Commercial Loan Best Practices

Risk Rating

Sample Risk Rating Model

Spring 2005

Sample Risk Rating Model

Introduction

Risk rating involves the categorization of individual credit facilities based on credit analysis and local market conditions, into a series of graduating categories based on risk. A primary function of a risk rating model is to assist in the underwriting of new loans. As well, risk ratings assist management in predicting changes in portfolio quality and the subsequent financial impact. Risk rating can lead to earlier response to potential deteriorating trends and a wider choice of corrective action to decrease exposure to unexpected loan losses. Finally, risk ratings are useful for loan pricing and regulating the commercial portfolio exposure to maximum acceptable levels of risk as established in board policy.

Risk ratings should be determined for all loans other than personal and mortgage loans in excess of $25,000. Risk ratings should be conducted:

- at the time of application for all new or increased loan facilities
- as part of the annual review process
- in situations where new information is considered that may materially affect the credit risk of the loan

The following sample risk rating model has been developed by industry representatives for consideration. The model may be modified as appropriate to meet the specific needs of individual member institutions.

Determination of risk ratings, likely attributes and required course of actions

The risk rating model uses an Excel spreadsheet. Each loan is evaluated under four risk components: Financial, Security, Management, and Environmental. Scores used for risk ratings are based on an evaluation of the relative strength or weakness of each consideration within the risk component. The maximum individual component score and overall score are outlined below.

Table 1: Risk Components and Considerations

Risk Component	Considerations	Weighting	Maximum Score
Financial	• Debt Service • Debt to Equity • Quality of Financial Reporting • Working Capital • Financial Trends	35%	35
Security	• Cash conversion • Quality of evaluation • Asset coverage	35%	35
Management	• Skill and tenure • Commitment • Infrastructure and support • Succession planning • Quality and frequency of information	15%	15
Environmental	• Issues, evaluation and insurance • Industry risk • Competition	15%	15
Total		100%	100

Various scores are possible under each of the four risk components. These are based on the relative strength or weakness of both quantitative and qualitative factors. Under each risk component, there are a number of possible scores based on the selection of the most appropriate option. **Please refer to Appendix 1 for additional guidance on completion of the risk rating template.**

The score is automatically determined by the selection made. A selection is made by pointing the cursor over the selection "box".

FINANCIAL (35% WEIGHTING)

Components	Y/N	Score
DSR 2X or better	☐	0
D:E 1:1 or better	☐	0
Top quality financial reporting	☐	0
Working capital ratio > 2:1	☐	0
Financial trends exemplary	☐	0
	Total:	0
DSR between 1.5X and 2X	☐	0
D:E between 1:1 and 2:1	☐	0
Good third party financial info	☐	0
Working capital 1.5 to 2.0	☐	0
Financial trends strongly positive	☐	0
	Total:	0
DSR between 1X and 1.5X	☐	0
D:E >2:1<5:1	☐	0
Acceptable financial info	☐	0
Working capital 1.0 to 1.5	☐	0
Financial trends steady/positive	☐	0
	Total:	0
DSR less than 1X/deteriorating	☐	0
D:E >5:1 or deteriorating	☐	0
Poor quality financial info	☐	0
W/C < 1.0	☐	0
Financial trends weakening	☐	0
	Total:	0
DSR well below 1X/significantly deteriorating	☑	1.5
D:E >5:1 and/or no likely solution	☐	0
Late financial info	☐	0
W/C negative and worsening	☐	0
Financial trends unsatisfactory	☐	0
	Total:	1.5
DSR minimal or negative	☐	0
D:E >5:1 and/or negative equity	☐	0
No financial info	☐	0
W/C strongly negative	☐	0
Financial trends unacceptable	☐	0
	Total:	0
	Score:	1.5

SECURITY (35% WEIGHTING)

