COMMERCIAL AND INDUSTRIAL LENDING

Core Analysis Procedures

Examiners are to consider these procedures but are not expected to perform every procedure at every institution. Examiners should complete only the procedures relevant for the institution's activities, business model, risk profile, and complexity. If needed, based on other identified risks, examiners can complete additional procedures not included below. References to laws, regulations, supervisory guidance, and other resources are not all-inclusive.

References

- *Interagency Guidelines Establishing Standards for Safety and Soundness (FRB: 12 CFR 208, Appendix D-1; FDIC: 12 CFR 364, Appendix A)*
- *Interagency Statement on Meeting the Needs of Creditworthy Small Business Borrowers (FRB: SR 10-2; FDIC: FIL-5-2010)*

Considerations and Background

Commercial and industrial lending covers a wide range of industries and requires varying analyses in order to ascertain credit quality. In general terms, these loans can be divided into three distinct types of financing: lines of credit, term loans, and asset-based loans. This reference is intended to give examiners an overview of the basic policy and portfolio considerations necessary to evaluate a bank's commercial and industrial lending activities. Resources regarding specific industries can be found in various banking publications such as those made available by The Risk Management Association (RMA). Common types of commercial and industrial loans are presented below:

- Working capital lines of credit are short-term obligations (usually no longer than one year) that generally fund seasonal increases in accounts receivable and inventory. Working capital lines of credit typically do not have a scheduled amortization and require interest-only payments each month or quarter. The accounts receivable and inventory are eventually liquidated, and the principal is repaid. Loan proceeds can also fund other expenditures until accounts receivable are created and collected. The structure of the loans can vary, but they should be closely tied to the timing of the conversion of the financed assets.

- Revolving lines of credit are similar to working capital lines of credit, but they are committed facilities that can have maturity dates that exceed one year. Similar to working capital lines, they may not have scheduled principal amortization; however, a portion of the facility may be amortized. They are often used to finance permanent working capital. These loans are usually secured by a blanket lien on all business assets. Lines used to finance permanent working capital are expected to revolve and be reasonably active during the loan, with recurring principal reductions or a resting period where the loan is paid down to a zero balance.

- Term loans are amortizing loans that are typically repaid over a period longer than one year, or a period longer than the normal operating cycle of the borrowing entity. Most often, term loan proceeds are used to purchase fixed assets. However, term loans may also be used to convert a working capital line that was not paid out at the bottom of the operating cycle to an orderly repayment schedule (or to term out a credit line that is now considered permanent working capital). Another common use for term loans is to finance business acquisitions. Term loans are repaid through business cash flow, according to a fixed amortization schedule, which can vary based on the cash flow expectations of the underlying asset financed or the anticipated profitability or cash flow of the business.

- Asset-based loans are advances on a line of credit based upon a borrowing base (percent of eligible accounts receivable and inventory and discounted value of machinery and equipment). This form of financing differs from a working capital line of credit or a revolving line of credit in that the underlying collateral is monitored in line with advances. These usually include borrowing base certificates, collateral audits (aka field audits), lock box collection of receivables, and other enhanced operational practices. See "Asset-Based Loans" starting with procedure 11 for a more detailed analysis of this unique form of financing.

Findings and Conclusions

Document findings and conclusions here, and include a summary of these findings and conclusions in the appropriate Primary or Supplemental modules.

Preliminary Review

1. Review documents that may identify issues relating to commercial and industrial (C&I) loans, such as:

- **Prior examination reports and work papers**
- **Examination planning memoranda and file correspondence**
- **Loan review reports**
- **Internal and external audit reports**
- **Loan committee minutes**
- **Documentation of action taken by management to address prior recommendations**

2. Obtain and analyze internal management reports relating to C&I loans, such as:

- **Lending activities (e.g., type, volume, location)**
- **Problem loans**
- **Workout strategies**

3. Assess the quality of market-analysis reports, considering:

- **Information provided in the reports**
- **Reporting on specific market segments**
- **Economic developments in the markets served**
- **Variety in sources used**
- **Timeliness of information**

COMMERCIAL AND INDUSTRIAL LOANS (EXCEPT ASSET-BASED LOANS)

