This article presents a framework for bank lending based on the fundamentals of commodity trading. It highlights central issues in the credit management process, such as risk underwriting criteria, credit structuring, and risk control; touches on the essential impact of technology over the activities of trading firms and banks, such as information management and transaction processing; and reviews a broad range of benefits available to commodity traders using banking services.

The predominant activity of commodity trading companies (CTCs) is the commerce of commodities, domestically or across borders. Their core business is in buying and selling commodities with little or no value added to the commodity from a manufacturing point of view. Inherent in these activities is the risk related to owning the commodity and collecting the sale’s proceeds. Characteristics of CTCs are shown in Figure 1.

Typically return on sales (ROS) is low because of competitive commodity market pricing and the low value added to the commodity by the trading firm. Return on equity (ROE) is driven by high asset turnover (AT) and high leverage (L). High AT and high L are a function of the short duration of the asset conversion cycle and the high quality of the trading assets (high liquidity). Brokering can increase ROE through brokerage fees earned without using the firm’s balance sheet, bypassing ownership risk.

The large financing requirements of commodity traders compared with their equity are met by banks, suppliers, and parent/affiliates.

- Bank financing is generally transactional in nature because the purpose and the repayment of financing are closely connected with the conversion of specific trading assets into cash.
- Suppliers provide short financing terms or require cash upon delivery due to the high liquidity of commodities.
- Intercompany financing may be tied to a specific transaction or support the overall capital position of the firm, for example,
<table>
<thead>
<tr>
<th>Attributes</th>
<th>Sophisticated</th>
<th>Less Sophisticated</th>
</tr>
</thead>
<tbody>
<tr>
<td>Activity Type</td>
<td>• Active in commodity trading with a broad network of suppliers and customers.</td>
<td>• Active in commodity trading with a narrow network of suppliers and customers.</td>
</tr>
<tr>
<td></td>
<td>• Focuses on short-term commodity trading.</td>
<td>• Focuses on short-term commodity trading,</td>
</tr>
<tr>
<td></td>
<td>• May invest in long-term projects internationally to ensure commodity sourcing or</td>
<td>• Does not invest in projects internationally.</td>
</tr>
<tr>
<td></td>
<td>for other reasons.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Takes ownership risk in the commodity/investment.</td>
<td>• Takes ownership risk in the commodity traded.</td>
</tr>
<tr>
<td></td>
<td>• Experienced in brokering transactions (bypassing ownership risk).</td>
<td>• Little or no experience in brokering transactions.</td>
</tr>
<tr>
<td>Commodity Traded</td>
<td>• Trades in one or a few commodity families and, to a minor extent, may trade in</td>
<td>• Predominantly trades in one commodity family.</td>
</tr>
<tr>
<td></td>
<td>noncommodities.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Product offering depends on strategy (see below).</td>
<td></td>
</tr>
<tr>
<td>Country/Market Coverage</td>
<td>• Operates in many markets worldwide.</td>
<td>• Does business in a few markets/countries.</td>
</tr>
<tr>
<td></td>
<td>• Has physical presence in many countries through affiliates (direct) and/or through third-party representatives (indirect).</td>
<td>• May have a direct or indirect presence in a few countries.</td>
</tr>
<tr>
<td>Strategy/Management Ownership</td>
<td>• Extensive use of advanced technology in global data access for decision making and transaction processing.</td>
<td>• Uses advanced technology.</td>
</tr>
<tr>
<td></td>
<td>• Uses banks for integrated linkages with customers and suppliers for processing, cash management, and treasury management.</td>
<td>• Uses banks primarily for credit.</td>
</tr>
<tr>
<td></td>
<td>• Well-defined risk management process and related accountabilities.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• When CTC is part of a major conglomerate:</td>
<td>• When CTC is not part of a conglomerate:</td>
</tr>
<tr>
<td></td>
<td>w Senior management is appointed by parent company.</td>
<td>w Management is in the hands of owners/owning family.</td>
</tr>
<tr>
<td></td>
<td>w Strategy is a function of the objectives of the entire group—parent and affiliates worldwide (for example, Japanese and Korean trading companies).</td>
<td>w Independent strategic focus.</td>
</tr>
<tr>
<td></td>
<td>w Profits may not be a necessary objective given group objectives (intercompany pricing).</td>
<td>w Profits are a necessary objective.</td>
</tr>
<tr>
<td>Size/Financial Capacity</td>
<td>• Annual revenues run into the billions of dollars.</td>
<td>• Annual revenues run into the hundreds of millions of dollars.</td>
</tr>
<tr>
<td></td>
<td>• Shares of parent may be publicly traded.</td>
<td>• Privately owned.</td>
</tr>
<tr>
<td></td>
<td>• Group has access to bank credit and to capital markets globally.</td>
<td>• Access to bank credit. Little or no access to capital markets.</td>
</tr>
<tr>
<td></td>
<td>• May receive financial support from group (for example, intercompany loans, soft intercompany pricing).</td>
<td></td>
</tr>
</tbody>
</table>
subordinated debt.

