by the adoption of growing fintechs, which have made the lending process easier and more convenient. Previously, this process was heavily dependent on credit scores such as those provided by CIBIL. These fintech firms have broken the traditional approach and started analyzing more data, such as history of employment, educational background, etc., to evaluate the risk more effectively. This approach enables them to lend money to people who don't have a credit history.

Here is a quick view of the companies on which we will be speaking,

- 1) KreditBee
- 2) CASHe
- 3) Faircent

What is a Credit Score?

Credit scores are numerical representations used by lenders to assess the creditworthiness of individuals. They reflect a person's credit risk based on their credit history and financial behavior. A higher credit score typically indicates lower credit risk and vice versa.

What factors affect credit score?

There are a couple of factors that affect one's credit score, which would be their payment history, credit utilization, length of credit history, credit mix, and new credit. All these factors collectively affect one's credit score.

Speaking more about it..

Credit scores are three-digit numbers that represent an individual's creditworthiness. They are calculated by credit bureaus based on a person's borrowing and repayment history. Lenders use these scores to evaluate how likely someone is to repay a loan or credit card debt. One such bureau that assigns credit scores is CIBIL, which stands for Credit Information Bureau India Limited. It is the most widely used credit bureau in India. The credit score ranges from 300 to 900; a score above 750 is, in general, considered a good one.

What can we derive from these credit scores?

To give a quick overview, one can use a credit score to reduce risk, whether the borrower is capable enough to pay back the amount, they set up a threshold value to minimize the risk.

Automating decision making, reviewing thousands of applications is a pain; for this purpose, they have developed algorithms to accept or reject an applicant's application. In some cases, this reduces human bias. It wouldn't be fair if the people who maintain a very good credit score were left unawarded. Keeping this in mind, they decide to apply different interest rates to encourage and, of course, increase the company's reach. The company uses these credit scores for the quick onboarding of clients.

Onboarding clients is a chaotic process; credit scores provide a quick glimpse of the client and provide a vague way for risk analysis.

Case studies of lending-based FinTechs

In the vast market of Fintechs in India, we have chosen to examine three distinct players in this field, KreditBee, CASHe, and Faircent, each representing a unique approach to digital lending. We have chosen these three companies because of their diversity and innovative approach.

KreditBee

How does it analyze customer data?

They use an app-based onboarding with access to bank account data, employment details, and their income patterns. They follow the current trend in AI/ML! They use it to evaluate the customers' spending behaviour, repayment capacity, stability of employment, and more.

The question arises for NTC(New-to-credit)!

These are very important customers for Kreditbee and cashe. Now, analyzing their credit score is analyzing blank papers. In these scenarios, they opt for other data such as their mobile usage, employment behaviour, and more. To analyze further, they lend small-ticket loans so that they will be able to generate their credit score.

CASHe

How does it analyse customer data?

They use their proprietary SLQ model, which would consider the client's education level, monthly income, and employer type, mobile usage patterns, social media behaviour, and device metadata. They further use these data to feed into an internal scoring engine to assess their creditworthiness and repayment intent. Real-time underwriting enables instant loan approvals through the mobile app

Faircent

How does it analyse customer data?

Well, everyone does assess credit scores. Faircent, in addition to this, assesses their income and occupation, loan purpose, past repayment behaviour(if an existing client), profile completeness, and verification levels. They use risk-based pricing; borrowers with higher scores and better profiles get lower interest rates. In all the above companies, the lender does not have a say in whom to lend, but in Faircent, the lenders get to choose whom to lend to, based on borrower profiles and risk grades assigned by Faircent.

These three companies highlight how modern FinTechs in India blend traditional credit scoring with innovative data analysis to create accessible yet safe lending ecosystems. Each model serves different borrower profiles — from salaried millennials to new-to-credit users and underserved individuals, while managing risk through smart underwriting and data-driven decision-making.

Role of Credit Cycles in India

The credit cycle in India plays a foundational role in shaping the dynamics of both individual credit scores and the performance of lending-based financial products such as loans, credit cards, and BNPL (Buy Now, Pay Later) services.

Role of the credit cycle

A credit cycle refers to the recurring phases of credit growth and contraction in the economy. It influences how easily people and businesses can access loans and how willing financial institutions are to lend. India, being a fast-growing and credit-dependent economy, is deeply influenced by these phases. During expansion, aka boom phase, and contraction, aka slowdown phase.

Boom Phase, Banks, NBFCs, and FinTechs offer loans more aggressively. Their interest rates are competitive, and during this phase, the approval criteria is relatively relaxed.

Slowdown Phase, lenders become cautious due to rising defaults or economic uncertainty. Possible rise in interest rates and a strict loan approval process.

Impact on the credit scores of the populace,

The credit cycle directly affects individual credit behavior, which in turn influences their credit scores (like CIBIL, Experian, CRIF High Mark):

Boom Phase: Easier access to credit encourages borrowing. If borrowers manage EMIs responsibly, their credit scores improve. But over-leveraging or multiple loans can lead to missed payments, hurting scores.

Slowdown Phase, Tighter credit leads to loan rejections, especially for low or borderline scores. Existing borrowers facing financial stress may miss repayments, causing scores to fall. Recovery from a poor score becomes harder due to restricted credit access.

Impact on lending-based products,

Loan Portfolios, In expansion, lenders disburse more loans, but the risk of NPAs rises if credit quality is ignored. In contraction, fewer loans are given, but portfolio quality is tighter and more secure. **FinTech Lending Products (BNPL, Digital Loans, P2P Lending).** These products flourish during easy credit cycles. But they are more vulnerable during slowdowns as default rates increase, especially among first-time or subprime borrowers.

Risk-Based Pricing, Credit cycles push lenders to rely more on credit scores for differentiated interest rates and credit limits. In downturns, only high-score individuals get favorable terms, widening financial inclusion gaps.

Conclusion

The growth of digital lending in India, propelled by FinTech platforms like **KreditBee**, **CASHe**, and **Faircent**, highlights a revolutionary change in credit evaluation. These firms have moved beyond traditional credit scoring models—such as those based on **CIBIL scores**—by tapping into **alternative data points** like employment history, mobile usage patterns, education level, and social interaction. This approach has promoted **greater financial inclusion**, specifically for **new-to-credit (NTC)** customers who earlier had limited or no access to formal credit. By employing advanced **AI/ML algorithms** and proprietary scoring models, these FinTechs can evaluate creditworthiness more precisely and make faster, data-driven decisions while reducing human bias.

Even with these advancements, the sustainability and performance of lending-based FinTechs are highly connected to the **credit cycles in India**. During a **boom phase**, credit is readily available for people, allowing individuals to build or improve their credit scores, provided they manage their EMIs responsibly. However, in a **slowdown**, access contracts and defaults may rise, which harms credit scores and lending portfolios. In order to navigate these cycles effectively, FinTechs must adopt **dynamic risk assessment** strategies and **risk-based pricing models**. Ultimately, the future of digital lending will be determined by how well these platforms balance **innovative data analytics** with **responsible lending practices**, ensuring both **inclusivity** and **financial stability** in an uncertain economic environment.

Team & Contributions

Karthikesh Bangi:- Rise of digital lending, trends Mishit Sharma:- Case studies on key FinTechs P Manthan:- Credit cycles and lending impact Shresth Keshari:- Credit scores and evaluation metrics