PN-ACG-153

Deloitte Touche
Tohmatsu

Jordan Loan Guarantee Corporation

Training Course on Underwriting Procedures
Volume I

Submitted by
Deloitte Touche Tohmatsu Emerging Markets
First Washington Associates, Ltd

Submitted to
USAID

IQC No PCE-I-00-99-00008-00
Support for Economic Growth and Institutional Reform

July 1999

A

TABLE OF CONTENTS

B

I INTRODUCTION

As part of its scope of work to provide technical assistance to the JLGC, FWA's Actuarial/Underwriting Advisor is required to provide the following deliverables during the course of his activity "Completion of training manuals for underwriting procedures" and "planning, preparation, implementation and evaluation of an underwriting training course for JLGC employees" This report is submitted in fulfillment of these obligations The actual training course was given in the last three weeks of the Advisor's assignment and was attended by the key operating officers of JLGC As noted in the evaluation section of this report, the training was generally well received by JLGC employees and built upon their personal management experiences and prior training received from other sources

II GENERAL CONCEPTS

Credit assessment for short term loans or guarantees is not an exact science The following guidelines are intended as an aid to identifying the relevant issues and attaching the correct weight and emphasis to those issues

Remember that the business of underwriting involves the analysis of "risk" the "risk" of non or late payment "Underwriters" in credit guarantee agencies evaluate risk The term originates from when individuals used to sign their name to cargo manifests, therein "underwriting" or guaranteeing the description of the cargo being sent abroad Today, people who evaluate risks are also called "underwriters" because in a real sense they are verifying that the firm or individual applying for credit is indeed what it or he is represented to be

Medium Term v Short Term

It is important for underwriters to realize that credit assessments for *medium* term loans or investment of equity has a considerably different emphasis than *short* term credit assessment For example, the rate of return on assets or the age of plant and machinery are not particularly relevant to determining whether a 180 day bill of exchange or draft will be paid on presentation The following guidelines are relevant for short term credit analysis

Possibility of a "Tail"

Notwithstanding the short term nature of most of JLGC's credit assessment, it should also be recognized that there can be a 1 ½ year "tail" to a short term credit approval For example, if the term of the policy is one year and the maximum repayment term is six months, the "tail" of unrepaid financing can extend beyond the expiration date of the policy

III BALANCING THE ISSUES

Prompt Responses

In the administration of credit approval limits, it is important to act quickly and in a manner consistent with the commercial nature of the transaction

Insufficient Information

Seldom will there be complete information on every factor relevant to a credit assessments Even with respect to the key issues following, there may be insufficient information regarding the buyer's record of payment of debt, inconsistencies between sources of credit information, or inadequate levels of working capital (cash flow)

Make a Decision

It is usually not possible in advance to decide what weight to attach to individual elements However, an attempt should be made to reach a decision in every case where practical considerations dictate that this should be done, even where there are gaps in the available information

IV FLEXIBILITY & COMMERCIAL REALISM

Other Choices

An underwriter should be conscious of the fact that for most exporters, getting the business done as speedily as possible is their major concern If confronted with documents that are too complex, or with delays which appear unnecessary or likely to endanger successful completion of the business, the exporter will be less inclined to use export credit guarantees

Most of the business that is submitted for coverage on a whole turnover basis is going to be shipped and paid for with or without cover The underwriter should always bear this in mind as a discipline to encourage action within a commercially realistic time-frame and with the appropriate degree of flexibility

Reasonable v Absolute - a Gray Area

Think of Absolute as a black area and Reasonable as a White area with multiple shades of gray in between Credit evaluation and credit improvement may seek to modify a transaction within commercially accepted practices towards the area of Absolute Assurance of Repayment However, from the outset it should be recognized that one cannot get an Absolute Assurance of Repayment

An underwriter should also consider that he/she has a duty to assist an exporter as much as possible as long as this is consistent with the objective of only guaranteeing business that has a reasonable prospect of payment

There are many instances where credit limits that normally would not be approved can be approved if conditions are attached to the approval For example, it could be possible to accommodate a credit limit request if an exporter can be persuaded to reduce the amount of the line of credit requested Therefore, rather than making one shipment the exporter can make two smaller ones thereby reducing the risk of nonpayment The effort should always be to try to move towards the darker area of the spectrum between Absolute & Reasonable, given that Absolute is the darker and preferred area

A second approach may be through the limitation on the time period that an approval will be valid Thus the exporter's total exposure could be reviewed at a time earlier than normal Finally, there may also be a modification in the terms of payment Rather than shipping on open account, a date or sight draft may be used or even an unconfirmed letter of credit

Underwriters should be as flexible as possible and attempt to devise new, but commercially realistic, conditions which allow the credit limit application to be approved if possible The underwriter should take a positive approach and try to find ways to approve a transaction and not turn it down

V INTEREST RATES

Knowledge of dıfferent ınterest rate possıbılıtıes ıs also ımportant to JLGC underwrıters, both because JLGC guarantees ınterest and because the type of ınterest ımposed by the lender wıll affect debt-servıcıng capabılıtıes

Thıs dıscussıon wıll assume two cases In case one, the ınterest rate wıll be fixed to the "peg" rate or ın the second case floatıng rate of ınterest Interest rates are referred to as "spreads" over the prıme lendıng rate or ın the case of ınternatıonal rates over LIBOR (London Interbank Offered Rate) Thıs spread ıs then expressed ın "basıs poınts" (bp) 100 basıs poınts are equal to a 1% change ın the rate

In Jordan, normal ınterest rates range between 12- 15% per annum and the banks take a 1% or 100 basıs poınt fee, payable up front

The effectıve ınterest rate can vary dependıng on the way the ınterest and prıncıpal are paıd as well as the "placement" fee Under the Mıcro Loan Program ın Jordan the ınterest rates are ıncluded ın the payments and not expressed as ınterest We wıll descrıbe four dıfferent loan payment schemes that wıll each have dıfferent APR (Actual Percentage Rates)

Case one equal amortızatıon of ınterest and prıncıpal

Case two one year grace on prıncıpal and equal amortızatıon of ınterest over the balance of the term of loan

Case three payments of ınterest only for the lıfe of the loan wıth a final one tıme or "balloon" payment of at the end of the term

Case four an early equal amortızatıon of ınterest ın effect prepayment of ınterest and subsequently a dıfferent schedule for the repayment of prıncıpal, ı e a 30% payment at the end of the term

Each of these cases wıll have a dıfferent APR Excel has an excellent program that can assıst ın determınıng the APR for any loan based on any scenarıo

VI COLLATERAL

As part of the process of demonstrating flexibility and using best endeavors to find a means of covering an exporter's business, it may become necessary from time to time to request that the foreign buyer provide security or collateral to the exporter to assure a timely repayment The benefit of any security provided to the exporter becomes available to the JLGC by means of the subrogation provision under the terms of the policy Several forms of collateral have been used However the most frequently used are (1) financial guarantees in the form of standby letters of credit or pledges and (2) mortgages and other charges on assets

A guarantee or pledge is an undertaking by the guarantor that he/she or any third party will be responsible for the debt, if the other person or company is unable to pay It is a common occurrence for parent or associated companies to guarantee the debts of their subsidiaries or associated companies In many cases, the buyer is a subsidiary of a larger company, but the buyer is without substantial assets In such cases, a guarantee by the parent or associated company may be necessary

Quite often a guarantee is provided without question where the buyer subsidiary company is without the necessary substance to be a good credit risk On other occasions, a guarantee is refused, usually with the explanation that subsidiaries must "stand on their own two feet" A further refinement is for the parent or associated company to offer a "letter of comfort" This usually incorporates a statement to the effect that it is the parent or associated company's policy to ensure that the debts of the subsidiary are paid, but it accepts no legal liability to pay them

Obtaining a guarantee, particularly a personal guarantee of directors or shareholders, does not necessarily cure all defects in the creditworthiness of the buyer, even if the guarantor has adequate asset backing It is also necessary to look at the legal environment in which the JLGC would be required to enforce such an obligation, if it became necessary

However, a guarantee from a parent company, director or shareholder can be a positive sign A guarantee can be an "act of good faith" indication that the guarantor stands behind the buyer As such, a guarantee can be of considerable value

In many countries, enforcing guarantees, no matter what form, is very difficult and this should be taken into consideration when weighing all of the factors affecting the final credit decision

Mortgages or charges over assets are usually used for medium term finance However, underwriters should be aware of the availability of such security as an alternative Arranging for this type of collateralization can be expensive and time consuming Therefore, unless there is going to be a long term relationship with the buyer, it may be too expensive

Property valuation procedures will vary from country to country and the foreclosure process will also vary Therefore, if one accepts property as collateral, one must know what the basis is for the value presented as well as the time it would take to foreclose on the property For example, in Jordan it will take up to three years The valuation may not be based on recent comparable sales or the economic value, but on the appraiser in the bank who may have a bias

Important If JLGC or the lender takes "collateral" for security on a loan, JLGC or the lender must have "control" of the asset That is, it must "control" the ability to liquidate the asset Otherwise, the collateral is of little value Also, the value has to have a relationship to the value achieved when the asset is sold under what is referred to as a distressed situation In some countries it is referred to as "under the hammer (gavel) of the auctioneer"

As part of an underwriter's "due diligence" in determining the creditworthiness of a buyer he/she should use

- Credit reports
- Trade references
- Prior ledger experience of your own as well as other creditors of the buyer
- Bank references
- Financial statements

VII UNDERWRITING PROCEDURES – BUYER / EXPORTER

Timely processing of an application is essential As previously discussed, it is of the utmost importance that underwriters act within a commercially realistic time-frame Where there are delays in approving credit limits caused by essential need to obtain credit information, the exporter should be kept continually advised of progress

The procedure in each case should reflect this need to act commercially, and follow this general pattern

A buyer file should be created and contain,

- Financial statements reflecting a favorable working capital position
- Agency and/or favorable bank reports on the buyer (credit information)
- Evidence of the performance of management in improving the business
- Stability of the buyer's industry
- Exporter's experience with the buyer in regards to payment record
- Financial statements reflecting a favorable working capital position

An exporter's file should contain

- Financial statements reflecting a favorable working capital position
- Agency and/or favorable bank reports on the exporter (credit information)
- Evidence of the performance of management in improving the business
- Stability of the exporter's industry
- Financial statements reflecting a favorable working capital position

All of this information about the borrower/ exporter is to ascertain what in the industry was referred to as the 5 "C"s, which recently become seven The 7 "C""s are

1 Character
2 Capacity
3 Capital
4 Conditions
5 Customer relationships
6 Competition
7 Collateral

Other factors that may be used as a primary basis for a credit decision-making may include

- Number of years in business
- Geographical location
- Experience in sector
- Product line age
- Expansion of existing product line

- Size or potential market
- Alternative suppliers
- Competing products
- Minimum capital requirements
- Tariff and non tariff barriers
- Dependence on purchased inputs
- Transportation requirements
- Requirements for advanced management skill
- Type of collateral
- Debt servicing level
- Debt / Equity ratio
- Overall cost of capital
- Likelihood of early cash flow
- Proneness to cyclical behavior
- Working capital requirements
- Track record of borrower
- Insurable risks

The extent and degree of analysis will be directly proportional to the amount of the loan For example

A LOAN OF 50,000 TO 100,000 JD'S	**100,000 TO 200,000 JD'S**	**200,000 OR MORE**
Central Bank Verification	Central Bank Verification	Central Bank Verification
Daily Newspaper Data Base	Daily Newspaper Data Base	Daily Newspaper Data Base
(1) Credit Report	(1) Credit Report	(2) Credit Reports
(1) Bank Checking	(2) Bank Checkings	(2) Bank Checkings
Prior Ledger Experience	Prior Ledger Experience	Prior Ledger Experience
Tax Department Verification	Tax Department Verification	Tax Department Verification
	Un Audited Financial Statements	Audited Financial Statements

VIII CREDIT REPORTS

It is important to have an understanding of credit information available from a wide variety of sources The general purpose in analyzing credit information is to arrive at a decision as to whether or not the concern merits the amount of credit under consideration Remember that JLGC is in the "risk" business and remain skeptical

JLGC is not only concerned with a single transaction, but with the future potential that any account represents The results of the investigation will have a bearing on whether the buyer should be sold on open account terms, whether a smaller than registered credit limit should be set, or whether some arrangement other than regular credit terms should be considered

It needs to be understood what the basis for the information that is provided For example, Dun & Bradstreet in their preliminary reports merely call the firm that they are reporting on and ask questions about the company D & B will check the public records in the United States However in some cases, it is only the state in which the business is doing business or is incorporated The "check" is to make sure there are no adverse actions like legal suits or a lien against the company's property If the company desires, they can provide financial information

Therefore, the basic report will tell the address of the business, its name, the number of employees, when the business was started, perhaps some financial information that has not been independently verified, and whether or not there are any legal filings--either law suits or liens against the company's property

The underwriter should look for a "favorable" credit report A favorable credit report is generally defined as

- Current dated within six (6) months of the application date
- No derogatory information, e g , buyer & owners have clean histories, no protested bills, multiple suits, liens, or outstanding judgments
- Satisfactory credit history "Current" sources do not indicate any payments received in excess of 60 days slow during the last 12 months

Contains the following minimum information

Date of Report	Name/Address of buyer
Date buyer established	Description of business activities
Present ownership	Management background information
Legal Status	Number of employees
Bank relationship(s)	Description of business facilities

Credit reports will vary as to their completeness and accuracy Therefore, usually two reports are obtained to enable one to note similarities and differences

IX TRADE REFERENCES

A "written" trade reference would be absent of any derogatory opinions and reflect no payments over 60 days slow over the last 12 months

Current date within (6) months of the application date
"Verifiable source" (contact name/title/company/phone number), reference date, and full buyer name & address are clearly identifiable
"Similar amount" reference's highest credit over the last 12 months must be at least 50% of the applicants requested credit amount
"Similar terms," secured terms (Irrevocable Letters of Credit, Cash Against Documents, Sight Draft Documents Against Payment) only justify use of same secured terms
Unsecured terms (open account, drafts, notes) justify secured or unsecured terms, but the applicant's requested terms cannot exceed the reference's unsecured term by more than 60 days

Contains the following credit history items

Years credit experience w/buyer	Terms of sale
Annual sales to buyer	Date of last sale
Recent high credit	Current outstanding amount
Past due amount (if any)	Days past due

Buyer payment history characterized as follows
_____Prompt, ____30 Days slow, ___60 days slow, ___90 days + days slow

X LEDGER EXPERIENCE

"Favorable" ledger experience is generally defined as

Applicant's ledger (trade) experience must be completely provided
Applicant has received payment from buyer over the last 12 months on at least one invoice on "similar amount" and "similar terms"
No current amounts due from buyer exceed 60 days slow

XI BANK REPORTS

"Current" dated within (6) months of the application date

Verifiable source the bank references must contain the following

- Appear on the bank's letterhead
- Date reference made
- Name of foreign buyer or bank with which the bank has a relationship
- Clearly indicate the professional title of the "duly authorized representative" of the bank which is providing the reference
- Provide the duly authorized representative's signature

An explicit "favorable" opinion must be stated—the bank must state that its relationship with the foreign buyer or banks has been satisfactory, or use similar terminology (e g the buyer was paid "as agreed" or with "all required terms ") A bank reference that is silent on the character of the relationship with the buyer or bank and does not give an explicit "favorable" should not be acceptable to the JLGC

It must be remembered that if the client owes money to the bank or the bank owes money to the client the client will always get a favorable report The report will tell how long the client has banked with the bank and whether or not he has maintained his account "in good order" The report may also tell the average balances expressed in bankers terms of "medium seven figures" or low "five figures"

Banks are very aware of the potential liability if they release adverse information Therefore, if the underwriter talks to a banker to confirm what he has written, the underwriter should listen very carefully, as a banker may give an oral opinion of the client that he would not be willing to put in writing

XII FINANCIAL STATEMENT ANALYSIS

In most cases, obtaining financial statements (F/S) will not be necessary as sufficient information will be contained in the reporting credit agency reports, bank reports or tax records to make a necessary judgment

F/S's should be sought by requesting the bank or exporter to obtain them Both the exporter and the buyers need to be "underwritten " Buyers with significant continuous exposure under the post shipment comprehensive policy need to be periodically reviewed A system should be set up to continually receive up dated financial information as well as any adverse information on the buyers

There are limits to the usefulness of F/S's because they represent the financial position of the company at one moment in time However, when a series of statements covering periods of time are reviewed, they will show important trends

Where accounts are un-audited, the information in the accounts should be treated with special caution In addition, if audited, one needs to pay particular attention to the "opinion" expressed by the accounting firm Some statements are reviewed and no opinion as to the quality or quantity of the assets and liabilities is expressed Other opinions are mere compilations A full audit verifies the validity and authenticity of all of the assets and liabilities, applying standard auditing procedures

These procedures include but are not limited to contacting creditors to verify outstanding balances as well as verification through third parties of the value and ownership of assets

However, F/S should not be the sole basis for determining the credit As appendix (III), we attach a discussion on "Problems in Measuring Accounting Profit" F/S may usefully be read backwards That is you may choose to read the foot notes first that appear after the balance sheet, income statement and funds flow statement and then look at the figures The footnotes will tell you if the firm is matching or mismatching revenue and expense They can have a time delay both in the valuation of assets and the recognition of revenue or expense, that may distort the appearance of the financial strength of the company

Besides looking at an array of statements giving a historical perspective, one can make some determination of the relative strength of the company by making some simple ratio calculations The most important ratios are the "current asset" ratio and the "quick asset" ratio In addition, one can look at the debt/equity ratios, net worth and profitability ratios, assuming you have valid information

A "current asset" ratio is current assets divided by current liabilities A "quick asset" ratio is taking only very liquid assets – cash, cash like instruments and accounts receivable divided by current liabilities, that is liabilities that will be paid in one year