**Commodities’ Characteristics**

Commodities include goods such as:

- Grains and feeds, including corn, wheat, and soybeans.
- Livestock and meat, including cattle, hogs, and pork bellies.
- Food and fiber, including cocoa, coffee, sugar, cotton, and orange juice.
- Metals and petroleum, including copper, gold, platinum, silver, crude oil, gasoline.
- Lumber, including wood and paper products.

Commodities represent good collateral value for bank financing because they are highly liquid and traded worldwide in large volumes at easily determinable prices. Their attractiveness, however, is diminished by their susceptibility to spoilage and by price volatility.

**Core Activities and Risks**

The asset conversion cycle (order, pay, sell, and collect) of commodity traders entails two major activities:

1. **Holding**, for which risk is related to owning the commodity prior to sale. Negative outcomes related to this risk include:
   - Physical loss (spoilage/obsolescence).
   - Value loss (price decline/volatility).
   - Market demand loss (illiquidity).
2. **Collecting**, for which risk is related to obtaining payment from the customer after the sale is made. Negative outcomes related to this risk include:
   - Loss from customer’s inability to pay when due (commercial risk).
   - Loss from shortage or unavailability of foreign exchange to the customer (country risk).
   - Loss due to currency devaluation (foreign currency risk).

When compared with shorter holding and collecting periods, longer periods are subject to greater exposure to loss because of spoilage and price decline. Longer periods also produce greater costs, such as interest expense for carrying inventory and accounts receivable. Therefore, longer periods require higher profit margins to compensate for greater exposure to loss, higher costs, and lower rate of asset turnover.

**Competitive Advantages**

Commodity traders can add value to their customers’ businesses based on their own competitive advantages. These can include the following:

- Management expertise in specific commodities, particularly concerning trends, ways to mitigate aggregate portfolio risks, and swift transaction decision-making.
- Enhanced strategic commodity sourcing at negotiated terms, rather than market sourcing at standard terms. This can be achieved by maintaining long-standing relationships with suppliers, including joint ventures and other cooperative arrangements.

At the center of these competitive advantages is the trading companies’ strategic focus on their own customers. This strategic focus encompasses:

- Market selection—national or regional.
- Customer profile—wholesalers, distributors, or retailers.
- Services provided—selling on small amounts, longer terms, or just-in-time inventory delivery.

**Bank Financing**

Commodity trading is a capital-intensive business that requires extensive financing. Banks provide financing based on the quality of the underlying asset and on the firms’ trading capabilities.

**Asset Quality.** Asset quality is one of the most important aspects of credit assessment. Asset quality by risk categories are shown in Figure 2. The assets of the trading companies can be divided in three broad categories:

1. **Cash and short-term investments**, such as near-cash securities, are high-quality assets that provide liquidity for the operating needs of the firm.
2. **Commodity trading assets** repre-
sent the core business of CTCs. Their quality is determined by the risks inherent in holding and collecting. Inventory risks include spoilage/obsolescence risk, market (price) risk, and liquidity risk. Accounts receivable risks include commercial risk (customer creditworthiness), country risk (foreign currency availability), and foreign currency devaluation risk. Implicit in assets of higher quality are lower risk and capacity to support higher leverage.

3. Long-term assets generally support the trading activities of the CTCs, such as corporate real estate, equipment, equity investments, and loans for supplier financing. These assets must be assessed separately to determine their contribution to the core business and the extent to which they can be financed through bank credit.