Components	Y/N	Score
Cash out virtually on demand	☐	0
Evaluation self evident/undoubted	☐	0
100% liquid/<1:2 LTV Fixed Asset Coverage	☐	0
	Total:	0
Cash out within 90 days	☐	0
Strong 3rd party evaluation held	☐	0
Partial liquid/1.5->2.0 Fixed Asset Coverage	☐	0
	Total:	0
Cash out 180-365 days	☐	0
Reliable internal/external eval'n	☐	0
1.0->1.5 Fixed Asset Coverage*	☐	0
	Total:	0
Cash out possible < 365 days	☐	0
Dated/marginal evaluation	☐	0
.75->1.0 Fixed Asset Coverage*	☐	0
	Total:	0
Full cash out unlikely <365 days	☐	0
Dated/questionnable evaluation	☐	0
< .75 Fixed Asset Coverage*	☐	0
	Total:	0
Full cash out very unlikley	☐	0
Questionnable/no evaluation	☐	0
<.50 Fixed Asset Coverage*	☐	0
	Total:	0
	Score:	0

* Can include assets supporting guarantee

Only one selection (or score) for each consideration (these are colour coded for simplicity) is required. For example, under management, there are six possible options or scores for succession planning (orange). These are either:

- formal written succession plan (3.50)
- logical informal succession plan (2.25)
- succession plan contemplated (1.25)
- poor/no succession plan (0.5)
- no succession plan (0.3)

MANAGEMENT (15% WEIGHTING)

Components	Y/N	Score
Very high skill level/long tenure	☐	0
High/evident commitment	☐	0
Exceptional infrastructure/support	☐	0
Formal written succession plan	☐	0
High quality current/planning information provided frequently	☐	0
	Total:	0
Above average skills/medium tenure	☐	0
Strong commitment	☐	0
Strong infrastructure/support	☐	0
Logical, informal succession plan	☐	0
Good quality current information provided regularly; annual budget	☐	0
	Total:	0
Average skills/short tenure	☐	0
Good commitment	☐	0
Appropriate infrastructure/support	☐	0
Succession plan contemplated	☐	0
Appropriate quality current info provided annually; no budget	☐	0
	Total:	0
Marginal/deteriorating skills	☐	0
Average/reducing commitment	☐	0
Weak infrastructure/support	☐	0
Poor or weak succession plan	☐	0
Basic information provided only, often late/incomplete	☐	0
	Total:	0
Low skills/neglect	☐	0
Questionnable/weak commitment	☐	0
Poor/inadequate infrastructure/support	☐	0
Inadequate succession plan	☐	0
Poor quality or no information provided	☐	0
	Total:	0
Inadequate skills/abandonment	☐	0
No commitment evident	☐	0
No infrastructure/support	☐	0
No succession plan in place/contemplated	☐	0
Information not available or very unreliable	☐	0
	Total:	0
	Score:	0

ENVIRONMENTAL (15% WEIGHTING)

Components	Y/N	Score
No issues-insurance held Evaluation unnecessary or full external certification	☐	0
Low risk Industry	☐	0
Virtually no competitors	☐	0
	Total:	0
Possible issues-insurance held Evaluation unnecessary or full external certification	☐	0
Low to moderate risk Industry	☐	0
Minimal viable competion	☐	0
	Total:	0
No issues- insurance may be held Appropriate internal/external evaluation done	☐	0
Moderate risk Industry	☐	0
No major competitive threats	☐	0
	Total:	0
Possible issues-no insurance held No or insufficient evaluation	☐	0
Moderate to high risk Industry	☐	0
Strong/ emerging competition	☐	0
	Total:	0
Possible issues - no insurance available No or insufficient evaluation held	☐	0
Higher risk Industry	☐	0
Superior competitors	☐	0
	Total:	0
Probable issues - no insurance available No or insufficient evaluation held	☐	0
Extremely high risk Industry	☐	0
Significant competitive disadvantage	☐	0
	Total:	0
	Score:	0

Overall Score and Risk Rating

After completion of the evaluation process, an overall score and risk rating is automatically determined. For example, an overall score between 62 and 81 provides a low risk rating while a score between 27 and 42 results in a cautionary risk rating.