XIII RATIOS

Ratio analysis is the foundation of what has become "credit scoring " "Credit scoring" has become a highly complex method of determining creditworthiness for large pools of similar credits - for example, thousands of individual credit card holders

Most programs address at least four ratios liquidity ratio, coverage ratio, leverage ratio, and operating ratio

Liquidity Ratio Liquidity is the measure of the quality and adequacy of current assets to meet current liabilities The two most used liquidity ratio's in a credit scoring model are "current ratio" (current assets/current liabilities) and "sales/receivable ratio (total sales/accounts receivable) Liquidity ratios, which could be added in the future would be "quick ratio" (cash & cash equivalents plus accounts receivable/current liabilities) and a "net sales ratio (net sales/accounts receivable)

Coverage Ratio This is a measure of the firm's ability to service debt The single coverage ratio in the model is EBIT (Net Earnings before payment of loan interest expense and tax expense divided by the amount of loan interest paid) Some analysts now use EBITDA (Net earnings before interest, taxes, depreciation & amortization)

Leverage Ratio This ratio analyzes the effect of debt (leverage) on the net worth of the company Highly leveraged firms are more vulnerable to business downturns than those with lower debt to net worth positions However, the measure of this vulnerability can vary depending upon the requirements of the industry The two ratios in this model are Debt/Net Worth (total liabilities divided by equity of capital stock and retained earnings) and Fixed Assets/Net Worth (total non current assets divided by equity or capital stock and retained earnings)

Operating Ratio These ratios are designed to assist in the evaluation of management performance Two ratios used in the model are Earnings Before Taxes/Net Worth (net earnings after expenses and interest divided by equity of capital stock and retained earnings), and Earnings Before Taxes/Assets (net earnings after expenses and interest divided by total assets)

Depending upon the type of industry being analyzed, numerous other ratios might be considered, such as Earnings/Current Inventory, Expenses/Sales and ratios for expense classifications to direct salary and wage expense, etc

Ratios, like financial statements themselves, are "guides"--not to be taken wholly or in part by them selves The ratios derived from the statements need to be compared to statements of other firms in similar businesses When this comparison is made, one can get a sense of the relative position of this company in relationship to its peers

Ratio Analysis and Credit Scoring have become a fine but not absolute science, particularly when used in large numbers of similar credits They have become the basis for determining alleged "certainty" when "certainty" doesn't exist

Within those four steps is the essential step of determining the type of opinion offered by the auditing firm A description of the different types of opinions is available in Appendix V

XIV SPREADSHEETS

A spreadsheet is a method of measuring the performance of a company in relationship to itself as well as to its industry over time It offers a consistent technique for the current and future analysis of companies

A spreadsheet is used to summarize relevant information from the F/S and to calculate the basic financial ratios Because F/S vary greatly between different industries and different countries, using this standard format as a basis for analysis of F/S allows for a consistent approach Banks, other financial institutions and the credit departments of large corporations routinely use spreadsheets similar to the following example to assist them in assessing credit worthiness Usually a spreadsheet is used to assess the creditworthiness of a foreign buyer

Company Name ______________________________ Country _________________________

Country – Rate of Exchange ____________________________

STATEMENT DATE			
FISCAL / INTERIM			
AUDITED Y/N			
ASSETS			
CASH & CASH EQUIVALENTS			
MARKETABLE SECURITIES			
ACCOUNTS RECEIVABLE			
STOCKS (INVENTORY)			
OTHER CURRENT ASSETS			
TOTAL CURRENT ASSETS			
FIXED ASSETS + GROSS DEPRECIATION			
NET FIXED ASSETS			
INVESTMENTS			
NON CURRENT RECEIVABLES			
PREPAID EXPENSES			
OTHER ASSETS			
INTANGIBLES			
TOTAL ASSETS			
LIABILITIES			
DUE TO BANKS LESS THAN ONE YR			
ACCOUNTS PAYABLE – TRADE			
ACCOUNTS PAYABLE – AFFILIATES			
CURRENT MATURITIES OF BORROWINGS			
INCOME TAX			
ACCRUALS			
DIVIDENDS PAYABLE			
OTHER CURRENT LIABILITIES			
TOTAL CURRENT LIABILITIES			
NOTES PAYABLE			

STATEMENT DATE			
LONG TERM DEBT UNSECURED			
LONG TERM DEBT SECURED			
OTHER LIABILITIES			
TOTAL LIABILITIES			
SUBORDINATED DEBT			
MINORITY INTERESTS			
COMMON STOCK			
CAPITAL SURPLUS			
TOTAL NET WORTH			
TOTAL LIABILITIES & NET WORTH			
CONTINGENT LIABILITIES			
NET SALES			
NET PROFIT			
WORKING CAPITAL			
CURRENT RATIO			
RECEIVABLE TURNOVER			
INVENTORY TURNOVER			
ACCOUNTS PAYABLE TURNOVER			
DEBT / EQUITY RATIO			

XV USING THE WEB

An additional source of credit information is the web In the U S all listed stocks appear in the data base of the Securities Exchange Commission (SEC) whose web site is www edgar com Other web sites are www bloomberg com as well as www msn com where you can find the respective symbol of a stock and subsequently find additional information including, but not limited to, recent new releases, charts of stock performance and other SEC filings Through the "MSN" web site you can find other countries and associated listed stocks

XVI CREDIT SCORING

As a natural outgrowth of credit analysis – credit scoring has developed into a fine science By consistently comparing variables from financial statements, credit reports, etc and assigning weights to these variables, scores for individual buyers can be ascertained However, the appropriateness of the scoring "method" will emerge only following preliminary and repeated prior system testing

Credit scores should be seen as just one of several means of arriving at a credit judgment and should not be used as the sole predictor of financial risk

XVII CREDIT SCORING MODEL

The methodology of credit scoring in this model begins with the measurement of credit risk factors A model may consider any number of factors, but usually they are limited to a relatively small number of factors These factors are best chosen for their easy quantification, but if desired qualitative factors may also be included with methodology for rating them

Four of the most important quantitative factors are the ratios previous mentioned liquidity, coverage, leverage & operating In addition, one might consider the qualitative factors of collateral, management capability, and the quality of the financial statements

Each of the factors chosen is then rated on a scale (typically being given a number of one to five, with five being the highest score)

The seven factors indicated above, for example, might be rated as follows

EXAMPLE OF RATINGS METHODOLOGY FOR CREDIT SCORING MODEL

Variable	Credit Evaluation Rating 1	2	3	4	5
Current Ratio	Under 1 0	1 0-1 5	1 6-2 0	2 1-2 5	Over 2 5
EBIT/interest	Under 1 0	1 0-1 9	2 0-2 9	3 0-3 9	Over 4 0
Debt/worth	Over 4 0	3 0-3 9	2 0-2 9	1 0-1 9	Under 1 0
Earnings before tax/worth	Under 05	06- 10	11- 15	16- 20	Over 20
Collateral	Personal Guarantee		Equipment		Bank Guarantee
Administration	Poor	Fair	Average	Above Average	Excellent
Statement Quality	Poor	Fair	Average	Above Average	Excellent
	Prepared by borrower little detail, inconsistent, errors	Prepared by borrower, , good detail consistent, apparently error-free	Prepared by, local acct , little detail, unaudited	Prepared by local acct , good detail, consistent, apparently error-free, audited	Prepared by intl acct , good detail, consistent apparently error-free, audited

In order to produce a credit score, the ratings of the seven factors are weighted according to their relative importance in the model and a resulting score for each factor is produced, i e , rating times weighting equals factor score, as shown below

	VARIABLE FACTORS	RATING	WEIGHT	SCORE
1	LIQUIDITY	3	4	12
2	COVERAGE	3	4	12
3	LEVERAGE	5	3	15
4	OPERATING	2	3	6
5	COLLATERAL	5	3	15
6	MANAGEMENT	5	2	10
7	STATEMENTS	4	1	4
			TOTAL	**74**

The sum of the factor scores may then be expressed in qualitative terms (In the example above the sum of the factor scores is 74) One way to score individual credits could be as follows

Best Credit	90 - 100
Good Credit	80 - 89
Average Credit	70 - 79
Fair Credit	60 - 69
Poor Credit	0 - 59

A decision can then be reached that the credit insurer, or lender, will only support credits in the better risk categories For example, JLGC could decide to guarantee only transactions in the top 4 categories and not those in the 5th category

XVIII OTHER FACTORS IN CREDIT SCORING

Other factors that could be used in a credit scoring model include the following

Factor	Rating	Recommended Weight	Maximum Possible Score
Amount & Purpose of the Loan	(1 2 3 4 5)	**3 0**	**15 0**
Borrowers contribution		1 0	5 0
Term		1 0	5 0
Monthly repayment		1 0	5 0
Feasibility Study	(1 2 3 4 5)	**3 0**	**15 0**
Market		1 0	5 0
Technical		1 0	5 0
Financial		1 0	5 0
Source Repayment	(1 2 3 4 5)	**3 0**	**15 0**
Borrowers other income		1 0	5 0
Project		1 0	5 0
Other sources		1 0	5 0
Collateral	(1 2 3 4 5)	**3 0**	**15 0**
Experience w/ Commercial Banks	(1 2 3 4 5)	**3 0**	**15 0**
Risk Analysis	(1 2 3 4 5)	**3 0**	**15 0**
Management		1 0	5 0
Market		1 0	5 0
Financial		1 0	5 0
SWOT*	(1 2 3 4 5)	**2 0**	**10 0**
Strength		0 5	2 5
Weaknesses		0 5	2 5
Opportunities		0 5	2 5
Threats		0 5	2 5

*Applicable to both Borrower & Project

As shown above, ratings and weights are given for each of the factors, together with the maximum possible score for each factor and categories of factors

I FINANCIAL STATEMENT ANALYSIS – BANKS

In January 1998, U S Banking regulators (Federal Reserve) made a revised proposal to apply the risk-based capital market framework that was developed by the Basle Committee on Banking Regulations and Supervisory Practices The Basle capital framework sought to establish a more consistent international approach for the measurement and assessment of capital adequacy, including minimum capital standards The proposed risk-based capital framework was developed with the twin objectives of helping to strengthen the stability of the international banking system and removing a source of competitive inequality for banks arising from differences in supervisory arrangements among countries

The Basle Agreement contains four major elements

1) A common framework for defining the elements of a banking organizations capital, with emphasis on common stockholders' equity referred to as – Core or Tier 1 – capital and appropriate recognition of other forms of capital – Tier 2
2) A weighting system for relating capital to banking risks, including off-balance sheet exposures
3) A schedule for achieving a minimum supervisory standard for the ratio of capital to weighted risk assets, and
4) Other transitional arrangements designed to provide a reasonable amount of time for organizations to bring their capital positions into conformity with the risk-based framework

The framework establishes no initial capital requirement but proposes an interim target capital equal to at least 7 25 percent of risk based assets (of which at least 3 25 percentage points should be in the form of stockholders equity) to be achieved by year-end 1990 In 1992 a minimum standard of 8 percent (which at least one half or four percentage points, should be in the form of common stockholders equity)

A second method of determining the viability of bank is to assess its exposure by various geographical markets The markets are risk rated The capital adequacy is then reflective of the relative risk, i e ,

A Markets	minimum risk	2 5 %
B Markets	moderate risk	3 75%
C Markets	above average risk	5 83%
D Markets	high risk	10 00%
Reschedules loans	limited recovery possibilities	20 00%

Information on banks is available on the web at www bankstat com as well as from the Banker's Almanac and other similar publications Bankstat is by subscription, however they report on a regular bases on more the 15,000 financial institutions world wide Within the U S there are what is referred to as "Schessenoff" report Thompson Financial Inc has recently acquired this firm Individual reports at this time will cost approximately U S $150 00 or more

XIX COUNTRY RISK ANALYSIS

Many analysts who study the question of country risk or creditworthiness attempt to create some sort of index or scale which quantifies their judgment of certain underlying facts concerning a country's credit standing There are, of course risks of overgeneralization when attempting to make this kind of quantification

The living reality of any country has many dimensions and the attempt to reduce it all to a single number may conceal more than it illuminates Nevertheless, analysts believe some use of such indices is helpful, provided the indices are carefully designed and provided that they are considered as the "starting" point of an analysis and not the final judgment

In considering an economic county model, one can separate three rather different quantities to be measured These measurements are designed to answer three questions

1 In the view of the country's current debt position, what is the probability of a default or rescheduling in the relatively near future ?

2 Regardless of debt position, what is a country's longer range economic health ?

3 What is the quality of a country's underlying human and natural resources ?

The first question lends itself to econometric analysis Analysts have undertaken computerized studies of past debt rescheduling to determine what combination of variables would have been most successful in predicting them The results of this exercise are set forth in the following Part I

Long term lenders are naturally concerned with a country's prospects beyond the next few years Part II of the country model is a checklist of factors bearing on longer term economic health It was developed by asking economists which factors they believed would be most important and what relative weights they would assign to these factors These indices look primarily at a country's wealth, its rate of growth, its control of inflation and the magnitude and structure of its export earnings

The ultimate economic strength of any country lies in its human and natural resources, with particular emphasis on human resources While it is not possible to quantify in any scientific way, it seems useful to list a number of possible categories and ask the economists to give their subjective judgment as to whether the country is good, fair or poor While the resulting number is necessarily rather arbitrary, the exercise is probably useful in obligating the economists to think carefully about the quality of human and natural resources in the countries with which they are concerned This is Part III

The first part produces a binary result a developing country either is or is not deemed by the model to be a candidate for rescheduling, with a relatively small gray area between 0 and 100, with 100 being the best position

No attempt has been made in this exercise to quantify political factors, and any results on a table such as this must be qualified in their entirety by a political assessment of the country concerned Political matters are impossible to quantify because of their variety and complexity as well as their long and short run characteristics

PART I EARLY WARNING OF LIQUIDITY PROBLEMS

Part I is based on the principle that there is a historical relationship between economic variables and measures of repayment difficulty that is common to a number of countries, which can be identified through econometric tests, and can be used to suggest future liquidity problems Similar principals are widely accepted in the physical and social sciences and have supported the development over the past few years of credit scoring models for bond rating and consumer credits

In developing Part I, logic analysis, an econometric technique specifically designed to deal with discontinuous measures of liquidity problems, was used to select and weight those economic variables best able to suggest if a country would likely encounter such problems

The model is based on 49 developing countries which have rescheduled their debts in recent years Six variables have been selected as best able to suggest liquidity problems up to five years in advance

- The ratio of external debt outstanding to exports
- The ratio of international reserves to imports
- The ratio of gross fixed capital formation to GDP
- Reserve position in the IMF
- The rate of increase in the consumer price index
- The ratio of disbursements on debt to exports

PART II LONGER RANGE ECONOMIC HEALTH

Part II is designed to simulate the mental process used by the economist in assessing quantifiable economic indicators that may have a longer term bearing on country credit worthiness Unlike Part I, Part II is expected to have limited predictive value and is intended primarily to give a rough, composite picture of the economic environment prevailing in a particular country

The following table presents the economic factors studied, their respective measures, and the weights that were given to each measure

ECONOMIC FACTORS	MEASURES	WEIGHTS
1 WEALTH	GNP/ CAPITAL (MOST RECENT YR)	25%
2 GROWTH	AVERAGE GNP PER CAPITA GROWTH RATE	15%
	INVESTMENT / GNP	10%

3	FISCAL & MONETARY POLICY	INFLATION RATE	5%
		AVG INFLATION RATE	5%
		BUDGET SURPLUS (DEFICIT)/EXPENDITURES	5%
4	MAGNITUDE & VULNERABILITY OF FOREIGN EXCHANGE EARNINGS	CURRENT ACCOUNT EARNINGS/GNP	15%
		AVERAGE CURRENT ACCOUNT EARNINGS (DEFICIT)/GNP 1 /	10%
		EXPORTS / COMMODITY DEPENDENCE 2 /	10%

NOTES
1 / Average computed over a 3 – year period
2 / Dependence on the two most important commodities expressed as a percentage of total exports

DEFINITIONS

GNP/CAPITA – A country's relative wealth was given the heaviest weighting in Part II of the country Model on the assumption that wealthier countries are generally better credit risks than poorer ones However, the absolute level of GNP alone did not appear to be an adequate measure of wealth since it made no allowance for how many people shared in the wealth Real GNP/ CAPITA for the most recent year available was therefore selected as the most practical measure obtainable for a large number of countries, although it too has admitted deficiencies

AVERAGE GNP/CAPITA GROWTH RATE – a 3 year average of the GNP/CAPITA growth rate shows a historical pattern As with the GNP/Capita measure alone, the higher the average growth rate in this ratio, presumably the better off is a particular country's economy

INVESTMENT / GNP – The level of investment as a percentage of GNP is a rough indicator of a country's attitude toward savings and consumption Other things being equal, a country which invests more currently will become more productive and wealthy in the long run

INFLATION RATE – The level of inflation (consumer price index) is a reflection of a country's attitude toward fiscal and monetary responsibility The rate for the most recent year available shows the most current picture

AVERAGE INFLATION RATE – A 3 – year average is an approximate measure of the shorter term trend in prices against which the current rate can be compared to point up an improvement or deterioration

BUDGET SURPLUS (DEFICIT) / EXPENDITURES – This ratio for the most recent year available complements the inflation rate for the most recent year and the 3 – year average by giving an insight into where prices are headed in the future

CURRENT ACCOUNT EARNINGS (DEFICIT) / GNP – Current account earnings or deficit (borrowings) are a measure of a country's external financial strength The measure is calculated for the most recent year available

AVERAGE CURRENT ACCOUNT EARNINGS (DEFICIT) / GNP - This ratio a average over the most recent three years to show a short term trend with abnormal year to year fluctuations smoothed out

EXPORTS / COMMODITY DEPENDENCE - a countries relative dependence on the two key export commodities reveals the potential vulnerability of a country's foreign exchange earnings

PART III HUMAN & NATURAL RESOURCES

Human and natural resources is a qualitative portion of the Country Model that relies on the subjective judgments of country economists