Policy Considerations

4. Determine whether the board adopted C&I lending policies that are consistent with safe and sound banking practices and appropriate for the size and complexity of the bank's operations. Consider whether the policies address the following risk management guidelines:

- **Identify the C&I loan types the bank is willing to extend**
- **Define the bank's target market for commercial lending**
- **Define and establish standards for:**
  - **Evaluating the financial condition and repayment capacity of borrowers**
  - **Evaluating the financial condition of guarantors**
  - **Financial reporting requirements**
  - **Maximum exposure limits for borrower relationships, product types, and in aggregate**
  - **Maximum leverage exposure for high-risk borrowers**
  - **Acceptable collateral and loan-to-value limits**
  - **Verification and ongoing evaluation of pledged assets**
  - **Lien perfection and documentation requirements**
  - **Loan covenant requirements**
  - **Ongoing monitoring, measuring, and reporting of identified risks**
  - **Risk-rating methodology**
  - **Problem loan management**
  - **Collection and recovery practices**
  - **Foreclosure practices**
  - **Charge-off procedures**

Borrower Assessment – Analyzing Nonfinancial risks

5. Determine whether the credit extension process includes an assessment of economic sectors (e.g., manufacturing, wholesale, retail, service provider) and industry risks that may influence the individual borrower's business strategy, financial stability, and financing requirements, such as:

- **Industry characteristics, changing trends, and competitive dynamics**
- **Industry and product offering life cycle (emerging, growth, mature, declining)**
- **Cyclicality, seasonality, supply chain vulnerability, vulnerability to product substitutes, changing technology, outsourcing, and international events**
- **Regulatory, economic, political, or other events**
- **Labor and environmental issues**

6. Determine whether the credit extension process includes an assessment of business risks that may influence the individual borrower's business strategy, financial stability, and financing requirements., Consider the following:

- **Impact of business size and history on operating strategy**
- **Borrower's ability and success at differentiating its products and services in the marketplace**
- **Buyer or supplier concentrations**
- **Impact of production cycle complexities**
- **Impact of distribution channel disruptions**

- **Development and marketing of products and services**
- **Vulnerability to substitution**
- **Entry and exit costs**
- **Technology risk internal and external to the organization**
- **Outsourcing strategies**
- **Stockholder expectations and demands**
- **Relevant, sound, and effectively executed business plans**
- **Debt and equity structure**
- **Access to capital markets**

7. Determine whether the credit extension process includes assessing management risk issues that may influence the individual borrower's business strategy, financial stability, and financing requirements, such as:

- **Private equity and debt sponsorship**
- **Management qualifications and experiences**
- **Management's track record**
- **Organizational structure (board of directors and senior management)**
- **Governance practices and control points that monitor financial success and viability**
- **Key man risks**
- **Management succession plan**

8. Assess the commitment and ability of the board and management to identify and address the economic, industry, business, and management risks affecting both individual borrowers and the aggregate loan portfolio.

Borrower Assessment – Analyzing Financial Risks

9. Determine whether the bank's financial analysis is appropriate for the size and complexity of the credit exposure and conforms to internal policies and procedures. Consider whether management:

- **Obtains timely, current, and accurate financial information from borrowers**
- **Uses industry specific balance sheet data (such as RMA Statement Studies) to compare to the borrowing entity under consideration**
- **Appropriately assesses the financing needs and repayment capacity of the borrower and whether the analysis includes level and trend analysis of financial ratios, cash flow history, and projections. Common analytical ratios include:**
  - **Profitability ratios, such as:**
    - **Gross profit margin (gross profit to net sales)**
    - **Operating profit margin (net operating income to net sales)**
    - **Net Profit Margin (net income to net sales)**
    - **Net income to assets**