RISK RATING RANGES		
1.	82 - 100	Undoubted
2.	62 - 81	Low
3.	43 - 61	Moderate
4.	27 - 42	Cautionary
5.	14 - 26	Unsatisfactory
6.	Under 14	Unnacceptable

RULES
Default to Cautionary Rating for any category where information cannot be entered
Management discretion is allowed up to a maximum of 5 points higher with no limit on how many points may be deducted
Comments

Rating:	
Financial:	30.5
Security:	26
Management:	10
Environment:	11
Adjustment	
Total Score:	77.5
Low	

The model allows for an "adjustment" which can be made if necessary. The final risk rating should correspond to the likely attributes of one of six possible risk ratings as outlined in Table 2 below.

Once the risk rating is completed, a "hard copy" should be obtained and retained in the loan file. Previous versions should be retained as appropriate. Trend information should be recorded in the "comments" section as necessary.

Risk Ratings and Likely Attributes.

There are six risk possible risk ratings. The risk rating for any particular loan facility is determined from the overall score obtained from the risk evaluation process as outlined below.

Table 2: Risk Ratings and Attributes

Risk Rating		Attributes	Score
1	Undoubted	• Virtually no risk • Government borrower • Full cash security • Strongly capitalized • Outstanding management	82-100
2	Low Risk	• Minimal risk of any loss • Strong security position/capitalization • Excellent financial history/trends • Strong management • Stable/strong industry	62-81
3	Moderate Risk	• Good security margin/LTV • Demonstrable debt service capacity • Sound management • Steady financial trends • Moderate capital level	43-61
4	Cautionary	• Deteriorating/lack of financials • Covenant breaches • Potential security shortfalls • Potential debt service shortfalls • Significant adverse developments	27-42
5	Unsatisfactory	• Need for immediate action indicated • Security shortfall/capital crisis • Cessation of operations • Adverse management change • Interest/principle arrears	14-26
6	Unacceptable	• Receivership or bankruptcy • Definite loss evident • Disappearing assets/security • Fraud	Under 14

Risk Rating 1: Undoubted

It is likely that very few accounts would fall within this category as it is generally reserved for loans granted to government or quasi-government agencies. In the event a loan is secured by cash it would only be included as a risk rating 1 if the account also met or exceeded the capitalization, management and debt service components.

Risk Rating 2: Low Risk

For an account to be rated low risk would require excellent security coverage as well as above average cash flow and capitalization.

Risk Rating 3: Moderate

This category represents normal business risk and would be where most of the loans would be rated.

IMPORTANT: No loan should be approved with an initial risk rating lower than 3.

Risk Rating 4: Cautionary

Accounts in this category are considered higher risk and deemed to be Watch List accounts. These accounts would be subject to review on a more frequent basis (at least semi-annually) and included in the regularly scheduled Watch List report provided to senior management and/or the Board. Corrective action needs to be taken to restore to a more acceptable risk profile. Accounts in this category generally attract a risk premium price on loan facilities as well as monitoring fees.

Risk Category 5: Unsatisfactory

Accounts in this category should be reported immediately to the Manager Credit and placed on the formal impaired listing as they must be closely monitored. It is acknowledged these accounts have a distinct possibility of moving to an "unacceptable" rating with likely write-off status in near future. Any accrued interest on these accounts will be noted on loan files but excluded from interest income. A formal action plan should be developed within 7 days of identification.

Risk Rating 6: Unacceptable

Accounts in this category would be reported immediately to the Manager Credit and placed on the formal Impaired Loan listing. A thorough review of the security and value on a forced sale or wind down basis should be made with an appropriate loan loss provision determined based on the security review.

Special Mention Accounts

There may be instances where it is deemed appropriate to have an account monitored more closely although it does not fall within a Watch List or worse category. In these cases the account could be classified as a "Special Mention" account. The risk rating model should be modified to identify these as appropriate (e.g. comment or special score etc.)

Such accounts would be subject to a report being provided at least semi-annually. These accounts may be made a "Special Mention" for reasons such as change of management, new competitor on the scene, increased leverage based on an expansion or entry into new product lines, etc. The classification of an account as a "Special Mention" is not to be construed as being a derogatory development but more for a monitoring tool. For recording purposes the score on the model is not to be amended but instead a notation should be made in the box below the rating score the account is to be designated a special mention account.