Trading Capabilities. Trading capabilities represent another important aspect of credit assessment. They comprise the following:

- Management expertise as it embodies experience in the market and knowledge of the factors influencing commodity prices for trading decision-making—mitigating risk by swift reduction in long positions and

<table>
<thead>
<tr>
<th>Figure 2</th>
<th>Commodity Trading Companies—Asset Quality</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Risk Categories</strong></td>
<td><strong>High Asset Quality (Low Risk)</strong></td>
</tr>
<tr>
<td>Inventory Spoilage/Obsolescence Risk</td>
<td>• Commodity with long inventory life. • Commodity with low probability of replacement by more productive alternatives.</td>
</tr>
<tr>
<td>Inventory Market Risk</td>
<td>• Commodity with a history of stable prices.</td>
</tr>
<tr>
<td>Inventory Liquidity Risk</td>
<td>• Easily salable commodity without a major price discount. • Broad market of buyers and sellers actively trading in large volumes at known prices.</td>
</tr>
<tr>
<td>Accounts Receivable Commercial Risk</td>
<td>• Accounts receivable is from a customer who is a well-established company with AAA credit rating. • Low probability of credit default.</td>
</tr>
<tr>
<td>Accounts Receivable Country Risk</td>
<td>• Accounts receivable is from a customer located in a country with: w Prime short-term credit rating. w Unquestioned ability and willingness to make foreign exchange available to importers.</td>
</tr>
<tr>
<td>Accounts Receivable Foreign Exchange Risk</td>
<td>• Accounts receivable is denominated in a strong currency relative to the CTC’s base currency and to the corresponding liability currency. • Accounts receivable currency carries a low probability of devaluation.</td>
</tr>
</tbody>
</table>
Lending to Commodity Traders

improving sales pricing and terms by redirecting commodity shipments in transit.

• Integrity of the firm’s accounting systems.
• Adequacy of systems support.
• Use of advanced technology for trading processing and risk control.

Timely access to market data for information management and close tracking of merchandise, documents, and funds are all important in commodity trading.

In assessing trading capabilities, banks also consider the CTCs’ strategies and risk management priorities in light of market opportunities and available resources, including capital. Related to this assessment is the consistency exhibited by management in keeping day-to-day activities consistent with the execution of strategies.

Trading companies undertaking transactions with greater levels of risk, such as those involving commodities with high price volatility, implicitly place greater demands on their trading capabilities and on the firm’s equity cushion for absorbing losses. Examples of greater demands on the firm’s trading capabilities include expertise in portfolio risk containment and the ability to close long positions quickly through supplementary commodity or derivative trading.

In those cases in which the CTC belongs to a major conglomerate, its strategies are often subordinated to the objectives of the overall conglomerate, particularly when the firm functions as a captive entity. Ownership can have a critical effect on the trading capabilities of the firm.

Bank Audits. Bank-conducted audits, an important due diligence component, are useful in ascertaining asset quality and the trading capabilities of the firm. Audits can be conducted periodically based on the specific situation and the need to track progress on issues pending correction.

Credit Structuring

Credit structuring defines the attributes of the credit facility and related lending conditions. It rests on asset quality and on the trading capabilities of the firm.

Bank financing is generally transaction-based because the purpose and the repayment of bank financing are closely connected with the conversion of specific assets into cash. Related reasons for transaction-based financing include:

• The large size of individual transactions in absolute dollars or in comparison with the trader’s own equity position.
• The short asset conversion cycle, usually fewer than 100 days, and the large loan exposure relative to the purchase price of the commodity, usually 80% - 90%.

Credit facilities are generally short term because of the short conversion cycle in commodity trading. They provide for the following:

• Import letters of credit to support purchases.
• Loans and bankers’ acceptances to finance inventory and accounts receivables.
• Bid bonds for expediting customs clearance.

In addition to credit facilities, counterparty foreign exchange lines facilitate the conversion of currencies, whether spot or forward.

The size of the credit facility depends on the following factors:

• Annual purchase volumes ($).
• The length of the asset conversion cycle (days).
• The loan advance ratio (loan amount as a % of the commodity cost).

The loan advance ratio represents the extent of credit risk the lending bank is willing to undertake in specific transactions, excluding the trader’s operating costs to carry out the transaction and the transaction’s earnings, given the risks incurred in holding and collecting. Conversely, the percentage not financed—100% minus the loan advance ratio—represents the equity cushion implicitly contributed by the CTC for the transaction.