- **Net income to equity**
- **Debt service coverage ratios, such as:**
  - **[Net Income + Depreciation + Amortization]/Current Maturities of Long-term Debt (CMLTD)**
  - **Interest Coverage (Earnings Before Interest and Taxes (EBIT)/Interest Expense)**
  - **Fixed Charge Coverage (EBIT + Depreciation and Amortization (EBITDA))/(Interest expense + Lease Expense + CMLTD)**
- **Liquidity ratios, such as:**
  - **Current**
  - **Quick**
  - **Net working capital**
  - **Inventory turnover**
  - **Accounts receivable turnover**
  - **Accounts payable turnover**
- **Leverage ratios, such as:**
  - **Debt to worth**
  - **Debt to tangible net worth**
  - **Net fixed assets to net worth**
- **Efficiency ratios (including percentage change), such as:**
  - **Sales to assets**
  - **Sales to net fixed assets**
  - **Inventory days on hand**
  - **Accounts receivable (AR) days on hand**
  - **Accounts payable (AP) days on hand**

- **Evaluates important items relating to insiders of the borrowing entity, such as salaries, fees, dividends, notes receivable, notes payable, and subordinated debt**
- **Appropriately explains significant balance sheet and income statement changes and assesses financial statement footnotes**
- **Appropriately identifies and reviews contingent liabilities**
- **Evaluates the borrowers' cash flow statements (source and use of funds)**
- **Reviews borrower tax returns, if applicable**
- **Reviews and analyzes guarantor personal financial statements, credit reports, and tax returns, if applicable[1]**

10. When reviewing individual borrowing relationships, to the extent possible, identify whether any of the following risk factors exist and assess the effect on the credit quality of the borrowing relationship:

- **A slowdown in the receivables collection period**
- **Materially rising inventory levels**
- **Slowdown in inventory turnover**
- **Existence of numerous liens on assets**
- **Concentrations of noncurrent assets**

---

[1] **Bank management typically assesses the guarantor's ability and willingness to support the loan (with cash or additional collateral) if the borrower is unable to meet the requirements of the note and loan agreement.**

- **High levels of intangible assets**
- **Substantial increase in long-term debt**
- **A large gap between gross and net sales**
- **Rising cost percentages**
- **A rising level of total assets in relation to sales**
- **Significant changes in the balance-sheet structure**
- **Credit lines fully extended for long periods without being repaid**
- **Credit lines not reduced in conjunction with the cash cycle of the company**
- **Declining gross profit margins**
- **Operating or net losses**
- **Declining or negative equity**
- **Large distributions**

Administration

11. Assess the loan approval process. Determine whether:

- **Loan presentations include appropriate analysis of the following items:[2]**
  - **Loan purpose, structure, covenants, and terms**
  - **Repayment source(s)**
  - **Collateral**
  - **Background of borrower, principals, and management**
  - **Industry and economic outlooks**
  - **Competitive environment**
  - **Industry and product life cycles**
  - **Business strategy, budget, profit plan, and prospects**
  - **Governance structure**
  - **Financial information, including balance sheet and income statement analysis**
  - **Financial projections**
  - **Project and global cash flow analysis**
  - **Borrowing and deposit history**
  - **Guarantor's capacity to support the credit, including liquidity or additional collateral**
- **The proper level of approval authority is documented**
- **Loan commitment letters include the same terms and conditions that were approved**

12. Review and assess procedures for monitoring and evaluating collateral.

- **Determine whether management initially, and routinely thereafter, performs or obtains the following, as appropriate:**
  - **Verifications and inspections**
  - **Lien and litigation (lis pendens) searches**

---

[2] Some items may not be appropriate for smaller, less-complex loans.

- **Collateral descriptions**
- **Accounts receivable agings[3]**
- **Inventory schedules, which may include work-in-process, obsolete, and ineligible inventory**
- **Current equipment listings and evaluations**
- **Repricing of liquid or readily marketable collateral**
- **Appraisals or valuation reviews to verify current market value of the collateral**
- **Valuation of intangible assets[4]**

- **Review the bank's lien perfection procedures. Consider:**
  - **UCC filings**
  - **Recorded mortgages**
  - **Evidence of title insurance**
  - **Collateral assignments**
  - **Landlord waivers**
  - **Recorded lien on vehicle titles**
  - **Possession**
  - **Acknowledgment of assignments**
  - **Ship or boat mortgages (filed with the US Coast Guard)**
  - **Airplane liens (filed with the FAA in Oklahoma City), including descriptions of motors and avionics**
  - **Radio and TV licenses (filed with the FCC)**

