Risk spectrum of financial assets held by banks and NBFCs

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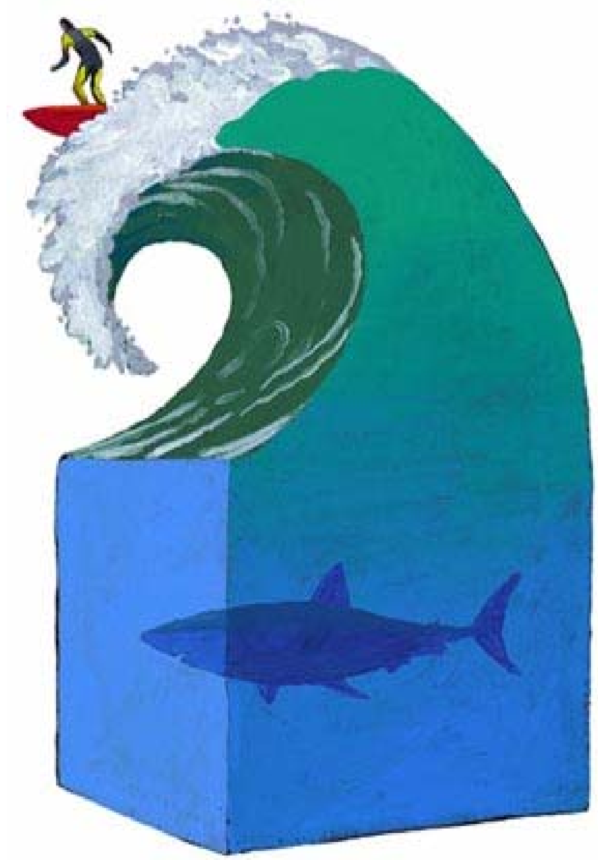


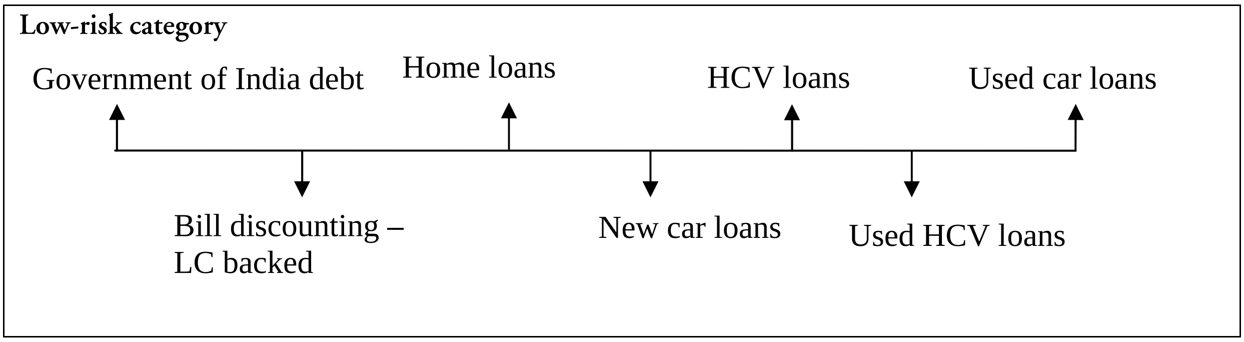
Asset quality is a critical determinant of a lending entity's business risk profile. An understanding of the risk attached to various asset types is therefore necessary while carrying out a credit rating exercise for such an entity. CRISIL has classified the relative credit risk of various financial assets in the form of a 'risk spectrum'. The risk spectrum forms a key input in CRISIL's credit risk assessment of banks, non-banking finance companies (NBFCs) and other lenders.