Credit structuring defines the conditions for maintaining the overall financial position of the firm within the agreed parameters by means of financial covenants, such as those defining minimum equity, maximum leverage, and minimum profits. It also includes conditions for:

• Protecting the value of the commodity financed with insurance coverage and warehousing safety.
• Maintaining asset control through title documents or warehouse receipts.
• Establishing creditor priority.
Lending to Commodity Traders

with collateral liens over the assets financed.

- Ensuring physical access to cash from sales, that is, cash dominion.

Credit pricing in the form of interest margin and fees compensates the bank for the risk incurred in lending to the commodity trader and for the expenses incurred. Pricing also entails compensation to the bank’s shareholders. It is important that the overall credit facility, pricing included, is competitive in the marketplace in meeting the firm’s asset conversion needs.

The challenge is structuring a credit facility that is responsive to the core activities of the trading firm, is competitive in the marketplace, and, at the same time, provides for effective risk control by the lending bank and superior returns to the bank’s shareholders.

Risk Control

Risk control entails performance monitoring by the lending bank of the lending conditions agreed with by the trading company and timely corrective action behind any shortfalls. Monitoring covers overall financial performance tracking against financial covenants and specific transaction tracking against transactional lending conditions.

Of critical importance in lending to commodity traders is the lending bank’s systems and process for tracking individual transactions regarding the following:

- Transaction eligibility relative to collateral qualification and line availability.
- Collateral maintenance in terms of market valuation, vis-a-vis loan coverage.
- Warehouse reliance in terms of reputation, control efficacy, and adequacy of contractual undertaking (warehouse agreement).
- Documentary control with respect to the negotiability and possession of title documents underlying collateral.
- Cash dominion for accessing the transaction’s sales proceeds directly from the CTC’s customers for loan repayment.
- Security interest, which provides creditor protection under Uniform Commercial Code filing.
- Insurance coverage in terms of amount, scope of coverage, insurer credit rating, and beneficiary designation.

Risk Underwriting

A bank’s marketing plan for pursuing business with commodity traders encompasses various elements, including risk acceptance parameters, market priorities, target segments, client profiles, priority products, minimum account size and profitability standards, resource allocation (including staffing), portfolio fit, and so forth. This section outlines just some of the issues pertaining to risk underwriting under two headings—Client Profile and Lending Guidelines. As shown in Figure 3, these guidelines provide direction for prospecting and product offering regarding questions such as the following:

- What does my prospect look like?
- What financing can I offer?
- What are the lending conditions?

These guidelines do not necessarily represent absolute requirements that must be strictly met but do provide general direction and a contextual reference regarding client selection and recommended credit structures. The guidelines should be flexible in application depending on such factors as the particular needs of the trading firm and its overall credit standing. It is important for the marketing plan to be in harmony within the broader context of the bank’s financial position, competencies, and credit policy.

Banking Services

Depending on the scope of the relationship between the trading firm and the bank, services provided can expand beyond credit to cover a broader spectrum of needs. Banks can facilitate the firm’s asset conversion cycle and contribute to enhancing their commercial relationships with customers and suppliers by linking the firm with its network of suppliers and customers through a broad range of banking services.

Of particular importance in establishing the linkages is the reach of the bank’s international network and the use of advanced technology in communication, automation, and decision-making systems support.

Major categories of banking services supporting the working capital needs of the CTCs include:

- Transaction processing—instructions and documents.
- Cash management—money.
### Commodity Trading Companies—Risk Underwriting