A summary of the measures and weights used in Part III is as follows

MANAGEMENT	WEIGHTS
DEPTH OF MANAGEMENT COMPETENCE	10%
RATIONALITY OF FISCAL / MONETARY POLICIES	10%
ABILITY TO IMPLEMENT ECONOMIC POLICIES	10%
INFRASTRUCTURE & STAGE OF ECONOMIC DEVELOPMENT	
COMMUNICATIONS / TRANSPORT INFRASTRUCTURE	10%
DEGREE OF INDUSTRIALIZATION & MODERNIZATION	10%
ATTITUDE & RESPONSIBILITY	
WORK ETHIC	10%
PROMPTNESS OF PAYMENTS TO CREDITOR NATIONS	10%
PHYSICAL RESOURCES	
AGRICULTURE	10%
MINERALS	10%
ENERGY	10%

Part III is the most abstract and subjective of all three parts of the Country Model We offer the following definitions

DEPTH OF MANAGEMENT COMPETENCE – measures the existence of competent managers at descending levels within government and industrial managerial hierarchies Also the presence of entrepreneurs in general

RATIONALITY OF FISCAL / MONETARY POLICIES – measures how well these policies are conceived in terms of the prevailing economic environment

ABILITY TO IMPLEMENT ECONOMIC POLICIES – measures a government's ability to put its policies into effect in face of political or other realities

COMMUNICATIONS / TRANSPORT INFRASTRUCTURE – reflects the degree of basic infrastructure needed to support further economic development

DEGREE OF INDUSTRIAL & MODERNIZATION – bears on a country's ability to produce goods in an efficient manner and to respond to technological change

WORK ETHIC – mirrors the attitude of the labor force toward productivity and the prevalence of labor unrest

PROMPTNESS of PAYMENT TO CREDITOR NATIONS – measures the timeliness of payments and delays due to both administrative procedures and to fundamental financial difficulties

AGRICULTURAL, MINERAL & ENERGY RESOURCES – reflects a country's relative self-sufficiency, external earnings related thereto, and its potential for future resource exploitation

XX COURSE EVALUATION

In order to obtain an objective evaluation of this training course, FWA's Actuarial/Underwriting Advisor asked each participant from JLGC to complete the enclosed questionnaire The results of this survey are shown on the page immediately following the questionnaire This indicates general satisfaction with the training and the conviction that subject matter, ability, facilities and logistics, role of the participants, and skill of the trainer were useful, appropriate and effective Highest marks were given to the trainer for answering questions thoughtfully, and for the value of teaching aids

The overall evaluation of the course done by JLGC participants rated the FWA trainer 4 2 out of a possible maximum of 5 0 Overall evaluation for other areas of the questionnaire were choice of subject matter - 4 0, utility of subject matter - 3 6, facilities/logistics - 3 9, role of the participants - 3 5, other - 3 2 The answers to 25 out of 28 questions indicated a medium to high level of satisfaction (3 0 to 4 8 average out of a possible maximum of 5 0) Lower satisfaction levels were registered for the trainer's estimation of the prior knowledge of the participants (2 8), appropriate allocation of time (2 3), and whether participants believed they will now be better managers (2 9)

CREDIT TRAINING COURSE EVALUATION - QUESTIONS

SUBJECT MATTER	**1=least useful(no) 5=most useful (yes)**
1) I think the topic, credit evaluation timely and useful	1 2 3 4 5
2) I think financial statement analysis timely and useful	1 2 3 4 5
3) I think the ratio analysis timely and useful	1 2 3 4 5
4) I think the credit report evaluation useful	1 2 3 4 5
5) I think a "scoring model" will be useful	1 2 3 4 5
6) I think bank financial statement analysis useful	1 2 3 4 5
7) I think country credit scoring timely and useful	1 2 3 4 5

UTILITY OF SUBJECT MATTER

1) This course was directly related to my main responsibility	1 2 3 4 5
2) Subject matter was only good background information	1 2 3 4 5
3) The subject matter included new tools for my daily work	1 2 3 4 5
4) The subject matter helped clarify or provide a good review, of tools I already possess	1 2 3 4 5
5) I believe I can do my job more effectively and efficiently than before this course	1 2 3 4 5
6) I believe I will be a better manager because the course provided me a better understanding of credit evaluation	1 2 3 4 5
7) The subject matter increased my understanding of what should be happening in the banks before the case is submitted to the JLGC	1 2 3 4 5

FACILITIES AND LOGISTICS

1) I liked the training facilities	1 2 3 4 5
2) I liked the teaching aids	1 2 3 4 5
3) Time allocated was appropriate	1 2 3 4 5
4) Reference materials were useful	1 2 3 4 5
5) The manual will provide a valuable tool for my library	1 2 3 4 5

PARTICIPANTS

1) Fellow participants added to the value of the course	1 2 3 4 5
2) A class of this size was ideal	1 2 3 4 5

TRAINER

1) The trainer was well prepared	1 2 3 4 5
2) The teaching aids, were appropriate	1 2 3 4 5
3) The trainer underestimated the knowledge of the participants	1 2 3 4 5
4) The trainer answered questions thoughtfully	1 2 3 4 5
5) The trainer achieved balance between theory & practice	1 2 3 4 5
6) I like the case studies and examples	1 2 3 4 5

OTHER

1) I would like to be a trainer and train others on this subject	1 2 3 4 5
2) If I were to teach this course I would do the following	

CREDIT TRAINING COURSE EVALUATION - ANSWERS

SUBJECT MATTER	RESPONSE					
QUESTION	1	2	3	4	5	Arithmetic Mean Avg
1			17%	50%	23%	4 2
2			33%	17%	50%	3 8
3			17%	33%	50%	4 3
4			50%	17%	33%	3 8
5			33%	17%	50%	4 2
6			33%	50%	17%	3 8
7				83%	17%	4 2
UTILITY OF SUBJECT MATTER						
1	17%		17%	17%	50%	3 9
2				50%	50%	4 5
3		33%	17%	33%	17%	3 4
4		33%	17%	17%	33%	3 3
5			33%	67%		3 7
6	17%	17%	50%		17%	2 9
7			50%	33%	17%	3 7
FACILITIES LOGISTICS						
1			17%	50%	33%	4 2
2			33%	17%	50%	4 2
3	33%		33%	33%		2 3
4				67%	33%	4 3
5				50%	50%	4 5
PARTICIPANTS						
1	17%	17%	17%	50%		3 0
2			33%	50%	17%	3 9
TRAINER						
1			17%	17%	67%	4 5
2				50%	50%	4 5
3	33%	17%		33%	17%	2 8
4				17%	83%	4 8
5			33%	17%	50%	4 2
6			17%	33%	50%	4 3
OTHER						
1		50%		33%	17%	3 2
2						

I LIST OF COURSE MATERIALS

A Credit Analysis Two More "C"s of Credit – by Dr Larry White, Associate Professor of Finance, MISSISSIPPI STATE UNIVERSITY

B Examples of Credit Reports for Businesses – Domestic / International

1 Example D & B Domestic & International Credit Report
2 WTDR (World Trade Data Report) now called a ICP (International Company Profile)
3 Critical Review D & B data collection – WSJ
4 Glossary of Terms

C Problems in Measuring Accounting Profit

D Understanding Financial Statements – a guide for non-financial professionals

E Types of [Auditor's] Opinions According to GAAP Regulations

F Credit Analysis Tying it all Together

G Outlining the Process of Forming & Updating Credit Judgments

H Four Steps to F/S Analysis

I 10 Practical Web Sites of Export Pro's

J Risk Rating Characteristics of Bankable Credit

K Spread Sheet – JLGC 1996,1997, & 1998

L From Ordinal to Cardinal Measures of Country Risk

M International Country Risk Guide

N International Financing Techniques - How to improve Export Financing

O Krentzman, Harvey C, "Successful Management Strategies for Small Business", Prentice Hall, Inc , Englewood Cliffs, New Jersey, USA, - "Tools of Financial Management"

P Ratio Analysis – definitions

PN-ACG-153

Deloitte Touche Tohmatsu

Jordan Loan Guarantee Corporation

Training Course on Underwriting Procedures Volume II

Submitted by
Deloitte Touche Tohmatsu Emerging Markets
First Washington Associates, Ltd

Submitted to
USAID

IQC No PCE-I-00-99-00008-00
Support for Economic Growth and Institutional Reform

July 1999

37

Appendices

Appendix A	Credit Analysis Two More "C"s of Credit By Dr Larry White, Associate Professor of Finance, Mississippi State University
Appendix B	Examples of Credit Reports for Business – Domestic and International 1 Example D & B Domestic & International Credit Report 2 WTDR (World Trade Data Report) now called a ICP (International Company Profile) 3 Critical Review D & B Data Collection – WSJ 4 Glossary of Terms
Appendix C	Problems in Measuring Accounting Profit
Appendix D	Understanding Financial Statements – A guide for non-financial professionals
Appendix E	Types of (Auditor's) Opinions According to GAAP Regulations
Appendix F	Credit Analysis Tying it all Together
Appendix G	Outlining the Process of Forming & Updating Credit Judgements
Appendix H	Four Steps to F/S Analysis
Appendix I	Ten Practical Web Sites of Export Pros
Appendix J	Risk Rating Characteristics of Bankable Credit
Appendix K	Spread Sheet – JLGC 1996, 1997 & 1998
Appendix L	From Ordinal to Cardinal Measures of Country Risk
Appendix M	International Country Risk Guide
Appendix N	International Financing Techniques – How to Improve Export Finance
Appendix O	Krentzman, Harvey C , "Successful Management Strategies for Small Business," Prentice Hall, Inc , Englewood Cliffs, New Jersey, U S A – "Tools of Financial Management "
Appendix P	Ration Analysis - Definitions

APPENDIX A

Credit Analysis Two More "C"s of Credit
By - Dr Larry White
Associate Professor of Finance, Mississippi State University

monthly payment over an extended period of time. Such future payments may best be characterized as "tooth fairy money." After all, the debtor has lost his business or suffered some other major financial reversal. Is he really likely to spend years of his life ransoming his past from the bank? If, after you have analyzed the situation, you have doubts, take the cash.

A VERY INTERESTING BUSINESS

Time spent handling loan workouts provides a valuable education. The lender gets a new appreciation for good credit and how loans can go wrong. His analytical and problem-solving skills are honed. He becomes more familiar with the law and bankruptcy. He improves his sales and negotiating skills. From dealing with problem debtors he develops a better understanding of human nature. Most important, he learns a lot about himself and his ability to deal with challenge, crisis and adversity.

CONCLUSION

This is a bad deal is the statement our bank's workout lenders use most often. It is used when a problem account is reassigned to us for handling, when loan loss reserves are discussed, and when complaints are made about losses incurred. More than merely a statement of the obvious, this serves as a constant reminder of the reality of problem loans. Lending is an art, and banking involves risk. In a perfect world, there would be no problem loans and no workout department.

All problem loans are bad deals to one degree or another. They arrive in the workout area in an imperfect state and, in most cases, end in an imperfect result. Both management and the workout lender must maintain this perspective in order to deal with the problem realistically. Only then will proper reserves be maintained, compromises and settlements reached, and true losses recognized. The best possible result, given the circumstances, will be achieved. This is the best way for the workout lender to maintain his performance and to sustain a positive attitude about the critical job he or she performs. ■

40

Credit Analysis: Two More "Cs" of Credit

by Larry R. White

Character, capacity, capital, conditions, and collateral are commonly referred to as the five Cs of credit. Customer relationships and competition are two additional Cs that round out the group to seven. They supply additional information that will help lenders and analysts make better credit decisions.

John Locke, an English philosopher, wrote in the 17th century that "Credit is nothing but the expectation of a sum of money within some limited time."[1]

In *Credit Analysis: A Complete Guide*, Roger Hale proposes that "Credit analysis is the process of inquiry prior to making the decision to lend." Further, he states, "In this inquiry, the banker today does his best to replace emotional feelings such as hopes and fears, with reasoned arguments based upon a careful study of a borrower's strengths and weaknesses." He proposes that this "careful study" is what we refer to as credit analysis, which he describes in the following excerpt:

The fundamentals of modern credit analysis are twofold. First is the examination of the nature of the borrower's business in the context of its industry, and second is the analysis of cash flow. The purpose of the former is to understand the competitive market position of the firm: the pressures of competition, the risk and reward structure of the industry, the barriers to entry, the degree of technological change, and so on. The purpose of cash flow analysis, on the other hand, is to distinguish from financial statements based on historical accounting principles the actual movements of cash in terms of its sources and uses. Once these past sources and uses have been examined, a reasonable estimate can be made as to future sources and uses, and this can be combined with the understanding of the borrower already gained to permit a judgment to be made as to the borrower's creditworthiness.[2]

© 1990 by Robert Morris Associates. Larry R. White ... coordinator of banking studies at Mississippi State University.

[1] Quoted in A Dictionary of the English Language ... 1773.

[2] Roger H. Hale, *Credit Analysis: A Complete Guide* (New York: John Wiley & Sons, Inc., 1983).

TWO IMPORTANT QUESTIONS

Credit analysis can be boiled down to answering two important questions

- *Can* the customer repay? and
- *Will* the customer repay?

Analyzing Information about the Borrower

We attempt to answer the above two questions by analyzing whatever information we can obtain from or about the customer. This analysis is couched in the wisdom of the words of the poet Rudyard Kipling, when he wrote

I keep six honest serving men,
(They taught me all I knew)
Their names are What and Why and When
And How and Where and Who

Seven Cs of Credit

Credit analysis revolves around what has, over time, evolved through the three Cs, four Cs, and five Cs, to what we shall propose to be the seven Cs of credit. These Cs are

1 Character
2 Capacity
3 Capital
4 Conditions
5 Customer relationships
6 Competition
7 Collateral

Character, capacity, capital, conditions, and collateral are the old friends that are commonly referred to as the five Cs of credit. Customer relationships and competition are the new friends and round out the group to the seven Cs.

FITTING THE SEVEN Cs INTO THE CREDIT ANALYSIS FRAMEWORK

Character

Character is directly related to the question Will the customer repay? Whether we are talking about a business or an individual, we must be able to answer this question in the affirmative to extend credit. A good synonym for character is commitment. Is the customer going to honor his or her obligations (commitments) set forth in the loan contract?

Customer Relationships

Customer relationships come into play in answering the will question as well. If we have an existing relationship with a customer, then we have additional information and experience to bring to the analysis. However, if we do not have this experience, we will need to gather information to tell us whether we want to have a relationship with this customer or not.

It used to be that if a customer of another institution approached us for credit, this was a red flag for us—why didn't the customer borrow from his or her existing institution? In today's highly competitive banking environment, however, banks are actively trying to take away good customers from one another.

Customer relationships also relates to the can question, as do the other Cs, by providing information about past credit experiences, with our institution and with others.

Capacity

However, the primary C in relation to the *can* question is capacity. Does the customer have the wherewithal to repay the loan, and what are these sources of repayment?

A good synonym for capacity is cash flow. It has often been said that "No one is repaid with accrual income." Cash is the only spendable asset. Therefore, we must determine what the source of cash will be to repay the loan. The primary source of cash flow is from repeatable operations, that is, the primary income generator of the borrower.

To determine operating cash flow, we must be able to distinguish between cash and noncash revenues and expenses and between operating and nonoperating items. Numerous training programs, including RMA's Men tor course, Cash Flow Analysis, are available to help us make these distinctions and accurately determine the operating cash flow on which we can rely for our primary source of repayment.

Conditions

Economic, industry, or business conditions play a strong supporting role in the *can* question. When times are good and things are going well, almost all customers can repay. However, when times are hard or things aren't going so well, can the customer still repay the loan? Therefore, the sensitivity of the cash flow to changing conditions is also a critical issue, deserving consideration. If cash flow from operations is sensitive to changing conditions, our next step should be to look at secondary sources of repayment that can support cash flow in these sensitive times.

Capital and Collateral

Here is where capital and collateral come into play. No banker wants to "take a customer to raise," as it were. The banker is a limited scope partner in the venture, not a primary or sole supplier of funds. The borrower must expect to bring something to the marriage besides the idea.

Capital can be represented by the contribution of either cash or other valuable assets to the venture or by accumulated wealth (net worth) that the borrower is willing to place at risk in the venture. In this sense, capital also plays a support role to character in the *will* question.

Bankers' expectations that the borrower should be willing to put something of value at risk have not always been received favorably. For example, commonly heard statements include, "Bankers will only lend you money if you don't need it" or "If I had the money to put into the project, then I wouldn't need to borrow it." (Maybe we need to add another C—communication!) Collateral can also (and, based on my own personal experiences, should only) serve as a secondary source of repayment in support of cash flow in sensitive times. Often collateral is project specific, making its value for other purposes somewhat limited.

In addition (again, possibly my own experiences bias my thinking), if

BEST AVAILABLE COPY

41

a customer lacks the commitment to honor obligations, this customer may also lack the commitment to maintain the collateral. The result is a decline in value upon foreclosure, repossession, and liquidation.

Also, adverse economic conditions can affect the marketability and value of collateral as well. Someone once said, "When you make a loan based on collateral, three things can happen, and two of them are bad." Collateral may best be viewed in a supporting cast role for capital when looking for secondary sources of repayment.

Competition

Competition is a tough C to apply to the task of answering our two questions. It might be that there needs to be a third question (actually, a set of questions) to be answered. For example, we may ask: Do we really want a particular customer's business? How far are we willing to go to get the business? Competition for good business most certainly plays a role in credit decisions in today's banking environment.

The desire to attract new good business from our competitors or to keep our old good business from going to the competition will cause almost all bankers to go the extra mile when making credit decisions. However, a caveat is appropriate: competition should not drive the credit decision. Rather, a sound credit decision should be made with competition in mind. That is, we need to make decisions that will be profitable for our bank in both the short and long run, if possible.