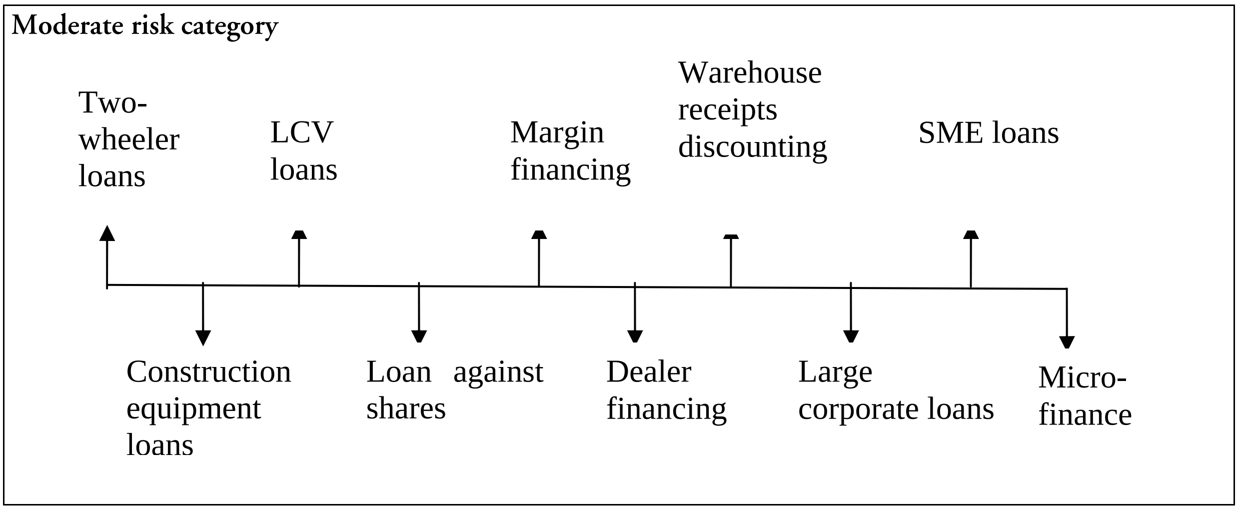
The risk spectrum encapsulates CRISIL's experience in rating various financial sector entities and securitisation instruments. CRISIL is uniquely qualified to comment on the distribution of risk across asset classes: CRISIL's ratings cover over 80 per cent of the outstanding assets and disbursements for almost all categories of organised financing in the Indian market. CRISIL's systematic and rigorous surveillance processes entail continuous monitoring of the performance of these asset classes. CRISIL's opinion therefore provides a comprehensive and current perspective, which is unmatched in the Indian financial markets.

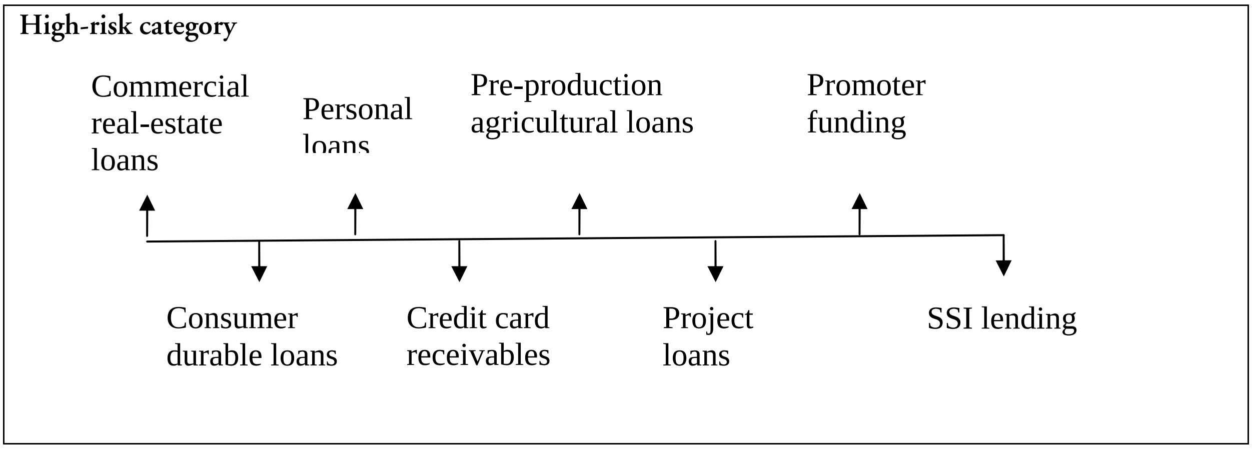
The key indicators considered for the purpose of assessing the relative risk of various asset classes are -

- Losses and delinquency levels
- Yield
- Borrowers' profile and diversity
- Granularity and ticket value of transactions
- Tenure
- Loan to value ratio (LTV)
- Ease of repossession
- Ease of resale
- Value retention of collateral
- Priority of repayment for borrowers

Factoring in these indicators, CRISIL has arrived at a risk continuum of various financial asset classes, as illustrated below:







This criteria piece explains the indicators used to understand the risk characteristics of these asset classes, and elaborates the main features of each asset class. The risk profile of each asset class based on key indicators is provided in Annexure.

