

About the Firm

Capital Performance Group is a management consulting firm based in Washington, DC. Our firm provides advisory, planning, analytic, and project management services to the financial services industry.

John Barrickman, Consulting Associate to CPG, oversees the development of the Two-Factor Loan Rating Framework. Mr. Barrickman has extensive consulting experience in strategic planning, credit process, risk management, and credit training. He has also been active in banker education, serving on the faculty of a number of regional lending schools and four of the six graduate schools of banking.

Case Study: NewAlliance Bank New Haven, CT

Development of framework to assess both borrowers and facilities. The framework was used to:

- ◆ Define tolerance for credit risk
- ◆ Approve/price loans
- ◆ Quantify transaction risk
- ◆ Track portfolio credit quality trends
- ◆ Evaluate adequacy of ALLL

CPG also developed the AQR framework to be a foundation to:

- ◆ Extend its application to the bank's consumer loan portfolio
- ◆ Adopt enhanced risk-based pricing strategies
- ◆ Improve provisioning
- ◆ Apply differential capital allocations
- ◆ Build more robust analysis and reporting capabilities

For more information, please contact us at 202/337-7870 or info@capitalperform.com.



Credit Risk Analytics

A Two-Factor Loan Rating Framework

The Need

The single-factor risk rating methodology employed by many institutions represents an incomplete picture of credit risk and is therefore less than ideal for facilitating timely credit decisions that are priced appropriately for risk.

A two-factor loan risk rating framework (also commonly referred to as a dual risk rating framework) can help to:

- ◆ Improve accuracy in provisioning.
- ◆ Build more robust analysis and reporting capabilities.
- ◆ Improve risk adjusted returns on capital.
- ◆ Provide an objective basis for justifying pricing differentiated by risk.

A two-factor risk rating explicitly rates both the borrower and the facility. By capturing both of these elements, it provides management with a better sense of the true risk in the loan portfolio.

Description of Our Solution

CPG will work in close collaboration with lending and credit personnel of the bank to:

- ◆ Develop a two-factor rating framework that reflects the institution's credit policies, credit culture, and risk management objectives.
- ◆ Develop explicit and objective factors to be considered when assigning risk grade to the borrower for each type of lending engaged in by the bank (e.g., CRE, C&I, ACD, consumer, residential real estate, etc.).
- ◆ Provide separate Excel-based borrower matrices for each type of lending – incorporating relevant objective measures of risk for each.
- ◆ Develop a facility rating matrix for assigning grades based on quality of collateral. The matrix will reflect the bank's credit policy, the type of collateral, the degree of control exercised over the collateral, and the loan-to-value ratio.
- ◆ Provide easy-to-use Excel-based templates that lenders and credit personnel can use to assign the borrower and facility ratings. The templates are customized to reflect the objective factors determined by the bank.
- ◆ Provide advice on how to leverage the two-factor rating framework to build risk-based pricing strategies, improved accuracy in provisioning, and to build more robust analysis and reporting capabilities.
- ◆ Train credit and lending personnel in the application of the new two-factor loan rating framework.



Examples

Below is a **sample C&I borrower matrix**. The number of pass categories, objective factors, and ranges are customized to fit each bank's specific needs.