Our competitors may or may not be doing this. They may be using the well known marketing technique of a loss leader, or they may be a captive subsidiary that is being driven by orders from higher up in making their credit or pricing decisions. Alternatively, their credit policies may be significantly different from ours, or they may need the business more than we do. Therefore, competition should best be used in a support role for the other Cs rather than as a primary determinant in the credit decision.

CONCLUSION

Credit analysis is central to one of the most important, if not the most important, decisions that bankers make. Being able to answer, in the affirmative, the two questions—*can* the customer repay and *will* the customer repay—is the focus of credit analysis and the lending decision. As with most decisions, the more quality information we have, the better our decision will be. The five Cs—character, capacity, capital, conditions, and collateral—have proven to be good friends through the years in providing the lender/analyst with quality information on which to base the credit decision.

With the increased competition in the banking business from other banks and nonbanks, it has become necessary to include additional information in our credit analysis and decisions. Two new friends—customer relationships and competition—can supply additional information that will help us make better credit decisions. Better credit decisions will lead to better structuring of loans, allowing the lender to satisfy the customer's needs better and enhance the profitability of the loan portfolio and the bank. ■

SELECTED BIBLIOGRAPHY

Bernstein, Leopold A. *Financial Statement Analysis: Theory, Application and Interpretation*. 4th Ed. Homewood, Ill.: Richard D. Irwin, Inc., 1988.

Gibson, Charles H., and Patricia A. Boyer. *Financial Statement Analysis*. Boston: CBI Publishing Company, 1979.

Gill, Edward K. *Commercial Lending Basics*. Reston, Va.: Reston Publishing Company, Inc., 1983.

Hale, Roger H. *Credit Analysis: A Complete Guide*. (New York: John Wiley & Sons, Inc., 1983).

42

BEST AVAILABLE COPY

APPENDIX B

Examples of Credit Reports for Business - Domestic and International

1. Example D & B Domestic & International Credit Report
2. WTDR (World Trade Data Report) now called a ICP (International Company Profile)
3. Critical Review D & B data collection - WSJ
4. Glossary of Terms

Company profiles painted with D&B data

The Business Information Report gives you an insider's perspective on a firm's operations, profitability and stability by combining the thousands of details available on the company in Dun & Bradstreet's data base. The report helps you reach your own conclusions about a company's overall condition with data organized in an easy to read, standardized format.

Quickly check a firm's identity and location
The firm's legal name, address, phone number and D U N S Number are always prominently displayed.

Gain a quick appraisal and overview of the company
The first step in getting an insider's perspective, the Summary section highlights key findings from the Business Information Report to give you a quick snapshot of the firm.

Keep pace with major changes that could impact your credit relationships
Changes in ownership, acquisitions, fires, burglaries, bankruptcies—all could affect your credit decisions about a firm. Special Events alerts you to major changes within the company.

Focus on a company's payment record for an overview of its credit-worthiness
A brief review of the company's payments includes high credit extended, amounts owed and past due, and time period since last sale to help you determine how you will be paid. Each horizontal listing represents the experience of an individual supplier.

Note changes that affect a company's business environment
Know what's going on within your accounts. Changes alerts you to shifts in management, business expansion or alteration to the legal structure such as the incorporation of a proprietorship.

Keep track of operational changes that might prove profitable for your company
Update shows you changes in operation since the report was last revised.

Add sophistication and financial data to your credit analysis
Essential financial components of a company—assets, sales, liabilities and profits—are revealed. Comments (see other side) summarizing the figures enhance your analysis.

BE SURE NAME, BUSINESS AND ADDRESS MATCH YOUR FILE

ANSWERING INQUIRY

DUNS 00 007 7743	DATE PRINTED	SUMMARY
GORMAN MANUFACTURING CO INC	AUG 23 198	RATING 3A3
GORMAN PRINTING		
(Subsidiary of Gorman Holding Companies Inc)	COMMERCIAL PRINTING	STARTED 1965
492 KOLLER ST	SIC NO	PAYMENTS SEE BELOW
(formerly 400 KOLLER ST)	27 51	SALES F $18 931 ...
(and Branches and Divisions)		WORTH F $3 182 ...
SAN FRANCISCO CA 94110 0012		EMPLOYS 500 (150 here)
Tel 415 555 9667		HISTORY CLEAR
		FINANCING SECURED
CHIEF EXECUTIVE LESLIE SMITH PRES		CONDITION FAIR
		TREND DOWN

SPECIAL EVENTS 8/20/8- On August 19 198 subject experienced a fire due to an electrical short in one of their printing machines. Damages amounted to $35 000 which was fully covered by their insurance company.

PAYMENTS (Amounts may be rounded to nearest figure in prescribed ranges)

REPORTED	PAYING RECORD	HIGH CREDIT	NOW OWES	PAST DUE	SELLING TERMS	LAST SALE WITHIN
07/8	Ppt	1500	0-	0	N30	1 Mo
07/8	Ppt	500	0	0	N30	2 3 Mos
07/8	Ppt	750	0-	0	N30	2 3 Mos
07/8	Slow 15	17000	6000	0	2 10 N30	1 Mo
07/8-	Slow 15	10000	500	0	2 10 N30	1 Mo
07/8	Slow 30	3000	500	0	2 10 N30	1 Mo
07/8-	Slow 60	3000	3000	3000	N30	2 3 Mos
07/8-	Slow 60	2000	2000	2000	N30	2 3 Mos
06/8-	Ppt	7000	300	0	N30	2 3 Mos
06/8-	Ppt	5000	2500	0	N30	1 Mo
05/8	Ppt	1000	-0	0	FOM	2 3 Mos
05/8	Slow 30	12000	2500	2500	N30	2 3 Mos
05/8	Slow 30	2500	1000	1000	N30	2 3 Mos

Payment experiences reflect how bills are met in relation to the terms granted. In some instances payment beyond terms can be the result of disputes over merchandise, skipped invoices etc.

CHANGES 03/17/8 Subject moved from 400 KOLLER ST to 492 KOLLER ST on March 11 198

UPDATE 08/17/8- On August 17 198 KEVIN J HUNT Sec treas stated for the six months ended Jun 30 198 profits were up compared to same period last year

FINANCE 03/17/8

	Fiscal Dec 31 198	Fiscal Dec 31 198	Fiscal Dec 31 198
Curr Assets	7 151 675	7 055 442	6 770 968
Curr Liabs	3 379 103	4 015 903	4 192 046
Other Assets	1 354 469	1 336 009	1 309 375
Worth	4 056 901	3 893 231	3 48 600
Sales	20 577 608	20 432 522	18 931 956
Net Income	767 361	64 451	3 892

Fiscal statement dated Dec 31 198

Cash	$ 212 597	Accts Pay	$ 1 9 1 028
Acct Rec	1 733 380	Bank Loans	1 795 000
Inventory	4 439 597	Other Curr Liabs	176 018
Prepaid Exp	385 391		
Curr Assets	6 770 968	Curr Liabs	4 192 046
Fixt & Equip	1 271 811	L T Liab Other	105 697
Other Assets	37 564	CAPITAL STOCK	50 000
		RETAINED EARNINGS	3 13 600
Total Assets	8 080 313	Total	8 080 313 (Continued)

Stay aware of public record activity that could affect a firm's stability

Public filings may include suits filed, judgments, liens and Uniform Commercial Code filings—information that you would want to factor into your overall evaluation of a firm—consolidated for easy reference

Confirm banking details for insight into a firm's purchasing power and liquidity

Can a company afford to do business with your firm? This section may include average checking/savings account balances, current and previous borrowing history and an appraisal of the overall banking relations

Evaluate the experience of the business and its principals to capitalize on hidden potential

A firm with potential is easier to spot when you know more about the company and its management. This section shows the history of the company and the background of the principals or owners. Details on related companies may also be included to give you insight into the company's overall structure

Understand a firm's operational details

Describes what the firm does, number of employees, a description of facilities, and location. It may also provide names and locations of branch operations, plus identify and describe any subsidiary businesses. This information is generally provided by the company's management

Keep up-to-date on your account's status

Continuous Service automatically alerts you to all significant changes in a company's Business Information Report for one full year following your original inquiry

---

Available through the mail or online via DunsPrint® or DunsPrint/PC. If time is short, call DunsDial® or DunsVoice® for summary details and request follow up printed reports for more complete analysis later.

For more information contact your local Dun & Bradstreet Credit Services office (consult your local telephone directory) or call Core Business Services at 201 665 5456

GORMAN MANUFACTURING CO INC
SAN FRANCISCO CA

AUG 23 198-

PAGE 2
CONSOLIDATED REPORT

FULL REVISION

FINANCE (Cont'd) Annual sales $18 931 956 cost of goods sold $16 77[illegible] Gross profit $ [illegible] net income $32 892 dividends $[illegible] 640 monthly rent $[illegible] 00 lease expires [illegible]
Fire insurance on mdse & fixt $6 000 000
Submitted by Kevin J Hunt Sec Treas Prepared from statement(s) by Accountant Fred Mitchel San Francisco CA Prepared from books without audit
Other assets are tangible composed of miscellaneous deposits and deferred items Other current liabilities and long term liabilities are not [illegible] due on equipment
On Mar 15 198 Kevin J Hunt Sec Treas referred to the above figures as still representative
He stated that sales for the 12 months ended Dec 31 198 were down compared to the same period last year Profit for the period was down but is expected to increase Kevin J Hunt stated that the net worth decreased at 12/31/8 attributed to the purchase and retirement to treasury of a portion of the capital stock
Current debt is in excess of net worth Inventory is large in relation to sales and working capital is light compared to volume transacted

PUBLIC FILINGS 03/17/8- On Mar 25 198- a suit in the amount of $500 was filed against Gorman Manufacturing Co Inc by Z Henrie Assoc (Docket #2[illegible]) in San Francisco CA Cause of action was [illegible]
Financing statement #7411[illegible] filed 01-28-8 with the Secretary of State of CA Debtor Gorman Manufacturing Co Inc San Francisco CA Secured party Swinger Corp Malibu CA Collateral Equipment
On March 17 198 Kevin J Hunt reported action filed by Z Henrie Associates was due to damages caused by faulty printer and has been settled Counter [illegible] suit was withdrawn

BANKING 03/8 Balances average moderate six figures Account open over three years Loans extended to low seven figures now owes low seven figures secured by accounts receivable and inventory and relation satisfactory

HISTORY 03/17/8- LESLIE SMITH PRES KEVIN J HUNT SEC TREA
DIRECTOR(s) THE OFFICER(s)
Incorporated California May 21 1965 Authorized capital consists of 200 shares common stock no par value
Business started 1965 by principals 100% of capital stock is owned by parent
LESLIE SMITH born 1926 married Graduated from the University of California Los Angeles June 1947 1947 1965 was the general manager for Raymor Printing Co San Francisco CA 1965 formed subject with Kevin J Hunt
KEVIN J HUNT born 1925 married Graduated from Northwestern University [illegible] in June 1946 1946-1965 was the production manager for Raymor Printing Co San Francisco CA 1965 formed subject with Leslie Smith
Related Companies Through the financial interest of Gorman Holding Companies Inc the Gorman Manufacturing Co Inc is related to two other sister companies (Smith [illegible] Inc San Diego CA and Gorman Suppliers Inc Los Angeles CA) These sister companies are also engaged in commercial printing There are no intercompany relations

OPERATION 03/17/8- Subsidiary of Gorman Holding Companies Inc Los Angeles CA which operates as a holding company for its underlying subsidiaries Parent company has two other subsidiaries There are no intercompany relations between parent and subject A consolidated financial statement on the parent company dated Dec 31 198 showed a net worth of $[illegible] with a fair financial condition indicated
Commercial printing engaged in letterpress and screen printing Sells for cash 30% balance net 30 days Has 1 000 accounts Sells to commercial [illegible] Territory Nationwide Nonseasonal
EMPLOYEES 500 including officers 150 employed here
FACILITIES Rents 40 000 sq ft in 1 story concrete block building in good condition Premises neat
LOCATION Industrial section on side street
BRANCHES Subject maintains a branch at 1073 Boyden R[illegible] Los Angeles CA
07-23)909 /[illegible])0039/02 00000 0[illegible]

45

21 0CY

Credit Advisory System

Now, faster and more consistent risk assessment through a system that consolidates the best of D&B *plus* new risk category rankings

For over two years D&B listened to credit managers speaking their minds We interviewed thousands of users of D&B credit information and consulted with hundreds of credit professionals

The result The Credit Advisory System, perhaps the most potent credit information source ever introduced by D&B Here, in a format that has been standardized and streamlined the information you want has been brought together in one place Dynamically up to date too *And to top it off, the system introduces a new set of guidelines designed specifically to measure the credit risk quality!*

The new ABC's of risk assessment

At the very heart of the system is the Credit Risk Category feature a unique method of ranking that helps you assess degrees of risk quickly and systematically It s as simple as ABC

For every company you inquire about, the system assigns a Credit Risk Category that is based on the company s complete D&B file A means that relatively little risk exists from D&B s perspective B signals that moderate risk exists C alerts you to examine the account more closely

Here, at last are uniform yardsticks you can apply to classify accounts more speedily, reliably and consistently And talk about the dynamics of timeliness! The Credit Risk Category is calculated *at the time of your inquiry*

The system's multiple roles

The new Credit Advisory System incorporates the most important information elements from three popular D&B reports the Business Information Report, Payment Analysis Report and Industry Norms

Now through this single convenient source you have the means to decide how much time and attention each risk warrants Even more importantly special features of the system also make it easy for you to know exactly *where* to devote your time and analyses

For instance, the system s Commentary Section provides a quick read of significant data and events Everything from payment patterns to collection placement from public filings to the company s financial standing within its industry And among the features in the rest of the report is a Credit Profile that includes a payment summary the company s PAYDEX® score the traditional D&B Rating and information about the company s history and operations

But that's not all!

Beyond the assigned 'A, B or C Risk Category, the system continues to guide you when further analysis (B) or caution (C) is called for

We not only identify the class of risk for you but also recommend a course of follow up action, by offering two system options One the D&B Payment Analysis Report which details the company s payment habits with up to 24 months of PAYDEX trends and industry comparisons Two the D&B Financial Information Report which computes key financial ratios for the subject company compares them with industry norms and provides you with the financial statement

Faster more reliable and more consistent evaluation of credit risks is what the Credit Advisory System is all about Every component and feature is designed to fulfill the expressed needs of credit professionals

You can t beat the system!

The Credit Advisory System is available on line via DunsPrint® DunsVoice® and DunsDial® or through the mail

For more information contact the Credit Advisory System Product Manager at 1 201 665 5688 Or contact your D&B sales representative or local D&B office

Dun & Bradstreet Credit Services

a company of The Dun & Bradstreet Corporation

Dollar-specific credit guidelines that draw the line on your accounts

In dollar figures, Duns Credit Guide quickly shows you a credit guide line that, based on D&B data, represents the average credit exposure appropriate for the company that is—or wants to be—your customer.

Duns Credit Guide helps you determine how much credit a firm can comfortably handle so your company's resources are devoted to fulfilling orders that will bring in real dollars. And it supports your decisions with precalculated financial ratios and comparative industry data.

Quickly discover an account's purchasing power
Section I prominently displays the computer generated credit guideline plus Estimated Annual Purchases, the anticipated yearly purchases this firm will make from all suppliers.

Analyze risk components to assess a firm's true risk condition
Comments points out pertinent conditions of risk—such as secured financing or heavy debt—that might affect credit policies.
Other D&B products helpful in the assessment of this account may also be suggested.

Assess a firm's strength with industry comparisons
Section II—Condition Analysis—compares and ranks a company's key financial ratios to its industry peers. Industry quartile rankings are expressed on a scale of 1 (the highest or best quarter) through 4 (the lowest quarter).

Pinpoint financial performance changes
Section III—Trend Analysis—includes up to three years of detailed performance ratios on a company with year-by-year comparisons to its industry.