Documentation

13. Review credit files for evidence of appropriate loan documentation, including the following loan documents, as appropriate:

- **Promissory note(s)**
- **Borrowing authorization**
- **Verification of true legal entity (proprietorship, partnership, or corporation)**
- **Collateral documents**
- **Perfection of lien inspection (title and UCC searches)**
- **Personal or corporate guarantees**
- **Loan agreement**
- **Insurance (liability, flood, fire, or key person)**
- **Bond or stock powers**
- **Appraisals**
- **Landlord's waiver**
- **Hypothecation agreement**
- **Subordination agreement**

---

[3] **Typically reviewed by management to identify trends, concentrations, ineligible accounts (e.g., inter-company transactions, receivables from foreign transactions), and compliance with formula borrowing base.**

[4] **Assessment methods include discounted current value of cash flows multiples of net income, commissions, and sales comparability of recent sales or franchise values and independent appraisals.**

ASSET-BASED LOANS

Because these credit arrangements are frequently a substitute for equity, the loans should always be secured by the liquidation value of accounts receivable, inventory, and any other collateral. Adequate administration and ultimate collectability of these loans requires close monitoring and regular evaluation of collateral values.

Policy Considerations

14. Assess the loan policy. Consider whether it addresses the following asset-based loan items:

- **Guidelines for qualified customers**
- **Advance rates justified by the value and marketability of underlying collateral**
- **Acceptable and non-acceptable types of collateral**
- **Personal guarantees**
- **Lender liability issues**
- **Actions when an out-of-borrowing-base situation occurs**
- **Monitoring requirements for bank management and third-party vendors**

Administration

15. Review asset-based loan agreements and determine whether the documents set forth conditions governing the handling of the relationships and the remedies available in the event of default. The following broad areas may be addressed in the loan agreements:

- **Eligible collateral and advance rates**
- **Delinquent accounts**
- **Contra accounts**
- **Affiliate accounts**
- **Concentration accounts**
- **Bill-and-hold sales**
- **Progress billings**
- **Receivables subject to a purchase-money interest**
- **Audit requirements**
- **Expectations for mandatory clean-up periods**
- **Confirmations**

16. Determine whether periodic on-site audits of borrowers are performed. If so, determine the frequency of the audits and assess whether the following items are appropriately included in the analysis:

- **Shipping documents**
- **Inventory invoices**
- **Turnover of AR and AP**
- **Direct verification of AR and AP**

- **Concentrations of customers' ARs[5]**
- **Sales dilution resulting from merchandise returns bad debt allowances or uncollectible receivables**
- **Borrower's credit and collection procedures**
- **Ineligible affiliate and inter-company receivables**
- **Other possible ineligible AR:**
  - **Restarts (i.e., new AR issued by borrower to replace an AR that is over 90 days past due)**
  - **Services[6]**
  - **Foreign[7]**
  - **Chronic delinquents**
- **Aging of AR and AP**
- **Inventory make up, including:**
  - **Shelf life**
  - **Obsolescence**
  - **High tech**
  - **Work in process[8]**
- **Machinery and equipment listing[9]**
- **Operational risk of the borrower, such as:**
  - **Poor bookkeeping**
  - **Delinquent rent**
  - **Unreasonable lease terms**
  - **Delinquent payroll taxes**
  - **Weak internal routine and controls, such as:**
    - **Reconciliation procedures**
    - **Physical security**
    - **Cash management and controls**
- **Over-advances**

17. Assess asset-based loan controls. Appropriate controls generally address:

- **Detailed procedures for quickly securing or taking physical possession of collateral**
- **Borrowing bases tailored to each borrower**
- **Monitoring procedures for borrowing bases to prevent over-advances**
- **Management information system tracking reports**
- **Information requirements for credit-approval presentations**
- **Funding disbursement and approval procedures**
- **Borrower operating accounts, including lock box controls if applicable**

---

[5] **Poor credit quality in a concentration may warrant lower advance rates.**

[6] **AR based on items such as legal or repair services are sometimes excluded.**