Lending personnel would normally retain their full lending authorities to accounts in this category.

Completion of the Risk Rating Scoring Model

The following additional guidance is provided for completion of the risk rating model. Institutions may modify these as necessary or develop other guidelines to meet their own specific needs.

Overview

There are also 4 distinct sections that assist in evaluating the various components of the risk rating model being Financial; Security; Management and Environmental and we comment on each component separately as follows:

Financial

This section consists of 5 considerations based on the type of information provided and, the actual financial results. Only one option under each consideration is to be chosen (for ease of reference each component is colour coded).

Considerations	**Options**					
Debt Service	=>2X	1.5X to 2X	1X to 1.5X	<1X or deteriorating	Well below 1X or significantly deteriorating	Minimal or negative
Debt to Equity	=< 1:1	>1: 1< 2:1	>2:1<5:1	>5.1 or deteriorating	>5:1 and no likely solution	>5:1 and negative equity
Financial Reporting	Top Quality	Good 3rd party	Acceptable	Poor quality	Late information	No information
Working Capital	>2:1	1.5:1 to 2:1	1:1 to 1.5:1	<1:1	Negative or worsening	Strongly negative
Financial Trends	Exemplary	Strongly positive	Steady or positive	Weakening	Unsatisfactory	Unacceptable
Equivalent Score	**7**	**5**	**3.5**	**2.4**	**1.5**	**0.6**

For most Commercial borrowers the components will be based on the most recent year end financial statements. In the case of agricultural borrowers it may be in order to use a maximum 3 year average on the financial data that is based on income statement related items such as debt servicing ratio as they are subject to wide variances in their results due to circumstances beyond their control (weather, commodity prices). If an average is used it should be based on a maximum 3 year rolling basis. The current balance sheet and not averages is to be used for capitalization and leverage ratios. Although it is preferred that 3rd party prepared information that provides book values is obtained, it is recognized this is not always available and it is difficult to determine the book value of assets. Accordingly it may be in order to use current market values for balance sheet items if required.

It is recognized the ratios shown are not representative of all businesses and in certain cases an adjustment to the risk rating model may be required. Should the account manager consider an adjustment should be made they may refer the file to an appropriate approval level for an exception. For example, car dealerships historically have much higher debt to equity ratios than most businesses and a ratio of say 3:1 would be excellent. It is noted that a number of the categories are generic in their wording such as "acceptable financial information". This is intentional in that there are cases, dependent on security, course of loans, manner of evaluation of assets, etc. where an income tax return may be appropriate for the level of advances being provided. Accordingly this component is not based on the ranking of the type of preferred financial reporting such as Audited or Reviewed; instead it is based on the appropriateness of the information received to properly analyze the credit union's position. For the most part an income tax return and an updated personal statement of affairs as at the same date would be appropriate for most agricultural borrowers and they would be ranked on the scale as "acceptable financial information". "Top quality" and "good 3rd party financial info" would be restricted to accountant prepared Review Engagement statements but not Notice to Reader. In the case of a start up business where no financial information is at hand it may be appropriate to use the projected income statement on the proviso the use of such information can be validated.

Security

This section consists of 3 considerations dependent on the type and liquidity and manner of valuation held.

Considerations	**Options**					
Cash Conversion	Virtually on demand	Within 90 days	Within 180-365 days	Possible <365 days	Full cashout unlikely <365 days	Full cash out very unlikely
Quality of Evaluation	Self-evident or undoubted	Strong 3rd party held	Reliable internal or external	Dated or marginal	Dated or questionable	Questionable or none
Asset Coverage	100% liquid or =>2X	Partial liquid or 1.5X to 2X	1.0X to 1.5X	0.75X to 1X	<0.75 X	<0.5X
(LTV)	>50%	50% to 75%	75% to 100%	100% to 133%	133% to 150%	>150%
Equivalent Score	**11/12**	**8/8.5**	**6**	**4/4.5**	**2**	**1**

Only one item per component is to be chosen (for ease of reference each component is colour coded).