BEST AVAILABLE COPY

BE SURE NAME BUSINESS AND ADDRESS MATCH YOUR FILE

DUNS CREDIT GUIDE & ANALYSIS

DUNS 00-007-7743
GORMAN MFG CO INC

DATE PRINTED
JUN 01 198-

STARTED 1965
STMT DATE 12-31-8-
STMT TYPE FISCAL

SIC NUMBER 2751

LINE OF BUSINESS
COMMERCIAL PRINTING

492 KOLLER STREET
SAN FRANCISCO CA 94110-0012

SECTION I - BASIC CREDIT GUIDE

CUSTOMER REQUIREMENTS	$ 10 000
BASIC CREDIT GUIDE AMOUNT	$ 36 100
ESTIMATED ANNUAL PURCHASES	$16 448 000

SUBSCRIBERS OWN KNOWLEDGE OF AND EXPERIENCE AND RELATIONSHIP WITH THE SUBJECT BUSINESS SHOULD BE USED IN CONJUNCTION WITH DUN S CREDIT GUIDE WHEN DETERMINING A CREDIT LINE

COMMENTS
SECURED FINANCING PRESENT
INVENTORY TURNOVER LOW COMPARED TO INDUSTRY
HEAVY DEBT SITUATION COMPARED TO INDUSTRY
ACCOUNTS PAYABLE HEAVY COMPARED TO INDUSTRY
TRADE SLOWNESS INDICATED

ADVISE FURTHER ANALYSIS USING
FULL REPORT
DUNS FINANCIAL PROFILE
PAYMENT ANALYSIS REPORT

SECTION II - CONDITION ANALYSIS

	QUICK (TIMES)	CURRENT (TIMES)	CURRENT DEBT/NET WORTH (%)	TOTAL DEBT/NET WORTH (%)
FIRM	0 5	1 6	120 4	132 0
RANK	3	3	4	3

SECTION III - TREND ANALYSIS

	12 / 31 / 8- FIRM	RANK	12 / 31 / 8- FIRM	RANK	12 / 31 / 8- FIRM	RANK
NET PROFIT/NET SALES (%)	0 2	4	0 3	4	3 0	3
TOTAL ASSETS/NET SALES (%)	42 7	2	41 1	1	32 0	1
RETURN ON INVESTMENT (%)	0 4	4	0 8	4	9 4	2
AVERAGE COLLECTION PERIOD (DAYS)	33 4	1	24 3	1	15 6	1
INVENTORY TURNOVER (TIMES)	4 3	4	4 0	4	5 3	4
ACCOUNTS PAYABLE/NET SALES (%)	10 1	4	6 2	3	8 3	4
OVERALL RANKING	3		3		3	

Note changes that affect a firm's short and long term financial condition

Working Capital Analysis gives you the figures you need to determine the potential worth and stability of an account

Call us for additional insight

Confirm your assessment with the objectivity and insight of D&B analysts. A toll free number makes it easy for you to speak with a Duns Account Consultant who will review your account with you. Analysts are available from 8 a.m. to 8 p.m. EST

Obtain an objective credit guideline even with confidential data

If a firm gives you confidential figures—but you want assistance calculating the credit guideline—we can still help. Simply input the figures online via DunsPrint and a Confidential Credit Guide is instantly generated for you. Or read the figures over the phone to a Duns Account Consultant and a printed report will be mailed to you within 24 hours. Either online or over the phone, no confidential figures are ever retained in D&B's files

Re-assess accounts and establish new terms in your favor

Any one of the more than 28 000 daily updates to D&B's file may affect your customer's credit guideline amount—and increase your risk. If a credit guideline amount fluctuates by 10 percent or more Continuous Credit Guide automatically sends you a new report

GORMAN MFG CO INC
SAN FRANCISCO CA 94110-0012

APRIL 18 198

PAGE 2

SECTION IV - WORKING CAPITAL ANALYSIS

WORKING CAPITAL CHANGES FROM 12/31/8- TO 12/31/8-

	INCREASES	DECREASES
CURRENT ASSETS		
CASH	-	288 115
ACCOUNTS RECEIVABLE	370 818	-
INVENTORY	-	660 628
NOTES RECEIVABLE	-	-
OTHER CURRENT ASSETS	293 451	-
CURRENT LIABILITIES		
ACCOUNTS PAYABLE	-	657 805
BANK LOANS	-	125 000
NOTES PAYABLE	-	-
OTHER CURRENT LIABILITIES	606,665	-
	1 270 934	1 731 548

WORKING CAPITAL DECREASED BY 460 614

CALL (800) 223-0141 TO DISCUSS THIS ACCOUNT WITH A DUNS ACCOUNT CONSULTANT
NEW JERSEY CUSTOMERS CALL (800) 223-0142

Available through the mail or online via DunsPrint® or DunsPrint/PC. If time is short, call DunsDial® or DunsVoice® for summary details and request follow up printed reports for more complete analysis later.

For more information contact your local Dun & Bradstreet Credit Services office (consult your local telephone directory) or call Core Business Services at 201 665 5456

The Payment Analysis Report (PAR®)

The fast way to find out who's slow and who's not

The Payment Analysis Report provides you with detailed payment information on your customers so you can anticipate when you'll be paid Or if you'll be paid Each PAR supplies you with important statistics on a firm's payment habits — including comparisons, analyses and detailed summary information — that help you reduce your risk of doing business

Make Credit Decisions — Quickly and Accurately The PAYDEX® score rates a company s payment record and helps you determine how quickly you ll be paid By reviewing the PAYDEX score, you'll get an instant overview of how a firm pays its bills

Easily Establish or Adjust Lines of Credit By comparing the firm s PAYDEX trend line (the solid line) with the industry median (the dotted line) you can see how the firm's payment habits compare with other firms in the same line of business You can use this information to set or adjust your customer's line of credit

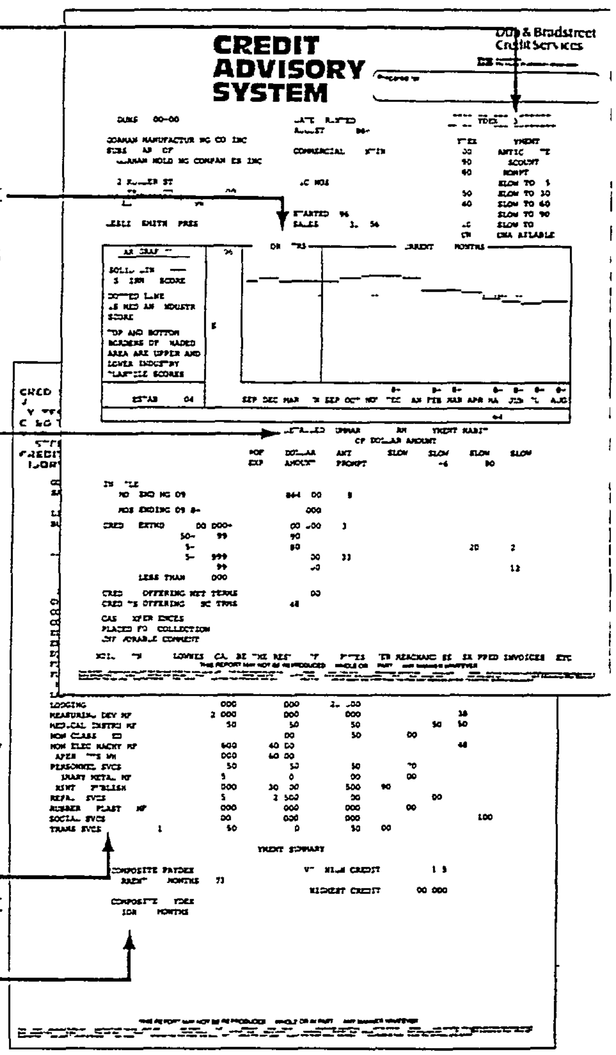
Note The display is numerical via DunsPrint® delivery

Avoid Potential Problems Before They Occur The "Detailed Summary' helps you pinpoint any changes in a firm s payment habits – at 12 months compared to the last three months — to help you reduce your risk of doing business Suppliers are broken down by dollar size extended — helping you identify how large suppliers are paid compared to small ones

In addition, 'Net Terms are distinguished from Discount Terms, indicating whether a firm may pay more quickly when a discount is offered And Accounts Placed for Collection are shown as well as Unfavorable Comments, so you can monitor the status of the account

Determine When a Firm Might Pay You — According to Industry Statistics Sometimes a firm pays certain industries more quickly than others By breaking out a firm s payment habits by "Line of Business," you can see when other suppliers are paid, and more importantly, when a firm is likely to pay you

Review Your Existing Credit Limits or New Orders A ' Payment Summary" recaps a firm's average PAYDEX for the current 12 months compared with the prior 12 months — so you can quickly check your existing credit limits or new orders against these figures The "Average High Credit and the "High Credit indicate the overall exposure of the firm



Automatic Update Protection Continuous Payment Analysis Reports

Continuous PAR alerts you to upward or downward shifts of 10 points or more in a firm s PAYDEX For one full year following your original PAR inquiry, you ll automatically be sent a new PAR Report whenever significant changes take place

Continuous PAR makes you aware of credit problems so you can take action early to avoid collection problems

The Payment Analysis Report (PAR®)

continued

The Importance of PAYDEX and Payment Trend Analysis as an Early Warning System

Often, when a firm is experiencing problems the first sign of impending difficulties is a deterioration in its paying performance Since PAYDEX scores are updated daily, these significant changes are quickly identified

The chart to the right shows a sample of ten U S firms divided into "Strong Firms" and "Failures" We have matched the maroon and gray tones to specific PAYDEX ranges (see below) for easy identification of the different stages in payment trend You can avoid potential difficulties by keeping this "early warning system" in mind every time you review PAYDEX scores

Its important to note that the firms listed in the Failures group *all* filed for bankruptcy (or made an assignment to the benefit of their creditors) in *September or October of the current year* As you can see, the PAYDEX scores for these firms were in the red *several months* before the actual failure

Payment Trend Analysis

	Prior Qtrs				Current 12 Months											
Strong Firms	8– Dec	8– Mar	8– Jun	8– Sep	8– Dec	8– Jan	8– Feb	8– Mar	8– Apr	8– May	8– Jun	8– Jul	8– Aug	8– Sep	8– Oct	8– Nov
Firm A	82	68	71	66	73	77	75	63	77	74	74	74	75	76	74	76
Firm B	79	78	79	79	84	85	79	78	77	67	70	77	83	83	82	83
Firm C	77	78	83	85	82	80	78	78	78	78	77	78	79	79	79	78
Firm D	74	73	73	73	80	79	76	80	80	79	75	73	76	76	73	74
Firm E	73	71	77	75	76	77	75	78	78	77	77	78	78	78	78	76
Failures	8– Dec	8– Mar	8– Jun	8– Sep	8– Dec	8– Jan	8– Feb	8– Mar	8– Apr	8– May	8– Jun	8– Jul	8– Aug	8– Sep	8– Oct	8– Nov
Firm V	51	52	52	51	56	56	56	52	50	48	49	54	54	54	54	54
Firm W	54	29	40	45	25	13	14	12	13	15	18	28	37	35	41	40
Firm X	32	41	37	30	27	26	26	27	30	29	24	22	22	22	26	26
Firm Y	44	44	37	30	37	37	37	38	37	37	31	21	37	37	37	37
Firm Z	40	40	40	35	30	30	30	30	30	30	30	30	30	30	25	25

Colors in the chart below indicate the following PAYDEX ranges

71 plus

56 70

55 and under

This is only a guideline and is not intended to be an absolute Guidelines may be adjusted according to the particular industry or to a company s individual requirements

The Payment Analysis Report is available on line via DunsPrint® DunsVoice® and DunsDial® or through the mail

For more information, contact the Credit Advisory System Product Manager at 1 201 665 5688 Or contact your D&B sales representative or local D&B office

Dun & Bradstreet Credit Services

a company of The Dun & Bradstreet Corporation

CREDIT ADVISORY SYSTEM

Dun & Bradstreet Credit Services
DB a company of The Dun & Bradstreet Corporation

Prepared for

PAYMENT ANALYSIS REPORT

DUNS 00-007-7743
GORMAN MANUFACTURING CO INC
(Subsidiary of
Gorman Holding Co Inc)
492 KOLLER STREET
(Formerly 400 Koller St)
SAN FRANCISCO, CA 94110-0012

TEL (415)872-9664

ŁESLIE SMITH, PRES

DATE PRINTED
AUG 23 198-

COMMERCIAL
PRINTING

SIC NOS
2751

STARTED 1965
SALES $18,931,956

PAYDEX 63

*** KEY ***

PAYDEX	PAYMENT
100	ANTICIPATE
90	DISCOUNT
80	PROMPT
70	SLOW TO 15
50	SLOW TO 30
40	SLOW TO 60
30	SLOW TO 90
20	SLOW TO 120
UN	UNAVAILABLE

FIRM VERSUS INDUSTRY PAYDEX

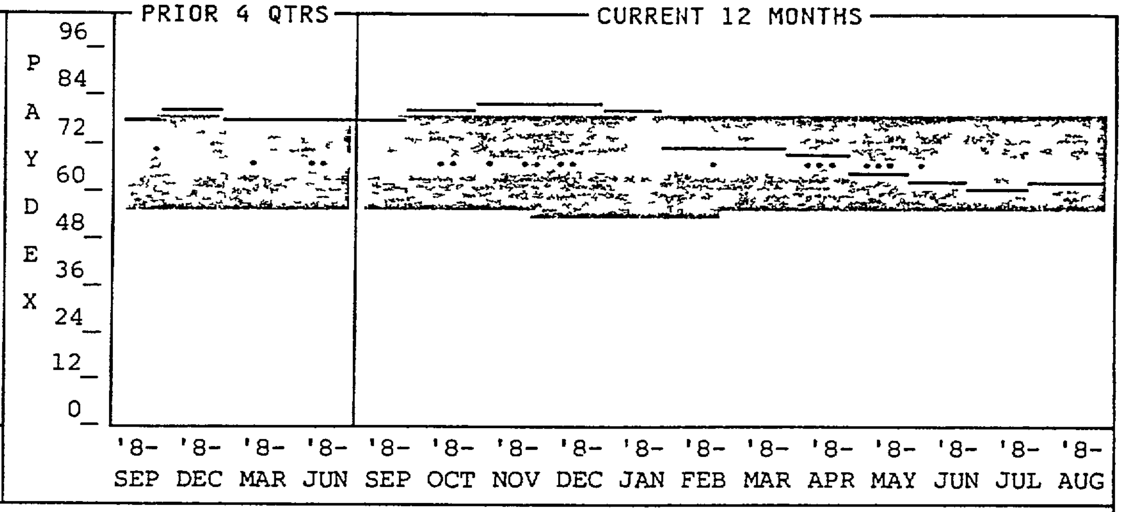
PAR GRAF GUIDE

SOLID LINE (——) IS FIRM'S SCORE,

DOTTED LINE ( ) IS MEDIAN INDUSTRY SCORE

ʻPP AND BOTTOM ʙORDERS OF SHADED AREA ARE UPPER AND LOWER INDUSTRY QUARTILE SCORES

SIC 2751
OF ESTAB 3,042



	SEP	DEC	MAR	JUN	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG
FIRM	78	80	78	78	78	80	82	82	80	70	70	69	64	59	59	63

DETAILED SUMMARY OF FIRM'S PAYMENT HABITS
/ OF DOLLAR AMOUNT

	#OF EXP #	DOLLAR AMOUNT $	ANTIC-PROMPT /	SLOW 1-30 /	SLOW 31-60 /	SLOW 61-90 /	SLOW 91+ /
IN FILE 12 MOS ENDING 09/8-	61	864,700	29	31	10	14	16
3 MOS ENDING 09/8-	27	458,000	28	25	6	24	17
CREDIT EXTND OF $100,000+	3	300,000	33	33	17	17	-
50-99,999	3	190,000	21	47	-	-	32
15-49,999	9	280,000	28	20	5	20	27
5-14,999	10	67,500	33	30	22	15	-
1- 4,999	15	22,500	33	18	18	19	12
LESS THAN 1,000	21	4,700	26	49	19	6	-
CREDITS OFFERING NET TERMS	32	423,300	30	7	3	27	33
CREDITS OFFERING DISC TRMS	8	248,700	30	44	26	-	-
ᶜ SH EXPERIENCES	-	-					
]CED FOR COLLECTION	2	12,500					
ᴗɴFAVORABLE COMMENTS	-	-					

INDICATIONS OF SLOWNESS CAN BE THE RESULT OF DISPUTES OVER MERCHANDISE, SKIPPED INVOICES, ETC

(CONTINUED)

CREDIT ADVISORY SYSTEM

Dun & Bradstreet Credit Services
DB a company of The Dun & Bradstreet Corporation

Prepared for

PAYMENT ANALYSIS REPORT

GORMAN MANUFACTURING CO INC
SAN FRANCISCO CA 94110-0012

* PAYMENT HABITS BY INDUSTRY *

LINE OF BUSINESS	# EXP	DOLLAR AMOUNT	HIGHEST CREDIT	AVERAGE HGH CR	ANT PPT	SLO 1-30	SLO 31-60	SLO 61-90	SLO 91+
		$	$	$	/	/	/	/	/
AIR TRANS	5	10,250	5,000	2,050	51	-	-	49	-
CHEMICALS WH	1	500	500	500	50	50	-	-	-
COMMUNICATIONS	2	5,750	5,000	2,875	50	7	43	-	-
COMPUTER/DP SVCS	2	3,500	2,500	1,750	-	29	-	35	36
ELEC EQUIP WH	3	261,000	100,000	87,000	21	58	21	-	-
ELEC MACHY MF	5	170,500	100,000	34,100	50	2	47	1	-
EQUIP RENTAL	1	2,500	2,500	2,500	100	-	-	-	-
FUR & FIX MF	1	80,000	80,000	80,000	50	50	-	-	-
FURNITURE RET	1	250	250	250	-	-	100	-	-
INDUSL MACHY WH	6	10,150	10,000	1,692	99	1	-	-	-
LAB INSTRMTS MF	1	50	50	50	-	100	-	-	-
LODGING	2	45,000	40,000	22,500	-	11	-	-	89
MEASURING DEV MF	2	32,000	30,000	16,000	39	23	-	38	-
MEDICAL INSTRU MF	1	50	50	50	-	-	50	50	-
} CLASSIFIED	2	1,500	1,000	750	-	100	-	-	-
NON ELEC MACHY MF	6	92,600	40,000	15,433	24	3	3	48	22
PAPER PDTS WH	8	103,000	60,000	12,875	100	-	-	-	-
PERSONNEL SVCS	1	1,050	1,050	1,050	1	20	5	-	74
PRIMARY METAL MF	1	7,500	7,500	7,500	-	100	-	-	-
PRINT & PUBLISH	6	33,000	30,000	5,500	90	2	-	8	-
REPAIR SVCS	1	2,500	2,500	2,500	-	-	100	-	-
RUBBER & PLASTIC MF	1	1,000	1,000	1,000	-	100	-	-	-
SOCIAL SVCS	1	1,000	1,000	1,000	-	-	-	-	100
TRANS SVCS	1	50	50	50	100	-	-	-	-

* PAYMENT SUMMARY *

COMPOSITE PAYDEX
CURRENT 12 MONTHS = 71

COMPOSITE PAYDEX
PRIOR 12 MONTHS = 79

AVG HIGH CREDIT = $14,175

HIGHEST CREDIT = $100,000

Determine when a firm might pay you—according to industry statistics
Sometimes a firm pays certain industries more quickly than others. By breaking out a firm's payment habits by Line of Business, you can see when other suppliers are paid and more importantly when a firm is likely to pay you.

Review your existing credit limits or new orders
Payment Summary recaps a firm's average PAYDEX for the current 12 months compared with the prior 12 months—so you can quickly compare this year's performance to last year's and pinpoint significant trends. The 'Average High Credit' and the 'High Credit' indicate the overall exposure of the firm.

Detect the early warning signs of financial distress
Often, when a firm is experiencing problems, the first sign of impending difficulties is a deterioration in payment performance. These significant changes are quickly identified because PAYDEX scores are updated daily.