Key indicators:

CRISIL has considered the following key indicators in evaluating the credit risk of an asset class:

Losses and delinquency levels

Loss levels and delinquency are measures that validate the risk continuum. They are, therefore, the most important factor used in generating the risk spectrum, where sufficient depth of data is available. Because origination standards vary from lender to lender, CRISIL uses an assessment across originators to arrive at an opinion on the asset class.

Yield

Typically, high interest rates are charged for risky exposures. Hence if the lending community expects more delinquencies from one set of exposures, the interest charged for that type of exposure is higher. Thus relative yield of an asset class gives a good indication of the market perception of the risk of that asset class. This indicator is normally viewed along with the extent of competition in the segment, as competition too has an impact on the prevailing yield in a business segment.

Borrower profile and diversity

These portfolio-level indicators relate to the certainty of borrowers' income, and the diversity in the sources of repayment. In CRISIL's opinion, the risk profile of a portfolio of loans to salaried individuals employed by a number of organisations is superior to that of one dominated by, say, truck operators: in the second case, each individual borrower is faced with business uncertainties, and the segment as a whole is exposed to the risk of fluctuating freight rates. By the same token, car loans have more diverse sources of repayment than commercial vehicle loans.

Granularity and ticket value of transaction

Granularity refers to the size of loans in relation to the portfolio size; the greater a portfolio's granularity, the less sensitive that portfolio will be to the performance of any single loan. For instance, portfolios consisting of retail asset classes are more granular and therefore better diversified than portfolios of corporate loans. Loans with high ticket values generally increase concentration risk, because such loans tend to dominate portfolios.

Tenure

Loans of short tenure provide greater safety than those of longer tenure; the level of uncertainty increases with time.

Loan to value (LTV) ratio

LTV ratio is the loan amount advanced as a percentage of the value of the asset. This parameter is important for all asset-backed lending. Typically, the higher the LTV, the greater will be the risk of loss. A low LTV ratio indicates high initial equity of the borrower in the asset, and hence increases the incentive for the borrower to avoid default.

Please refer to 'CRISIL's rating methodology for ABS transactions' for a detailed explanation of this indicator.

Ease of repossession

The ease with which the collateral can be repossessed is a key determinant of loss levels. CRISIL believes that it is significantly easier to repossess a car or truck than a plant, machine, or current asset. Repossession is particularly difficult in the case of consumer durables, where it may not be possible to trace the funded asset.

Ease of resale

A developed secondary market for the asset implies lower losses for the financier, who can readily sell repossessed assets. It also helps the financier design underwriting norms and determine appropriate LTV levels depending upon the risk appetite. If there is no ready secondary market, the extent of recovery and time required to sell the asset are uncertain, thereby increasing the risk of the asset class.

Value retention of collateral

The asset's ability to retain its value over a period of time is a critical factor in analysing its risk characteristics. The resale value of a car or truck is likely to be closer to the outstanding exposure than that of a plant or piece of machinery: there is no ready market for specialised manufacturing equipment. Within the car segment, a low-priced car retains value better than a premium segment car. Conversely, the resale value of a house could increase over the loan tenure.

Priority of repayment for borrowers

In certain cases, understanding borrower behaviour is an important factor in assessing the risk of the asset class. For instance, a retail borrower will be inclined to give priority to repaying a housing loan, over a loan taken for a consumer durable or car. This is amply reflected in the lower delinquency levels in the housing finance segment.