The cash out period is an indication of how long would it take to realize on our security. Cash security is very liquid and accordingly would be considered "cash out virtually on demand". Commercial real estate that is vacant would be more difficult to realize on and accordingly dependent of the type of property and location "cash out greater than 365 days". The evaluation section would be based on the type and age of the information at hand. In the case of inventory, for example, if timely and ongoing information is not received from the borrower it would be deemed as "dated/ marginal" or even "dated/questionable evaluation". In the event we receive monthly or quarterly information is received in a timely manner from the borrower, inventory could be considered "reliable internal".

The fixed asset coverage determinant is based on the value of security pledged and not the net worth of the assets of the borrower.

Management

This section consists of 5 considerations dependent on the skill sets of the management, information systems used, investment held by management and evidence of succession plans.

Considerations	**Options**					
Skill and Tenure	High skill or long tenure	Above average or medium tenure	Average skills or short tenure	Marginal or deteriorating skills	Low skills or neglect	Low skills or abandonment
Commitment	High or evident	Strong	Good	Average or reducing	Questionable or weak	None evident
Infrastructure and Support	Exceptional	Strong	Appropriate	Weak	Poor	None
Succession Planning	Formal written plan	Logical informal plan	Plan contemplated	Poor or weak plan	Inadequate	No plan in place or contemplated
Quality and Frequency of Information	High quality Current	Good quality Regular Annual budget	Appropriate quality Annual No budget	Basic Late Incomplete	Poor or none	Not available or unreliable
Equivalent Score	**3.5**	**2.25**	**1.25**	**0.8**	**0.5**	**0.3**

Only one item per component is to be chosen (for ease of reference each component is colour coded).

The tenure and skill level are dependent on various aspects. There may be accounts where the people have owned the business for many years yet they are not deemed to have good skill levels. In order to properly score the model in that situation, the box that indicates "marginal/ deteriorating skills" would be checked. Please note where there is a "/" both of the characteristics do not have to be present – one is sufficient to be included in that component.

Commitment refers to the level of investment or income derived from the business. A business where a person has little invested and is an absentee owner could well be deemed to "questionable/ weak commitment" or in the case where siblings/children are employed in the business, it could well be deemed to be "strong commitment. The components infrastructure, succession planning and business planning are all dependent on the type of business and the level of such required. An example would be a successful variety store owner with a history of profitability who has the spouse or sibling as a backup. Although there may be no formal employee structure, succession plan or business plan it may still be rated as being "appropriate infrastructure"; logical succession planning" and "appropriate quality current info".

Environmental

This section consists of 3 considerations dependent on the type of industry and competition.

Considerations	**Options**					
Issues, Evaluation and Insurance	No issues Evaluation unnecessary or full external certification Insurance held	Possible issues Evaluation unnecessary or full external certification Insurance held	No issues Appropriate internal or external certification Insurance may be held	Possible issues No or insufficient evaluation No insurance held	Possible issues No or insufficient evaluation No insurance available	Probable issues No or insufficient evaluation No insurance available
Industry Risk	Low risk	Low to moderate risk	Moderate risk	Moderate to high	High	Extremely High
Competition	Virtually none	Minimal viable competition	No major threats	Strong or emerging competition	Superior competitors	Significant competitive disadvantage
Equivalent Score	**5**	**3.5**	**2.5**	**1.5/2**	**1**	**0.5**

Only one item per component is to be chosen (for ease of reference each component is colour coded).

With regard to the environmental aspects, the categories are relatively straightforward and self-explanatory. The competitive section is also basically self explanatory. An example here would be the milk industry which would be considered "minimal viable competition" as protection is provided by a marketing board however there are competitive products such as soy milk, etc.

Guidelines for determining categories when information is unknown or unavailable

Where information is unknown or unavailable for any category the equivalent "Cautionary" rating box should be checked. An example would be if it was unknown if a succession plan was in place the "Poor/ no succession plan" box would be selected. As can be appreciated it is important to obtain all the required information possible when doing a new or renewal credit since if not obtained it will have a negative impact on the risk rating for the Member.