Monitor payment performance changes to avoid collection problems
With Continuous PAR, for one full year following your original Payment Analysis Report inquiry, you'll automatically be sent an updated report whenever significant changes take place. Continuous PAR alerts you to upward or downward shifts of 10 points or more in a firm's PAYDEX. Continuous PAR makes you aware of credit problems so you can take action early to avoid trouble.

payment analysis PAR report   Dun & Bradstreet

GORMAN MANUFACTURING CO
SAN FRANCISCO CA 94110-0012   * PAYMENT HABITS BY INDUSTRY *   PAGE 2

LINE OF BUSINESS	# EXP	DOLLAR AMOUNT	HIGHEST CREDIT	AVERAGE HIGH CR	ANT	SLO 1-30	SLO 31-60	SLO 61-90	SLO 91+
		$	$	$	%	%	%	%	%
AIR TRANS	5	10 250	5 000	2 050	51	-	-	49	-
CHEMICALS WH	1	500	500	500	50	50	-	-	-
COMMUNICATIONS	2	5 750	5 000	2 875	50	7	43	-	-
COMPUTER/DP SVCS	2	3 500	2 500	1 750	-	29	-	35	36
ELEC EQUIP WH	3	261 000	100 000	87 000	21	58	21	-	-
ELEC MACHY MF	5	170 500	100 000	34 100	50	2	47	1	-
EQUIP RENTAL	1	2 500	2 500	2 500	100	-	-	-	-
FUR & FIX MF	1	80 000	80 000	80 000	50	50	-	-	-
FURNITURE RET	1	250	250	250	-	-	100	-	-
INDUSL MACHY WH	6	10 150	10 000	1 [illegible]	99	1	-	-	-
LAB INSTRMTS MF	1	50	50	50	-	100	-	-	-
LODGING	2	45 000	40 000	22 500	-	11	-	-	89
MEASURING DEV MF	2	32 000	30 000	16 000	39	23	-	38	-
MEDICAL INSTRU MF	1	50	50	50	-	-	50	50	-
NON CLASSIFIED	2	1 500	1 000	750	-	100	-	-	-
NON ELEC MACHY MF	6	92 600	40 000	15 433	24	3	3	48	22
PAPER PDTS WH	8	103 000	60 000	12 875	100	-	-	-	-
PERSONNEL SVCS	1	1 050	1 050	1 050	1	20	5	-	74
PRIMARY METAL MF	1	7 500	7 500	7 500	-	100	-	-	-
PRINT & PUBLISH	6	33 000	30 000	5 500	90	2	-	8	-
REPAIR SVCS	1	2 500	2 500	2 500	-	-	100	-	
RUBBER & PLASTIC MF	1	1 000	1 000	1 000	-	100	-	-	-
SOCIAL SVCS	1	1 000	1 000	1 000	-		-	-	100
TRANS SVCS	1	50	50	50	100	-	-	-	-

* PAYMENT SUMMARY *

COMPOSITE PAYDEX
CURRENT 12 MONTHS = 71

COMPOSITE PAYDEX
PRIOR 12 MONTHS = 79

AVG HIGH CREDIT = $ 14 175

HIGHEST CREDIT = $ 100 000

Available through the mail or online via DunsPrint® or DunsPrint/PC. If time is short, call DunsDial® or DunsVoice® for summary details and request follow-up printed reports for more complete analysis later.
For more information, contact your local Dun & Bradstreet Credit Services office (consult your local telephone directory) or call Core Business Services at 201 665 5456.

Insight into the dynamics of payment performance and trends

The Payment Analysis Report gives you a quick review of a firm's payment habits so you can determine how the business is likely to pay you. It features the dynamic PAYDEX® score and detailed payment information to help you determine payment trends over the last two years, how the firm is paying its bills *right now* and if a firm may be heading for financial difficulty.

Make credit decisions based on a firm's *current* payment performance

The PAYDEX score rates a company's payment record and helps you determine how quickly you'll be paid. It gives you an instant overview of how a firm pays its bills *today*.

Easily establish or adjust lines of credit

By comparing the firm's PAYDEX trend line (the solid line) with the industry median (the dotted line) you can see how the firm's payment habits compare with other firms in the same line of business. This information helps you set, or adjust, your customer's line of credit. Note: The display is numerical via DunsPrint© delivery.

Avoid potential problems before they occur

The Detailed Summary helps you pinpoint any changes in a firm's payment habits to help you reduce your risk of doing business. Suppliers are broken down by dollar size—to help you identify how the company pays based on the amount of credit being extended.

In addition, Net Terms are distinguished from Discount Terms to indicate if a firm pays more quickly when a discount is offered. Accounts Placed for Collection are shown, as are Unfavorable Comments.

payment analysis PAR report — Dun & Bradstreet

DUNS 00-007-7743

DATE PRINTED
AUGUST 23 198-

GORMAN MANUFACTURING CO INC
SUBSIDIARY OF
GORMAN HOLDING COMPANIES INC

COMMERCIAL PRINTING

492 KOLLER ST
SAN FRANCISCO CA 94110-0012
TEL 415 555 9664

SIC NOS
2751

STARTED 1965
SALES $18 931 956

LESLIE SMITH PRES

PAYDEX 63

KEY **

PAYDEX	PAYMENT
100	ANTICIPATE
90	DISCOUNT
80	PROMPT
70	SLOW TO 15
50	SLOW TO 30
40	SLOW TO 60
30	SLOW TO 90
20	SLOW TO 1 0
UN	UNAVAILABLE

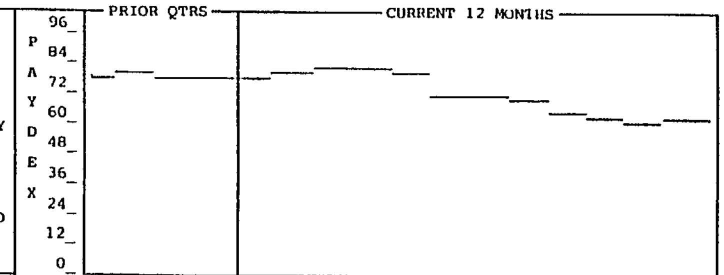
PAR GRAF GUIDE

SOLID LINE (——) IS FIRM S SCORE

DOTTED LINE ( ) IS MEDIAN INDUSTRY SCORE

TOP AND BOTTOM BORDERS OF SHADED AREA ARE UPPER AND LOWER INDUSTRY QUARTILE SCORES

SIC 2751
OF ESTAB 3 042



	8- SEP	8- DEC	8 MAR	8- JUN	8- SEP	8 OCT	8- NOV	8- DEC	8- JAN	8- FEB	8- MAR	8- APR	8- MAY	8 JUN	8- JUL	8- AUG
FIRM	78	80	78	78	78	80	82	82	80	70	70	( )	(4	59	59	63

DETAILED SUMMARY OF FIRM S PAYMENT HABITS
% OF DOLLAR AMOUNT

	#OF EXP	DOLLAR AMOUNT $	ANTIC-PROMPT %	SLOW 1-30 %	SLOW 31-60 %	SLOW 61 90 %	SLOW 91+ %
IN FILE							
12 MOS ENDING 09/8-	61	864 700	29	31	10	14	16
3 MOS ENDING 09/8-	27	458 000	28	25	6	24	17
CREDIT EXTND OF $100 000+	3	300 000	33	33	17	17	-
50-99 999	3	190 000	21	47	-	-	32
15-49 999	9	280 000	28	20	5	20	27
5-14 999	10	67 500	33	30	22	15	-
1 4 999	15	22 500	33	18	18	19	12
LESS THAN 1 000	21	4 700	26	49	19	6	
CREDITS OFFERING NET TERMS	32	423 300	30	7	3	27	33
CREDITS OFFERING DISC TRMS	8	248 700	30	44	26	-	-
CASH EXPERIENCES	-	-					
PLACED FOR COLLECTION	2	12 500					
UNFAVORABLE COMMENTS	-						

INDICATIONS OF SLOWNESS CAN BE THE RESULT OF DISPUTES OVER MERCHANDISE SKIPPED INVOICES ETC

The Credit Advisor

The basic component in D&B's new Credit Advisory System, the Credit Advisor brings together in one place information elements from several D&B reports And introduces a unique method of ranking for fast, systematic risk assessment.

Credit Risk Category
Through an automated analysis of the information available to D&B on a business one of three risk categories (A B or C) is assigned to the company After reviewing the critical information flagged in the Commentary Section, you decide how to interpret each risk category according to your credit policy the size of exposure and the unique needs of your business

The three Credit Risk Categories and the meaning of each

"A" —The information in Dun & Bradstreet's file on this account suggests a relatively low risk

For further analysis review Payment Analysis Report (provides detailed trade analysis) and/or Financial Information Report (financial statement with key ratios and industry norms)

"B" —The information in Dun & Bradstreet's file on this account suggests moderate risk

Further analysis is also advised using Payment Analysis Report and/or Financial Information Report.

"C" —The information in Dun & Bradstreet's file strongly suggests a close examination of this account

Specifically advise using Payment Analysis Report and/or Financial Information Report

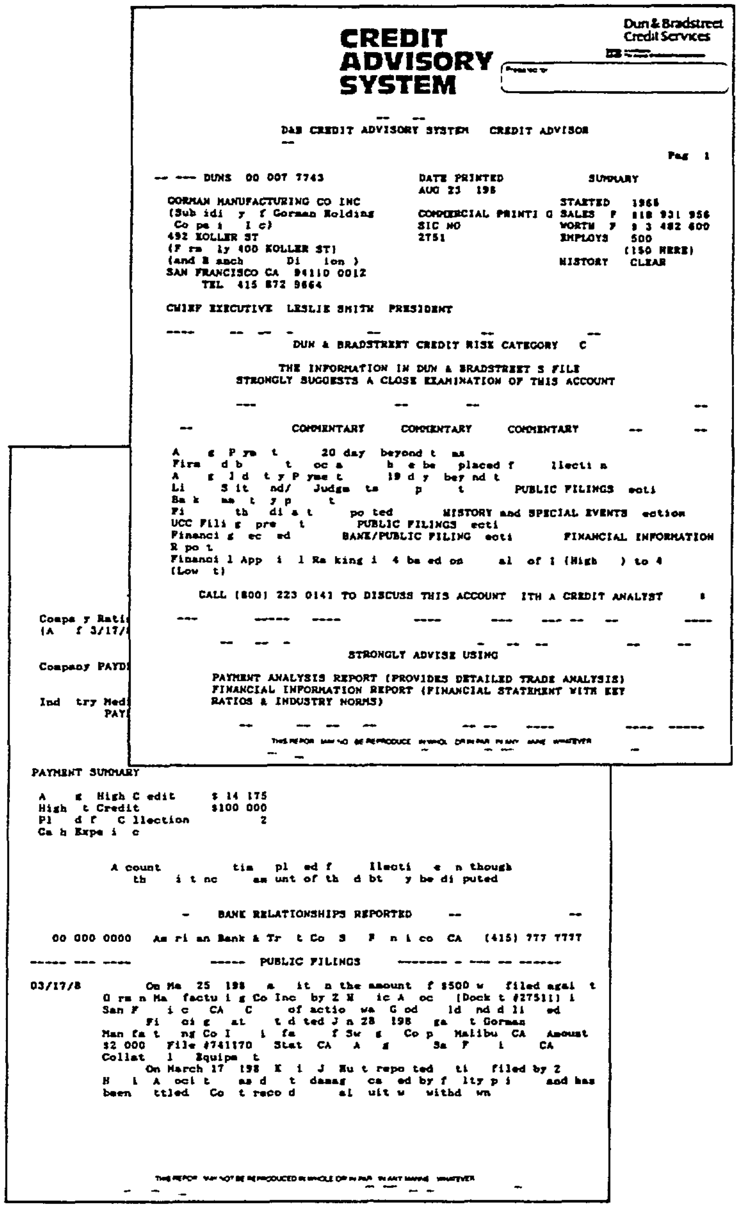
For each risk category the Credit Advisor presents a summary of the data used to make the recommendation in the Commentary Section In situations where a B or C risk category is indicated a careful review of all information in the Credit Advisor is advised Additionally further analysis of the company's payments or financials may be recommended using other D&B products depending on identified conditions of the business

Other sections of the Credit Advisor include

Commentary
Highlights significant data and events reflecting the criteria that make up the recommended risk category

Credit Profile
Features overall D&B Rating PAYDEX® and pertinent information relating to the company's payment experiences

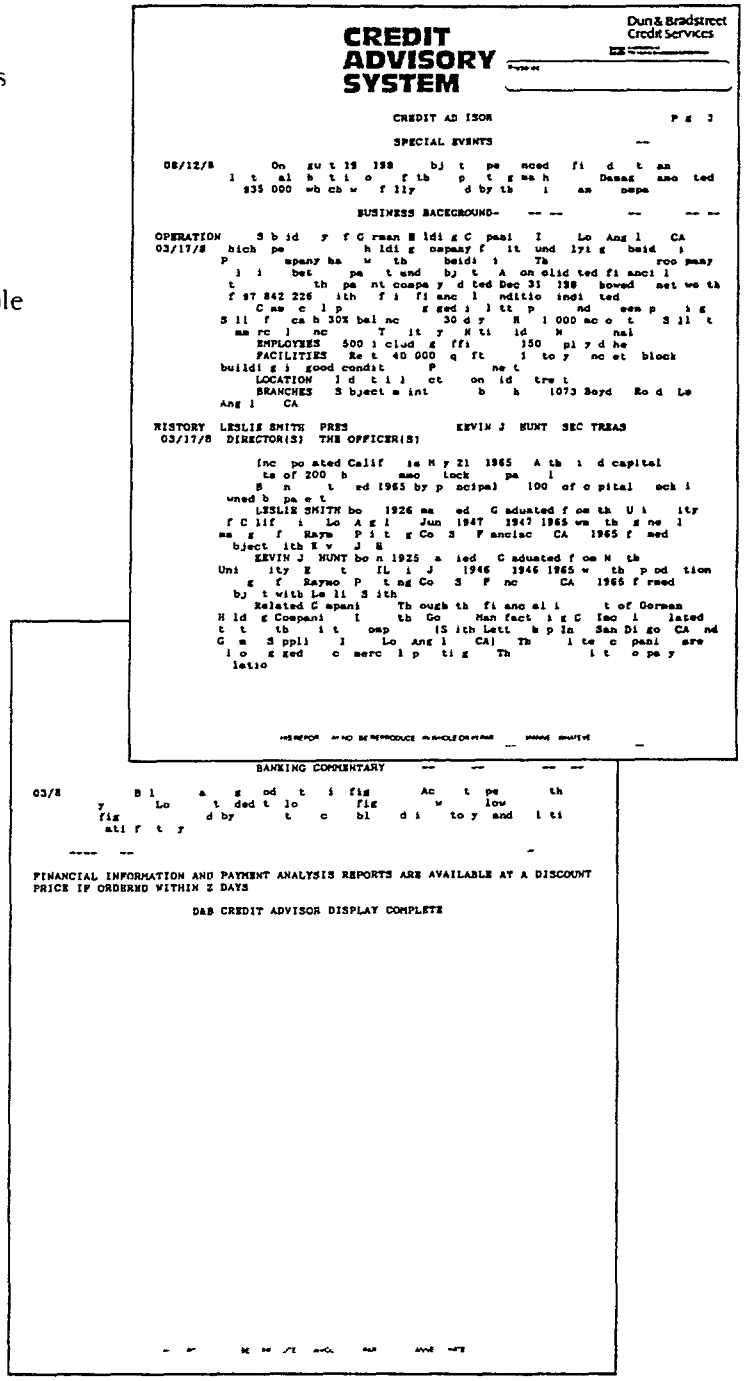
Company Rating The D&B Rating is assigned on the basis of a periodic review by a D&B business analyst of the company's financial statement payment history business background management experience and bank relations



Company PAYDEX The PAYDEX is a dollar weighted numerical score that indicates a company's payment performance It is produced by combining up to 875 individual payment experiences and provides an instant overview of a company's current payment posture

Industry PAYDEX Median A median PAYDEX based upon the firm's SIC grouping that is used for comparative analysis with the firm's PAYDEX

Payment Summary This information is computed from the company's trade experiences and includes four data elements Average High Credit High Credit Placed for Collection and Cash Experiences



Bank Relationships Reported

(Appears on Page 2 of Credit Advisor)

May include checking, savings or lending institutions. The names provided may not represent the full extent of the firm's banking relationships.

Public Filings

(Appears on Page 2 of Credit Advisor)

May include public record information such as suits, judgments, tax or other liens and Uniform Commercial Code Filings. May also contain applicable releases and status updates of public record items.

Special Events

Highlights significant activities or changes in the business. May include bankruptcy details, changes in ownership, officers, partners or business location, fire or other disaster details, interim financial results and other major events.

Operations

Describes what the firm does, number of employees, a description of facilities and location. It may also provide names and locations of branch operations plus identify and describe any subsidiary businesses. This information is generally provided by the company's management.

History

Provides background details on the company including the year it was started, incorporation details, changes in control and ownership information. May also profile the business experience of the company's principals or owners. May contain year of birth, marital status, educational background and the names and business description of any affiliated companies. This information is generally provided by the company's management.

Banking Commentary

May include average checking/savings account balances, previous and current borrowing history and a determination of whether the overall banking relations are satisfactory. This information, normally provided directly by a bank or banks, may not represent the full extent of the firm's banking relationship.

The Credit Advisor is available on-line via DunsPrint®, DunsVoice® and DunsDial® or through the mail.

For more information contact the Credit Advisory System Product Manager at 1 201 665-5688. Or contact your D&B sales representative or local D&B office.