Risk categorisation of various financial assets:

CRISIL analyses each asset category based on the indicators discussed above to assess the risk characteristics of various financial assets. The risk profile of each segment is placed on a risk continuum within three broad categories of risk: low, moderate and high. The relative importance assigned to each risk indicator could vary across business segments, based on the relevance of that indicator for the specific segment being analysed. The categorisation of the risks of various assets is detailed below:

Low-risk category

Bill discounting backed by letters of credit (LC)

CRISIL has observed that there are hardly any delinquencies in bills that are backed by LCs from scheduled banks. This is because a corporate's credit quality does not matter once a bank has issued an LC. Hence CRISIL places the discounting of LC-backed bills in the low-risk category.

Home loans

Given the low delinquency levels and high borrower priority in this segment, CRISIL categorises the housing finance segment as low risk.

New car loans

Low delinquency, diverse borrower profile, ease of repossession, and development of the second hand market for cars, places this segment in the low-risk category.

Heavy commercial vehicle (HCV) loans

Though HCV loans do not have as good a borrower profile or diversity as car loans, this segment is comparable to car loans on features such as ease of repossession, ease of resale and delinquency. Value retention is typically higher in HCVs in comparison to new car loans.

Used car/HCV loans

Financing for used vehicles is considered more risky than for new vehicles. Most of the features of the two segments (new and used) are comparable except that used vehicles have a marginally weaker borrower profile. However, the risk is mitigated by much lower LTVs and better value retention, for used vehicle financing than for new vehicles. Hence CRISIL places used vehicle financing in the low risk category.

Moderate risk category

Two-wheeler loans

Two-wheeler loans are placed in the moderate risk category due to factors such as the diversity in borrower profile, short tenure, moderate ease of repossession and moderate value retention. The delinquency levels of two wheelers are also higher than cars and HCVs but at moderate levels.

Construction equipment loans
This asset class has moderate loss levels. Due to borrower-related risks such as project delays and bunching of cash flows, the segment is at a higher risk category than commercial vehicles and passenger cars.

Light commercial vehicle loans
These assets exhibit moderate risk characteristics; this is because of the predominance of small freight operators in the borrower profile and higher delinquency levels.

Loan against share (LAS) and margin financing
In loans against shares, the borrower offers owned shares as pledge against the borrowing. LAS is typically made only against liquid shares and at a low LTV of around 50 per cent. A trigger (usually well above the loan value) is set such that if the share value falls below the trigger, the borrower has to provide additional shares as collateral to reinstate the margin, failing which the financier can sell the shares. CRISIL has categorised LAS in the moderate risk category despite the inherent risk of equity collateral, and high monitoring requirements essential for the timely sale of shares; this is due to the low LTVs and liquidity prevalent in the equity market. Margin financing differs from LAS in that LTV tends to be higher, but the level of monitoring is also relatively higher; this reduces operational risks.

Dealer financing
Dealer financing is a moderate risk category business segment wherein funding is against security of finished goods stock. Risks in dealer financing are moderate on account of the lower granularity and moderate difficulty in repossession, partly offset by relatively higher value retention of underlying assets.

Warehouse receipts discounting
This asset has been classified in the moderate risk category owing to the weaker borrower profile, offset by the availability of liquid collateral and moderate risk of reduction in the collateral value.

Large corporate loans and SME loans
Factors such as difficulty in repossession and lower resale value result in categorising financing corporates and SMEs as a moderate risk activity. The difficulty in enforcement of security is mitigated partly by an extensive due diligence during the credit-appraisal process.

Micro finance
This asset is characterised by a weak borrower profile; however, due to group lending, the customer priority is high because of social pressure exerted by other group members. The delinquency levels are, therefore, moderate.

High-risk category

Commercial real estate loans
Lending against commercial real estate is a high-risk category business due to factors such as volatility in commercial real estate prices, concentrated borrower profile, and difficulty in repossessing collateral.

Consumer durable loans
Consumer durable financing is a high risk activity owing to the high delinquency levels and difficulties in repossession.

Personal loans and credit card receivables
These assets are unsecured. They also show high delinquency levels.

Agricultural loans (excluding warehouse receipts discounting)
Unlike warehouse receipts discounting, these loans are granted for agricultural production. The repayment capacity of the borrower is directly linked to the ability to produce and sell. In several parts of India, agriculture is exposed to the uncertainties of monsoons. Delinquency levels in the segment are therefore, high, placing it in the high-risk bucket.