[7] **Sometimes excluded because of perfection difficulties outside the US.**

[8] **Typically excluded from borrowing base**

[9] **Specialty equipment is typically excluded as eligible collateral.**

- **Periodic lien position monitoring[10]**

MANAGERIAL OVERSIGHT

Ongoing Monitoring Responsibilities

18. Evaluate the overall effectiveness of the monitoring of key borrower relationships. Effective monitoring procedures generally address:

- **Maintaining regular communication with the client**
- **Conducting on-site visitations and inspections**
- **Reviewing the financial condition of the borrower**
- **Monitoring for emerging issues**
- **Tracking compliance with covenants**
- **Securing and taking possession of the collateral**
- **Monitoring the borrowing base**
- **Maintaining accurate and current credit files**
- **Conducting a formal annual review of the borrowing relationship**
- **Managing problem loans and credit relationships**
- **Monitoring the effects of economic and regulatory changes on the client's risk profile**
- **Communicating potential or well-defined weaknesses to management**
- **Ensuring that risk ratings are timely and appropriate**

19. Determine whether management uses non-client resources to monitor the borrowing relationship. These resources may include:

- **Legal counsel, accounting firm, or other consultants providing services to the borrower**
- **Competitors**
- **Suppliers**
- **Customers**
- **Regulators**
- **Public records, such as newspapers, magazines, trade publications, court records, or recordations**

20. Determine whether risk factors associated with working capital and seasonal loans exist. The following conditions may reflect poor loan structures, weak documentation, or ineffective monitoring of the relationship and may result in a problem or workout situation:

- **Working capital advances used for funding losses**
- **Working capital advances funding long-term assets**

---

[10] To determine whether lien positions are undermined by post-funding changes such as the filing of judgments against the borrower.

- **Trade creditors not paid at end of business cycle**
- **Over extension of collateral causing an out-of-formula situation**
- **Inventory values decline causing an out-of-formula situation**
- **Collectability of accounts receivable declines**
- **Working capital advances used to fund long-term capital**
- **Excessive dividends, distributions, or owner salaries**
- **Excessive or chronic overdrafts**

21. Determine whether risk factors associated with term business loans exist. The following conditions may reflect poor loan structures or ineffective monitoring of relationships:

- **The loan term is not consistent with the useful life of the collateral**
- **Cash flow from operations does not allow for adequate debt amortization**
- **The gross margin of the business is narrowing, which may necessitate the business to sell more product to produce the same gross profit**
- **Higher sales volume requires more cash for expansion of current assets, leaving less cash for debt amortization**
- **Sales are lower than expected**
- **Management is unable or unwilling to cut overhead expenses, straining cash flow and resulting in diminished repayment capacity**
- **Fixed assets become obsolete before the loan matures**
- **Payments on term debt strain cash flow, and the business is unable to adequately operate or allow natural expansion**
- **Operating or net losses exist**
- **Liquidity ratios, working capital, or net worth of the borrower is declining**
- **The overall financial condition of the business is deteriorating because of poor performance or unforeseen occurrences in the industry**

Problem Loans and Workout Situations

22. When reviewing individual borrowing relationships, determine whether any of the following non-financial risk factors exist:

- **Deteriorating supplier relationships**
- **Management issues**
- **Ownership issues**
- **Industry problems**
- **Declining economic conditions**

23. When reviewing individual borrowing relationships, determine whether any of the following financial risk factors exist:

- **Late statements or frequent overdrafts**

• **Covenant violations or over-advances** • **Late payments** • **Deteriorating trends** • **Operating or net losses** • **Liens**
24. For problem credits, determine whether management: • **Appropriately grades the loans and analyzes for potential impairment** • **Appropriately identifies and accounts for non-accrual loans and troubled debt restructures** • **Develops appropriate workout or exit strategies**
25. Evaluate the governance practices and overall effectiveness of problem loan administration. Consider the adequacy and accuracy of: • **Executive reporting** • **Appraisals and collateral valuations** • **Borrower and guarantor financial analysis** • **Documentation of expenses, such as legal fees, appraisal or collateral evaluation fees, consulting fees, and collateral liquidation costs** • **Recovery rates**
End of Core Analysis.