Dun & Bradstreet Credit Services

D&B a company of The Dun & Bradstreet Corporation

Credit Advisory System
Credit Advisor

CREDIT ADVISORY SYSTEM

Dun & Bradstreet Credit Services
a company of The Dun & Bradstreet Corporation

Prepared for


```
-------DUNS  00-007-7743------------DATE PRINTED-----------SUMMARY----------
                                    AUG 23, 198-
  GORMAN MANUFACTURING CO INC                            STARTED    1965
  (Subsidiary of Gorman Holding     COMMERCIAL PRINTING  SALES  F   $18,931,956
  Companies Inc)                    SIC NO               WORTH  F   $ 3,482,600
  492 KOLLER ST                     2751                 EMPLOYS    500
  (Formerly 400 KOLLER ST)                                          (150 HERE)
  (and Branches or Divisions)                            HISTORY    CLEAR
  SAN FRANCISCO CA  94110-0012
       TEL  415 872-9664

  CHIEF EXECUTIVE  LESLIE SMITH, PRESIDENT
```

DUN & BRADSTREET CREDIT RISK CATEGORY C

THE INFORMATION IN DUN & BRADSTREET'S FILE
STRONGLY SUGGESTS A CLOSE EXAMINATION OF THIS ACCOUNT

COMMENTARY-----COMMENTARY-----COMMENTARY

- Average Payments are 20 days beyond terms
- Firm's debts on 2 occasion(s) have been placed for collection
  Average Industry Payments are 19 days beyond terms
  Liens, Suits and/or Judgments are present - see PUBLIC FILINGS section
- Bank commentary present
- Fire or other disaster reported - see HISTORY and SPECIAL EVENTS sections
- UCC Filings present - see PUBLIC FILINGS section
- Financing secured - see BANK/PUBLIC FILING sections or FINANCIAL INFORMATION Report
- Financial Appraisal Ranking is 4 based on a scale of 1 (Highest) to 4 (Lowest) compared to the industry

*** CALL (800) 223-0141 TO DISCUSS THIS ACCOUNT WITH A CREDIT ANALYST ***

STRONGLY ADVISE USING

- PAYMENT ANALYSIS REPORT (PROVIDES DETAILED TRADE ANALYSIS)
- FINANCIAL INFORMATION REPORT (FINANCIAL STATEMENT WITH KEY RATIOS & INDUSTRY NORMS)

CREDIT ADVISORY SYSTEM

Dun & Bradstreet Credit Services
a company of The Dun & Bradstreet Corporation

Prepared for

REDIT ADVISOR
AGE 2 OF 3

--------------------CREDIT PROFILE--------------------

Company Rating	3A3	Estimated Financial Strength is $1,000,000 - $9,999,999 and Composite Credit Appraisal is FAIR
(As of 03/17/8-)		
Company PAYDEX	63	Average Payments are 20 Days Beyond Terms (based on 61 trade experiences)
Industry Median PAYDEX	65	Average Industry Payments are 19 Days Beyond Terms

AYMENT SUMMARY

Average High Credit	$ 14,175
Highest Credit	$100,000
Placed for Collection	2
̄h Experiences	-

Accounts are sometimes placed for collection even though the existence or amount of the debt may be disputed

--------------------BANK RELATIONSHIPS REPORTED--------------------

00-000-0000 American Bank & Trust Co (415) 777-7777
San Francisco, CA

--------------------PUBLIC FILINGS--------------------

03/17/8- On Mar 25, 198-, a suit in the amount of $500 was filed against Gorman Manufacturing Co Inc by Z Henric Assoc (Docket #27511) in San Francisco, CA Cause of action was Goods sold and delivered

Financing statement dated Jan 28, 198- against Gorman Manufacturing Co Inc in favor of Swinger Corp , Malibu, CA Amount $2,000 File #741170 State CA Assignee San Francisco, CA Collateral Equipment

On March 17, 198- Kevin J Hunt reported action filed by Z Henric Associates was due to damages caused by faulty printer and has been settled Court records reveal suit was withdrawn

--------------------SPECIAL EVENTS--------------------

8/12/8- On August 19, 198-, subject experienced a fire due to an electrical short in one of their printing machines Damages amounted to $35,000, which was fully covered by their insurance company

CREDIT ADVISORY SYSTEM

Dun & Bradstreet Credit Services

a company of The Dun & Bradstreet Corporation

Prepared for

---------------------------BUSINESS BACKGROUND---------------------------

OPERATION 03/17/8- Subsidiary of Gorman Holding Companies Inc , Los Angeles, CA, which operates as a holding company for its underlying subsidiaries Parent company has two other subsidiaries There are no intercompany relations between parent and subject A consolidated financial statement on the parent company, dated Dec 31, 198- showed a net worth of $7,842,226, with a fair financial condition indicated

Commercial printing, engaged in letterpress and screen printing Sells for cash 30/ balance net 30 days Has 1,000 accounts Sells to commercial concerns Territory Nationwide Nonseasonal

EMPLOYEES 500 including officers 150 employed here

FACILITIES Rents 40,000 sq ft in 1 story concrete block building in good condition Premises neat

LOCATION Industrial section on side street

BRANCHES Subject maintains a branch at 1073 Boyden Road, Los Angeles, CA

HISTORY LESLIE SMITH, PRES KEVIN J HUNT, SEC-TREAS
03/17/8- DIRECTOR(S) THE OFFICER(S)

Incorporated California May 21, 1965 Authorized capital consists of 200 shares common stock, no par value

Business started 1965 by principals 100/ of capital stock is owned by parent

LESLIE SMITH born 1926 married Graduated from the University of California, Los Angeles, June 1947 1947-1965 was the general manager for Raymor Printing Co San Francisco, CA 1965 formed subject with Kevin J Hunt

KEVIN J HUNT born 1925 married Graduated from Northwestern University, Evanston, IL, in June 1946 1946-1965 was the production manager for Raymor Printing Co , San Francisco, CA 1965 formed subject with Leslie Smith

Related Companies Through the financial interest of Gorman Holding Companies, Inc , the Gorman Manufacturing Co Inc is related to two other sister companies (Smith Lettershop Inc, San Diego, CA and Gorman Suppliers Inc , Los Angeles, CA) These sister companies are also engaged in commercial printing There are no intercompany relations

---------------------------BANKING COMMENTARY---------------------------

03/8- Balances average moderate six figures Account open over three years Loans extended to low seven figures, now owes low seven figures, secured by accounts receivable and inventory, and relation satisfactory

---

F[illegible]NCIAL INFORMATION AND PAYMENT ANALYSIS REPORTS ARE AVAILABLE AT A DISCOUNT [illegible]E IF ORDERED WITHIN 2 DAYS

Information plus answers for fast risk assessment

Quickly assess the potential risk of doing business with other companies with the Credit Advisory System. The system ranks an account into one of three categories so you can allocate your resources according to the risk each account presents.

The basic component in the Credit Advisory System, the Credit Advisor, consolidates information from three D&B reports—the Business Information Report, Payment Analysis Report and Industry Norms—to give you a quick analysis of the business. It also supplies the unique "ABC" risk assessment for fast systematic analysis on every company.

Determine the risk quality of every account
Through an automated analysis of a company's D&B file, a risk category ("A", "B" or "C") is calculated and assigned at the time of your inquiry. You'll instantly know how much time and attention each risk warrants, allowing you to turn low risk orders into dollars faster. And give medium- to high-risk accounts the in-depth analysis it takes to establish realistic credit terms that minimize collection problems later.

The three Credit Risk Categories:

A The information in Dun & Bradstreet's file on this account suggests relatively low risk.

B The information in Dun & Bradstreet's file on this account suggests moderate risk.

C The information in Dun & Bradstreet's file strongly suggests a close examination of this account.

Understand risk components to establish credit relationships
Commentary highlights significant data and events reflecting the criteria that make up the assigned risk category. After reviewing the critical information flagged in the Commentary section, you decide how to interpret each risk category according to your credit policy, the size of exposure and the unique needs of your business.

Dun & Bradstreet
Credit Services

CREDIT ADVISORY SYSTEM

Prepared for

```
CREDIT ADVISOR
PAGE  1 OF  3

-------DUNS  00-007-7743------------DATE PRINTED-----------SUMMARY----------
                                    AUG 23  198-
  GOPMAN MANUFACTURING CO INC                           STARTED     1965
  (Subsidiary of Gorman Holding     COMMERCIAL PRINTING SALES  F    $18 931 956
   Companies Inc)                   SIC NO              WORTH  F    $ 3 482 600
  492 KOLLER ST                     2751                EMPLOYS     500
  (Formerly 400 KOLLER ST)                                         (150 HERE)
  (and Branches or Divisions)                           HISTORY     CLEAR
  SAN FRANCISCO CA  94110-0012
       TEL  415 555-9664

  CHIEF EXECUTIVE  LESLIE SMITH  PRESIDENT
---------------------------------------------------------------------------
-              DUN & BRADSTREET CREDIT RISK CATEGORY   C                  -
-                                                                         -
-              THE INFORMATION IN DUN & BRADSTREET'S FILE                 -
-         STRONGLY SUGGESTS A CLOSE EXAMINATION OF THIS ACCOUNT           -
-
---------------------------------------------------------------------------

-------------------COMMENTARY-----COMMENTARY-----COMMENTARY-----------------

 - Average Payments are 20 days beyond terms
 - Firm's debts on   2 occasion(s) have been placed for collection
 - Average Industry Payments are 19 days beyond terms
 - Liens  Suits and/or Judgments are present - see PUBLIC FILINGS section
 - Bank commentary present
 - Fire or other disaster reported - see HISTORY and SPECIAL EVENTS sections
 - UCC Filings present - see PUBLIC FILINGS section
 - Financing secured - see BANK/PUBLIC FILING sections or FINANCIAL INFORMATION
   Report
 - Financial Appraisal Ranking is 4 based on a scale of 1 (Highest) to 4
   (Lowest) compared to the industry

*** CALL (800) 223-0141 TO DISCUSS THIS ACCOUNT WITH A DUNS ACCOUNT CONSULTANT ***
---------------------------------------------------------------------------

---------------------------------------------------------------------------
-                        STRONGLY ADVISE USING                            -
-                                                                         -
-      - PAYMENT ANALYSIS REPORT (PROVIDES DETAILED TRADE ANALYSIS)       -
-      - FINANCIAL INFORMATION REPORT (FINANCIAL STATEMENT WITH KEY       -
-        RATIOS & INDUSTRY NORMS)                                         -
-                                                                         -
---------------------------------------------------------------------------
```

Verify a firm s credit potential
The D&B Rating is a composite credit appraisal that helps assess a firm s credit worthiness

Set terms according to a firm s timeliness of payment
The PAYDEX is a dollar weighted numerical score that indicates a company s payment performance It combines up to 875 individual payment experiences to provide an instant overview of a company s current payment posture

Put a firm s payment performance into perspective by comparing it to the industry
A median PAYDEX for the firm s line of business is provided for comparative analysis

Review the highlights of a firm s credit experiences
This information summarizes the company s trade experiences from four key perspectives

Confirm a company s bank connections
May include checking, savings or lending institutions The names provided may not represent the full extent of the firm s banking relationships

Be aware of public record activity that could affect a firm s stability
Public Filings may include suits filed judgments liens and Uniform Commercial Code filings—information that you would want to factor into your overall evaluation of a firm—consolidated for easy reference

Keep pace with major changes that could impact your credit relationships
Changes in ownership, acquisitions, fires, burglaries, bankruptcies—all could affect your credit decisions about a firm Special Events alerts you to major changes within the company

CREDIT ADVISORY SYSTEM

Dun & Bradstreet Credit Services

P pa ed for

CREDIT ADVISOR
PAGE 2 OF 3

--------------------------------CREDIT PROFILE--------------------------------

Company Rating 3A3
(As of 03/17/8-)

Estimated Financial Strength is
$1 000 000 - $9 999 999 and
Composite Credit Appraisal is FAIR

Company PAYDEX 63

Average Payments are
20 Days Beyond Terms
(based on 61 trade experiences)

Industry Median
PAYDEX 65

Average Industry Payments are:
19 Days Beyond Terms

PAYMENT SUMMARY

Average High Credit	$ 14 175
Highest Credit	$100 000
Placed for Collection	2
Cash Experiences	-

Accounts are sometimes placed for collection even though the existence or amount of the debt may be disputed

--------------------------BANK RELATIONSHIPS REPORTED--------------------------

00-000-0000 American Bank & Trust Co (415) 777-7777
San Francisco, CA

--------------------------------PUBLIC FILINGS--------------------------------

03/17/8- On Mar 25 198- a suit in the amount of $500 was filed against Gorman Manufacturing Co Inc by Z Henric Assoc (Docket #27511) in San Francisco CA Cause of action was Goods sold and delivered
Financing statement dated Jan 28 198- against Gorman Manufacturing Co Inc in favor of Swinger Corp Malibu CA Amount $2 000 File #741170 State CA Assignee San Francisco CA Collateral Equipment
On March 17 198- Kevin J Hunt reported action filed by Z Henric Associates was due to damages caused by faulty printer and has been settled Court records reveal suit was withdrawn

--------------------------------SPECIAL EVENTS--------------------------------

08/12/8- On August 19, 198- subject experienced a fire due to an electrical short in one of their printing machines Damages amounted to $35 000, which was fully covered by their insurance company

Understand a firm's operational details

Describes what the firm does, number of employees, a description of facilities and location. It may also provide names and locations of branch operations plus identify and describe any subsidiary businesses. This information is generally provided by the company's management.

Evaluate the experience of the business and its principals to capitalize on hidden potential

A firm with potential is easier to spot when you know more about the company and its management. This section shows the history of the company and the background of the principals or owners. Details on related companies may also be included to give you insight into the company's overall structure.

Confirm banking details for insight into a firm's purchasing power and liquidity

Can a company afford to do business with your firm? This section may include average checking/savings account balances, current and previous borrowing history and an appraisal of the overall banking relations.

Support your analysis with Credit Advisory System options

Determine when, or if, you'll be paid

The Credit Advisory System includes the Payment Analysis Report (see separate insert) to give you more in-depth payment information on your customers. So you know *before* you approve credit terms how a company usually pays its bills. Each Payment Analysis Report supplies you with important statistics on a firm's payment habits—including comparisons, analyses and detailed summary information—that help you reduce your risk of doing business.

Evaluate a firm's financial standing within its industry

The other option within the Credit Advisory System, the Financial Information Report (see separate insert), helps you easily incorporate sophisticated financial statement analysis into your account review procedures. And helps you quickly assess the financial status of a firm compared to its industry.

CREDIT ADVISORY SYSTEM

Dun & Bradstreet Credit Services

P epared for

```
CREDIT ADVISOR
PAGE  3 OF  3

----------------------------BUSINESS BACKGROUND------------------------------

OPERATION     Subsidiary of Gorman Holding Companies Inc   Los Angeles  CA
03/17/8- which operates as a holding company for its underlying subsidiaries
         Parent company has two other subsidiaries   There are no intercompany
         relations between parent and subject   A consolidated financial
         statement on the parent company  dated Dec 31  198- showed a net worth
         of $7 842 226  with a fair financial condition indicated
              Commercial printing  engaged in letterpress and screen printing
         Sells for cash 30% balance net 30 days   Has 1 000 accounts   Sells to
         commercial concerns   Territory  Nationwide  Nonseasonal
              EMPLOYEES   500 including officers   150 employed here
              FACILITIES   Rents 40 000 sq  ft  in 1 story concrete block
         building in good condition   Premises neat
              LOCATION   Industrial section on side street
              BRANCHES   Subject maintains a branch at 1073 Boyden Road  Los
         Angeles  CA

HISTORY  LESLIE SMITH  PRES                KEVIN J  HUNT  SEC-TREAS
 03/17/8- DIRECTOR(S)  THE OFFICER(S)

              Incorporated California May 21, 1965   Authorized capital
         consists of 200 shares common stock  no par value
              Business started 1965 by principals   100% of capital stock is
         owned by parent
              LESLIE SMITH born 1926 married   Graduated from the University
         of California  Los Angeles  June 1947   1947-1965 was the general
         manager for Raymor Printing Co  San Francisco  CA   1965 formed
         subject with Kevin J  Hunt
              KEVIN J  HUNT born 1925 married   Graduated from Northwestern
         University  Evanston  IL  in June 1946   1946-1965 was the production
         manager for Raymor Printing Co   San Francisco  CA   1965 formed
         subject with Leslie Smith
              Related Companies   Through the financial interest of Gorman
         Holding Companies  Inc , the Gorman Manufacturing Co Inc  is related
         to two other sister companies (Smith Lettershop Inc  San Diego, CA and
         Gorman Suppliers Inc , Los Angeles  CA)   These sister companies are
         also engaged in commercial printing   There are no intercompany
         relations

-----------------------------BANKING COMMENTARY-------------------------------

 03/8-        Balances average moderate six figures   Account open over three
         years   Loans extended to low seven figures  now owes low seven
         figures, secured by accounts receivable and inventory  and relation
         satisfactory

------------------------------------------------------------------------------

FINANCIAL INFORMATION AND PAYMENT ANALYSIS REPORTS ARE AVAILABLE AT A DISCOUNT
PRICE IF ORDERED WITHIN 2 DAYS
```

The Financial Information Report

This report contains four key ratios, industry norms and the financial statement when available

Financial Profile
Computes four key ratios measuring debt utilization efficiency and short term solvency and compares them with norms for the respective industry From this information a financial appraisal is computed indicating where the firm ranks on a composite basis in relation to its industry

The four key ratios are

Quick Ratio—liquid assets (cash, accounts receivable) divided by current liabilities This ratio measures the ability of the business to meet its current debts if creditors were to press for immediate payment.

Current Ratio—derived by dividing current assets by current liabilities This ratio provides a general indication of the ability of the business to meet its current debts

Debt Utilization—obtained by dividing total current long term and deferred liabilities by tangible net worth This ratio measures the relationship of the capital provided by creditors (total liabilities) to the amount of the owners' investment.