Project loans
These loans are granted for new projects. Repayment is dependent on both the successful completion of the project and its commercial viability following completion. Due to these risks, CRISIL places this asset in the high-risk category.

Promoter funding
Shares pledged as collateral by a promoter are normally part of the promoter's controlling stake. This form of lending reduces the promoter's effective equity investment in the firm, since a large part of the investment is made out of borrowed funds. Further, repayment normally depends on the fortunes of the firm; it is therefore likely that the same business factors that trigger a default on the loan also sharply erode the value of the shares.

SSI lending
This asset class has one of the highest delinquency levels. It features an extremely variable asset quality, and a weak borrower profile. The collateral is also difficult to repossess and sell.

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Annexure: The risk profile of each asset class based on key indicators

Low, Moderate or High denote the risk level for the indicator.

No.	Asset	Risk category	Average static pool Loss$	Average Gross NPAs for past 2 years#	Interest rates charged	Diversity of customer profile	Granularity	Tenor	LTV	Ease of repossession	Ease of resale	Value retention of collateral
1	Bills discounting - LC backed	Low	NA	NA	8-10%	Low	Low	Low	*	*	*	*
2	Home loans	Low	1%	2.2%	8-11%	Low	Low	High	Moderate	Moderate	Moderate	Moderate
3	New car loans	Low	1.5% (except few players)	2.7%	8-12%	Low	Low	Moderate	High	Low	Low	High
4	HCV loans	Low	2 to 3%	2.6%	8.5-13%	Moderate	Low	Moderate	High	Low	Low	Moderate
5	Used car loans	Low	2.5%	NA	10-14%	Low	Low	Moderate	Moderate	Low	Low	Moderate
6	Used HCV loans	Low	NA	NA	13-20%	Moderate	Low	Moderate	Moderate	Low	Low	Low
7	Two-wheeler loans	Moderate	2.5 to 3%	3.6%	12-18%	Low	Low	Low	High	Moderate	Low	Moderate
8	Construction equipment loans	Moderate	3%	2.3%	8-15%	Moderate	Moderate	Moderate	High	Moderate	Moderate	Moderate
9	LCV loans	Moderate	4%	5.6%	9-14%	Moderate	Low	Moderate	High	Low	Low	Moderate
10	Loan against shares	Moderate	NA	0%	9-16%	Low	Low	Low	Low	Low	Low	High
11	Margin financing	Moderate	NA	0%	10-15%	Moderate	Moderate	Low	Moderate	Low	Low	High
12	Dealer financing	Moderate	NA	NA	8.5-12.5%	Low	Moderate	Low	Moderate	Moderate	Moderate	Moderate
13	Warehouse receipts discounting	Moderate	NA	NA	8-10%	High	Low	Low	Moderate	Low	Moderate	Moderate
14	Large corporate loans	Moderate	NA	NA	7%-12%	Low	Moderate	Moderate	Moderate	High	High	High
15	SME corporate loans	Moderate	NA	NA	9%-13%	Low	Moderate	Moderate	Moderate	High	High	High
16	Micro finance	Moderate	NA	NA	15%-35%	Low	Low	Low	*	*	*	*
17	Commercial real estate loans	High	NA	NA	9-12%	High	Moderate	High	Moderate	High	Moderate	Moderate
18	Consumer durable loans	High	NA	8.6%	14-18%	Low	Low	Low	High	High	High	High
19	Personal loans	High	4 to 4.5% for good pools	7.6%	11-40%	Low	Low	Moderate	*	*	*	*
20	Credit card receivables	High	NA	7.2%	25-40%	Low	Low	Low	*	*	*	*
21	Agricultural loans (excluding warehouse receipts discounting)	High	NA	6.8%	7-9% (low due to regulations)	Moderate	Low	Moderate	High	High	Moderate	Moderate
22	Project loans	High	NA	NA	11-15%	Moderate	High	High	Moderate	High	High	High
23	Promoter funding	High	NA	NA	9-16%	Moderate	Low	Low	High	Low	High	High
24	SSI lending	High	NA	13.4%	11-15%	Low	Low	Moderate	Moderate	High	High	High

*# As on March 31, 2005 and 2004 NA – Not available * not applicable $ Static pool data pertaining to structured finance transactions*