Borrowing Risk Rating		1	2	3	4	5	6
Objective Factors	Weight					Special Mention	Substandard
Quantitative	60%	1	2	3	4	5	6
Debit Service Coverage - EBITDA/Interest + CMLTD	10%	Greater than or equal to 2.00	1.38 to 1.99	1.13 to 1.99	1.00 to 1.12	0.59 to 0.99	Less than 0.50
Global Cash Flow	20%	Greater than or equal to 2.00	1.38 to 1.99	1.13 to 1.99	1.00 to 1.12	0.59 to 0.99	Less than 0.50
Debt/Tangible Net Worth ¹	20%	Upper Quartile RMA - <i>Default to 2</i>	Upper Quartile RMA	Upper Middle Quartile RMA	Lower Middle Quartile RMA	Lower Quartile RMA - <i>Default to 8</i>	Lower Quartile RMA
Moody's RiskCalc 1 Year EDF	50%	Less than or equal to 0.080%	0.081% to 0.285%	0.286% to 0.610%	0.611% to 2.166%	2.167% to 7.692%	7.693% to 19.490%
Additional Factor(s)	TBD	Additional Factor(s)	Additional Factor(s)	Additional Factor(s)	Additional Factor(s)	Additional Factor(s)	Additional Factor(s)
Qualitative	30%	1	2	3	4	5	6
Quality of Financial Information	25%	Audited/Unqualified	Audited/Qualified	Reviewed	Full Disclosure Compilations	Non Disclosure Compilations and Tax Returns	Borrower Prepared Financials or Tax Returns
Industry Risk Factor (IBIS) ²	25%	Less than or equal to 3.50	3.51 to 4.00	4.01 to 4.50	4.51 to 5.00	5.01 to 6.74	Greater than 6.75
Business Relationship with Bank XYZ	25%	25+ Years	16 to 24 Years	11 to 15 Years	6 to 10 Years	2 to 5 Years	Less than 2 Years
Financial Trends ³	25%	Very Positive	Generally Positive	Stable	Erratic	Generally Negative	Very Negative
Additional Factor(s)	TBD	Additional Factor(s)	Additional Factor(s)	Additional Factor(s)	Additional Factor(s)	Additional Factor(s)	Additional Factor(s)
Owner Support	10%	1	2	3	4	5	6
FICO Score	55%	Greater than or equal to 760	730 to 759	700 to 729	670 to 699	640 to 669	Less than 640
Total Debt/Adjusted Net Worth	15%	Less than or equal to 1.00	1.01 to 2.00	2.01 to 3.33	3.34 to 4.44	4.45 to 5.00	Greater than 5.00
Personal Cash Flow	15%	Greater than or equal to 2.0	1.38 to 1.99	1.13 to 1.37	1.00 to 1.12	0.50 to 0.99	Less than 0.50
Years of Experience in this Industry	15%	25+ Years	16 to 24 Years	11 to 15 Years	6 to 10 Years	2 to 5 Years	Less than 2 Years
Additional Factor(s)	TBD	Additional Factor(s)	Additional Factor(s)	Additional Factor(s)	Additional Factor(s)	Additional Factor(s)	Additional Factor(s)

(1) Include properly subordinated debt in the calculation of Tangible Net Worth and deduct the same from the debt sum.
(2) Industry risk will be evaluated using IBIS industry risk scores available from RMA using e-Mentor.
(3) Financial trends should be viewed over a three year period. Factors to consider include Operating Profit Margin, Debt Service Coverage, Liquidity, Global Cash Flow. Very Positive = All Factors Improving; Generally Improving = 3/5 Factors Improving; Stable= All Factors Stable; Erratic= 1-3 Factors Declining; Generally Negative = 3/5 Factors Declining; Very Negative = All Factors Declining.

Below is an **abbreviated sample facility rating matrix** (standard matrices have classes A-E). Class descriptions are customized to fit each bank's specific needs.

Class	Description
A - Superior	Cash held at XYZ Bank. Letters of credit or bond issuance from issuer with "AA" or better investment grade. Government securities at advance policy rates. Credits 100% guaranteed by the full faith and credit of the United States government. Commercial real estate with less than 25% Loan-to-Value (LTV)/ Cost (whichever is lower).
B - Excellent	Cash held at other banks with collateral control agreement in place. Letters of credit or bond issuance from issuer with "A" or better investment grade or non-rated financial institution. Cash equivalents, such as cash value of whole life insurance. Marketable securities including federal agency, municipal, and corporate securities margined at policy advance rates. The portion of facilities guaranteed 75% or more by the U.S. government or an agency. Commercial real estate with 26-50% LTV/Cost (whichever is lower). Tax pledge or general obligation of a municipality. SBA 504 loans.
C - Above Average	Bank XYZ in senior position in relation to other debt positions. Asset-based lending with dominion and control of collateral (e.g. periodic borrowing base, lockbox, controlled account, field audits). Commercial real estate with 51-65% LTV/Cost (whichever is lower). Construction loans with less than 50% LTV/Cost (whichever is lower). An abundance of other collateral (!30% of policy advance rate) or exceptional collateral.