<table>
<thead>
<tr>
<th>Attributes</th>
<th>Client Profile</th>
<th>Lending Guidelines</th>
</tr>
</thead>
</table>
| **Activity Type**           | • Experienced in commodity trading (5 years).  
                             | • Diversified network of suppliers and customers.  
                             | • Important percentage of purchases/sales (50%+) are across borders.  
                             | • Located within the U.S.  
                             | • Good reputation in the marketplace (for example, banks active in commodity lending). | • **Credit Structuring** establishes the following parameters:  
                             |                                                                                | w Credit is principally for financing specific short-term commodity transactions.  
                             |                                                                                | w Credit facility expiration is generally within 1 year.  
                             |                                                                                | w Credit amount and terms are in accordance with purchasing volumes, length of the conversion cycle.  
                             |                                                                                | w Loan advance ratio (see below).  
                             |                                                                                | w Maintain overall financial position within agreed on parameters (for example, minimum equity, maximum leverage, minimum profits).  
                             |                                                                                | w Protect the value of the commodity financed (for example, creditor’s interest, insurance, warehousing, title documents, cash dominion).  
                             |                                                                                | w Senior creditor position required; at least pari passu with others’ bank creditors.  
| **Commodity Traded**        | • Predominantly trades in one commodity family.                                | Adequate **Asset Quality**. Define loan advance ratio in view of:  
                             |                                                                                | w Spoilage/obsolescence (insurance?).  
                             |                                                                                | w Price volatility.  
                             |                                                                                | w Illiquidity.  
| **Country/Market Coverage** | • Operates in many markets worldwide; may have a physical presence in many countries. | Adequate **Asset Quality**. Define loan advance ratio in view of:  
                             |                                                                                | w Customers’ ability to pay (concentration risk?).  
                             |                                                                                | w Shortages of foreign exchange.  
                             |                                                                                | w Foreign currency devaluation.  
| **Strategy/Management Ownership** | • Stable management (5 years).  
                             | • Identifiable management experience in one (a few) commodity family.  
                             | • Expertise resides on a group rather than on a single individual. | Adequate **Trading Capabilities**:  
                             |                                                                                | w Strategies.  
                             |                                                                                | w Management expertise, priorities (day-to-day).  
                             |                                                                                | w Accounting systems integrity.  
                             |                                                                                | w Systems support.  
                             |                                                                                | w Financial resources/owners’ financial support.  
                             |                                                                                | • Satisfactory Bank Audit results re: Asset Quality, and Trading Capabilities.  
                             |                                                                                | • Good track record in commodity trading (5 years).  
| **Size/Financial Capacity/Bank Earnings** | • Annual revenues and assets are in the hundreds of millions of dollars.  
                             | • Access to bank credit. | Unequal audited financials by recognized firm (3 years).  
                             |                                                                                | Favorable track record (profits in last 5 years).  
                             |                                                                                | Supports a minimum credit facility size of $10-$20 million.  
                             |                                                                                | Loan pricing is commensurate with risks.  
                             |                                                                                | Minimum dollar earnings ($100,000), minimum hurdle rates (for example, 17%).  

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Figure 3: Lending to Commodity Traders

The Journal of Lending & Credit Risk Management January 1998
• Treasury management—borrowing and liquidity management.

Examples of the benefits most commonly accrued to CTCs using banking services include:

• Reduced holding and collecting times by expediting and tracking the flow of the merchandise, documents, and funds between the CTC and its network of key customers and suppliers; this can increase asset turnover.

• Increased efficiency by reducing processing costs through existing technology in communication, for example, an import letter of credit initiation in the lender’s personal computer, and by integrating the bank’s systems into the backroom of the trading firm. This can reduce paperwork, reduce costs, and increase return on sales.

• Enhanced access to credit and capital markets worldwide for a broad range of financing transactions. Examples include asset conversion financing and buyers’ financing in concert with export credit government agency programs—at competitive terms. Competitive credit structures can lower costs and enhance transactional processing for the CTC, thereby increasing return on sales.

• Reduced risk by transferring certain risks inherent to the firm’s asset conversion cycle to the bank. These risks may include foreign exchange contracts, derivative contracts, and nonrecourse financing of export draft/documents.

Conclusion

The protection of the value of the commodity is of primary importance in the performance of the trading company and for loan repayment. Such value is subject to a variety of risks with potentially large negative impact to the trading company. Through sensible credit structuring and constant risk monitoring, lending banks can effectively and profitably finance commodity trading firms in a fashion that adequately addresses lending risk and is consistent with the client’s own parameters of risk and profit.

Critically important in commodity lending is the adequacy of the lending bank’s systems and processes for risk control, particularly those directed at protecting the value of the commodity financed.

Commodity trading is a global business. Implicit in its global scope is the growing importance of technology to both trading companies and lending banks in global information access, timely portfolio risk decision making, and transaction execution. There is ample opportunity for banks to add value to the commodity trading firms by providing comprehensive solutions to their working capital needs. This entails globally linking the trading firms with their respective networks of key suppliers, customers, and stakeholders through the bank’s international network and a broad range of banking services. These services, encompassing varying degrees of technological sophistication, can benefit commodity traders in such broad areas as transaction processing, cash management, and treasury management—including borrowing and liquidity investing.