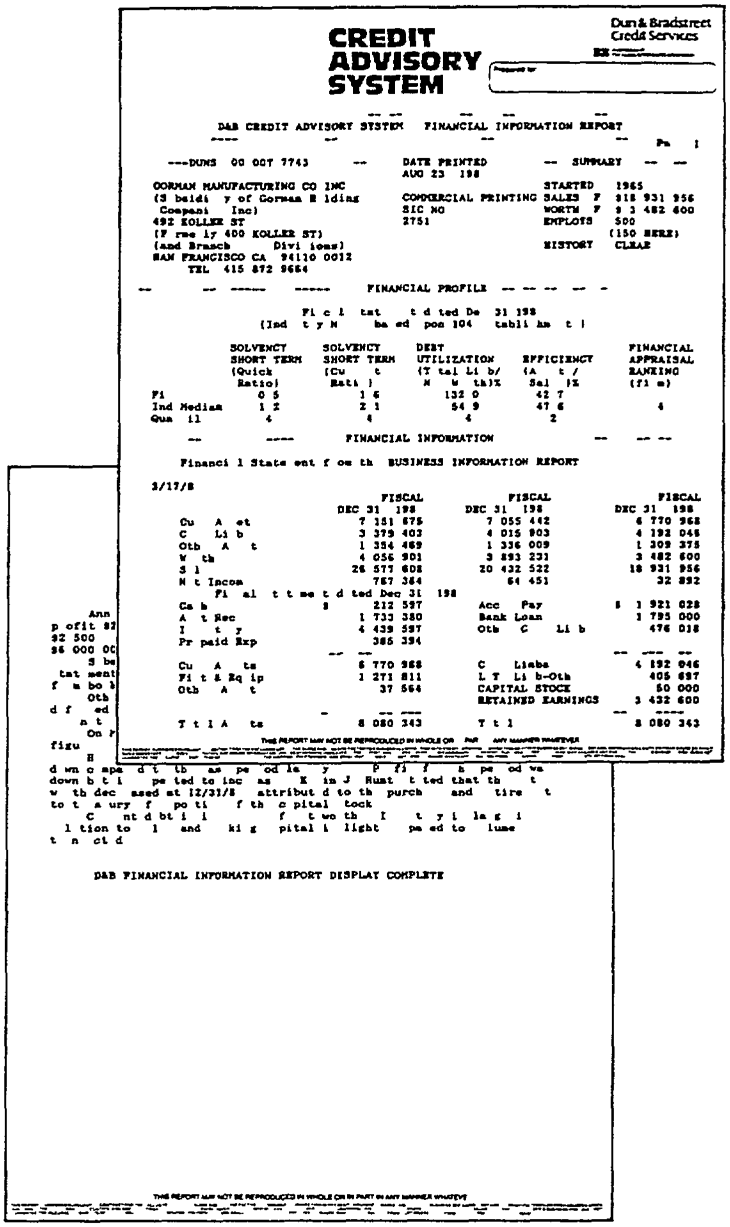
Assets to Sales—percentage calculated by dividing total assets by annual net sales This ratio ties in with sales and the total investment that is used to generate those sales This relationship indicates whether a company is overtrading or, conversely, carrying more assets than is needed for its volume

Financial Appraisal Ranking
The available ratios are computed and compared against industry norms for the respective industry From this information, a financial appraisal ranking is computed indicating where the firm ranks on a composite basis in relation to its industry

Industry Median—the median ratio figure for a concern in a given SIC and asset size

Quartile—the number indicated reflects how the company compares to others in the industry on that particular ratio

Financial Statement
When available, includes balance sheet, income statement, management comments and analysis



The Financial Information Report is available on line via DunsPrint,® DunsVoice,® and DunsDial® or through the mail
For more information contact the Credit Advisory System Product Manager at 1 201 665 5688 Or contact your D&B sales representative or local D&B office

Dun & Bradstreet Credit Services
a company of The Dun & Bradstreet Corporation

Credit Advisory System Financial Information Report

CREDIT ADVISORY SYSTEM

Dun & Bradstreet Credit Services
a company of The Dun & Bradstreet Corporation

Prepared for

FINANCIAL INFORMATION REPORT

-------DUNS 00-007-7743-------------DATE PRINTED------------SUMMARY-----------

AUG 23, 198-

GORMAN MANUFACTURING CO INC
(Subsidiary of Gorman Holding Companies Inc)
492 KOLLER ST
(Formerly 400 KOLLER ST)
(and Branches or Divisions)
SAN FRANCISCO CA 94110-0012
TEL 415 872-9664

COMMERCIAL PRINTING
SIC NO
2751

STARTED		1965
SALES	F	$18,931,956
WORTH	F	$ 3,482,600
EMPLOYS		500 (150 HERE)
HISTORY		CLEAR

------------------------------FINANCIAL PROFILE------------------------------

Fiscal statement dated Dec 31 198-
(Industry Norms based upon 104 establishments)

	SOLVENCY SHORT TERM (Quick Ratio)	SOLVENCY SHORT TERM (Current Ratio)	DEBT UTILIZATION (Total Liab/ Net Worth)/	EFFICIENCY (Assets/ Sales)%	FINANCIAL APPRAISAL RANKING (firm)
Firm	0 5	1 6	132 0	42 7	
Ind Median	1 2	2 1	54 9	47 6	4
Quartile	4	4	4	2	

----------------------------FINANCIAL INFORMATION----------------------------

Financial Statement from the BUSINESS INFORMATION REPORT

3/17/8-

	FISCAL DEC 31, 198-	FISCAL DEC 31, 198-	FISCAL DEC 31, 198-
Curr Assets	7,151,675	7,055,442	6,770,968
Curr Liabs	3,379,403	4,015,903	4,192,046
Other Assets	1,354,469	1,336,009	1,309,375
Worth	4,056,901	3,893,231	3,482,600
Sales	26,577,608	20,432,522	18,931,956
Net Income	767,364	64,451	32,892

Fiscal statement dated Dec 31, 198-

Cash	$ 212,597	Accts Pay	$ 1,921,028
Acct Rec	1,733,380	Bank Loans	1,795,000
Inventory	4,439,597	Other Curr Liabs	476,018
Prepaid Exp	385,394		
Curr Assets	6,770,968	Curr Liabs	4,192,046
Fixt & Equip	1,271,811	L T Liab-Other	405,697
Other Assets	37,564	CAPITAL STOCK	50,000
		RETAINED EARNINGS	3,432,600
Total Assets	8,080,343	Total	8,080,343

64

CREDIT ADVISORY SYSTEM

Prepared for

FINANCIAL INFORMATION REPORT

Annual sales $18,931,956, cost of goods sold $16,777,064 Gross profit $2,154,892, net income $32,892, dividends $29,640, monthly rent $2,500 Lease expires 1999 Fire insurance on mdse & fixt $6,000,000

Submitted by Kevin J Hunt, Sec-Treas Prepared from statement(s) by Accountant Fred Mitchel, San Francisco, CA Prepared from books without audit

Other assets are tangible, composed of miscellaneous deposits and deferred items Other current liabilities and long term liabilities are notes due on equipment

On Mar 15, 198- Kevin J Hunt, Sec-Treas, referred to the above figures as still representative

He stated that sales for the 12 months ended Dec 31, 198- were down compared to the same period last year Profit for the period was down but is expected to increase Kevin J Hunt stated that the net worth decreased at 12/31/8-, attributed to the purchase and retirement to treasury of a portion of the capital stock

Current debt is in excess of net worth Inventory is large in relation to sales and working capital is light compared to volume transacted

Add financial perspective to your account analysis

The Financial Information Report is available as an option with the Credit Advisory System to provide insight and details on a firm's financial standing. It shows you how a firm's financial performance compares to its industry, including the latest financial statement available to D&B.

Analyze a firm's ability to handle its current debt
Computes four key ratios measuring debt utilization, efficiency and short term solvency and compares them with industry norms. From this information a financial appraisal is calculated indicating where the firm ranks on a composite basis in relation to its industry.
The four key ratios:

Measure the ability of the business to meet its current debts if creditors were to press for immediate payment
The Quick Ratio—liquid assets (cash + accounts receivable) divided by current liabilities.

Determine the ability of the business to meet its current debts
The Current Ratio—derived by dividing current assets by current liabilities.

Measure the relationship of the capital provided by creditors (total liabilities) to the amount of the owners' investment
Debt Utilization—obtained by dividing total current, long term and deferred liabilities by tangible net worth.

Judge whether a company is overtrading or, conversely, carrying more assets than is needed for its volume
Assets to Sales—percentage is calculated by dividing total assets by annual net sales. This ratio ties sales in with the total investment that is used to generate those sales.

Analyze a firm's financial statement
The Financial Information Report includes balance sheet, income statement, management comments and analysis when available. Essential financial components of a company—assets, sales, liabilities and profits—are revealed. Additionally, three years of comparative financial figures are included to help you identify emerging trends.

CREDIT ADVISORY SYSTEM

Dun & Bradstreet
Credit Services

Prepared for

FINANCIAL INFORMATION REPORT
PAGE 1 OF 2

-------DUNS 00-007-7743------------DATE PRINTED-----------SUMMARY----------

GORMAN MANUFACTURING CO INC
(Subsidiary of Gorman Holding Companies Inc)
492 KOLLER ST
(Formerly 400 KOLLER ST)
(and Branches or Divisions)
SAN FRANCISCO CA 94110-0012
TEL 415 555-9664

AUG 23 198-
COMMERCIAL PRINTING
SIC NO
2751

STARTED	1965
SALES F	$18 931 956
WORTH F	$ 3 482 600
EMPLOYS	500 (150 HERE)
HISTORY	CLEAR

-------------------------------FINANCIAL PROFILE-------------------------------

Fiscal statement dated Dec 31 198-
(Industry Norms based upon 104 establishments)

	SOLVENCY SHORT TERM (Quick Ratio)	SOLVENCY SHORT TERM (Current Ratio)	DEBT UTILIZATION (Total Liab/ Net Worth)/	EFFICIENCY (Assets/ Sales)	FINANCIAL APPRAISAL RANKING (firm)
Firm	0 5	1 6	132 0	42 7	
Ind Median	1 2	2 1	54 9	47 6	4
Quartile	4	4	4	2	

----------------------------FINANCIAL INFORMATION---------------------------

Financial Statement from the BUSINESS INFORMATION REPORT

3/17/8-

	FISCAL DEC 31 198-	FISCAL DEC 31 198-	FISCAL DEC 31 198-
Curr Assets	7 151 675	7 055 442	6 770 968
Curr Liabs	3 379 403	4 015 903	4 192 046
Other Assets	1 354 469	1 336 009	1 309 375
Worth	4 056 901	3 893 231	3 482 600
Sales	26 577 608	20 432 522	18 931 956
Net Income	767,364	64 451	32 892

Fiscal statement dated Dec 31 198-

Cash	$ 212 597	Accts Pay	$ 1 921 028
Acct Rec	1 733 380	Bank Loans	1 795 000
Inventory	4 439 597	Other Curr Liabs	476 018
Prepaid Exp	385 394		
Curr Assets	6 770 968	Curr Liabs	4 192 046
Fixt & Equip	1 271 811	L T Liab-Other	405 697
Other Assets	37 564	CAPITAL STOCK	50 000
		RETAINED EARNINGS	3 432 600
Total Assets	8 080 343	Total	8 080 343

Comments summarizing the figures enhance your analysis

A narrative commentary is provided to help you interpret the firm's balance sheet. Information on how the balance sheet was prepared and explanations of how particular figures have been affected may appear.

Duns Analytical Services can support higher-risk credit and business decisions

When you need still more financial detail, call 1 800 223 0141 to reach a Duns Account Consultant for help in selecting the right service or for in-depth consultations on specific business decisions.

Available with the Credit Advisory System through the mail or online via DunsPrint or DunsPrint/PC. If time is short, call DunsDial or DunsVoice for summary details and request follow-up printed reports for more complete analysis later.

For more information, contact your local Dun & Bradstreet Credit Services office (consult your local telephone directory) or call Core Business Services at 201 665 5456

CREDIT ADVISORY SYSTEM

Dun & Bradstreet Credit Services

Prepared for

FINANCIAL INFORMATION REPORT
PAGE 2 OF 2

Annual sales $18 931 956 cost of goods sold $16 777 064 Gross profit $2 154 892 net income $32 892 dividends $29 640 monthly rent $2 500 Lease expires 1999 Fire insurance on mdse & fixt $6 000 000

Submitted by Kevin J Hunt Sec-Treas Prepared from statement(s) by Accountant Fred Mitchel San Francisco CA Prepared from books without audit

Other assets are tangible composed of miscellaneous deposits and deferred items Other current liabilities and long term liabilities are notes due on equipment

On Mar 15 198- Kevin J Hunt Sec-Treas referred to the above figures as still representative

He stated that sales for the 12 months ended Dec 31 198- were down compared to the same period last year Profit for the period was down but is expected to increase Kevin J Hunt stated that the net worth decreased at 12/31/8- attributed to the purchase and retirement to treasury of a portion of the capital stock

Current debt is in excess of net worth Inventory is large in relation to sales and working capital is light compared to volume transacted

ACI AUTOMATIC BUSINESS CREDIT LIMIT MODEL

ACI BUSINESS CREDIT INSURANCE

WHAT IS IT?

It is a guarantee to businesses that they will be reimbursed by ACI for abnormal credit losses sustained on merchandise shipped or services rendered to other businesses

WHAT KIND OF COVERAGE IS AVAILABLE?

1 *Mercantile rated policies* are furnished according to the following schedule of ratings Coverage is provided automatically, based on a debtor s mercantile standing at shipment date

RATING	OPEN LIMIT	RATING	OPEN LIMIT
5 A 1	$100 000	5 A 2	$25 000
4 A 1	100 000	4 A 2	25 000
3 A 1	100 000	3 A 2	25 000
2 A 1	50 000	2 A 2	25 000
1 A 1	50 000	1 A 2	25 000
B A 1	50 000	B A 2	25 000
B B 1	50 000	B B 2	25 000
C B 1	50 000	C B 2	25 000
1 R 2	25 000	2 R 2	15 000
C C 1	30 000	C C 2	15 000
D C 1	25 000	D C 2	12 500
D D 1	20 000	D D 2	10 000
E E 1	10 000	E E 2	5 000
F F 1	5 000	F F 2	3 000

Larger lines on accounts with or without the above ratings can be requested as additions to a policy by an endorsement

2 *Blanket coverage policies* provide a line of credit on all accounts Larger accounts can be specifically named for coverage

3 *Key account coverage policies* name all larger accounts above a specified limit, for specific coverage

Dun & Bradstreet

Key to Ratings

ESTIMATED FINANCIAL STRENGTH			COMPOSITE CREDIT APPRAISAL			
			HIGH	GOOD	FAIR	LIMITED
5A	$50 000 000	and over	1	2	3	4
4A	$10 000 000 to	$49 999 999	1	2	3	4
3A	1 000 000 to	9 999 999	1	2	3	4
2A	750 000 to	999 999	1	2	3	4
1A	500 000 to	749 999	1	2	3	4
BA	300 000 to	499 999	1	2	3	4
BB	200 000 to	299 999	1	2	3	4
CB	125 000 to	199 999	1	2	3	4
CC	75 000 to	124 999	1	2	3	4
DC	50 000 to	74 999	1	2	3	4
DD	35 000 to	49 999	1	2	3	4
EE	20 000 to	34 999	1	2	3	4
FF	10 000 to	19 999	1	2	3	4
GG	5 000 to	9 999	1	2	3	4
HH	Up to	4 999	1	2	3	4

GENERAL CLASSIFICATION BASED ON ESTIMATED STRENGTH AND COMPOSITE CREDIT APPRAISAL

ESTIMATED FINANCIAL STRENTH		COMPOSITE CREDIT APPRAISAL		
		Good	Fair	Limited
1R	$125 000 and over	2	3	4
2R	$50 000 to $124 999	2	3	4

EXPLANATION

When the designation 1R or 2R appears followed by a 2 3 or 4 it is an indication that the Estimated Financial Strength while not definitely classified is presumed to be in the range of the ($) figures in the corresponding bracket and while the Composite Credit Appraisal cannot be judged precisely it is believed to fall in the general category indicated

INV shown in place of a rating indicates that Dun & Bradstreet is currently conducting an investigation to gather information for a new report. It has no other significance

FB (Foreign Branch) Indicates that the headquarters of this company is located in a foreign country (including Canada) The written report contains the location of the headquarters

ABSENCE OF RATING — THE BLANK SYMBOL

A blank (—) symbol should not be interpreted as indicating that credit should be denied It simply means that the information available to Dun & Bradstreet does not permit us to classify the company within our rating key and that further inquiry should be made before reaching a credit decision

ABSENCE OF A LISTING IN THE REFERENCE BOOK

The absence of a listing is not to be construed as meaning a concern is non-existent has discontinued business nor does it have any other meaning The letters NQ on any written report mean not listed in the Reference Book The letters FBN on any written report also mean that the business is not listed in the Reference Book and that the headquarters is located in a foreign country

EMPLOYEE RANGE DESIGNATIONS IN REPORTS ON NAMES NOT LISTED IN THE REFERENCE BOOK

Certain businesses do not lend themselves to a Dun & Bradstreet rating and are not listed in the Reference Book Information on these names however continues to be stored and updated in the D&B Business Information File Reports are available on these businesses but instead of a rating they carry an Employee Range Designation (ER) which is indicative of size in terms of number of employees. No other significance should be attached

KEY TO EMPLOYEE RANGE DESIGNATIONS

ER 1	1000 or more	Employees
ER 2	500-999	Employees
ER 3	100-499	Employees
ER 4	50- 99	Employees
ER 5	20- 49	Employees
ER 6	10- 19	Employees
ER 7	5 9	Employees
ER 8	1 4	Employees
ER N		Not Available

Dun & Bradstreet® INTERNATIONAL REPORT

© DUN & BRADSTREET INC.

	CD 15 TYZ 28 197-	NG A 1
ELECTRON A G	MFR RAD PHONOS LOUD	FRANKFURT/MAIN GERMANY
	SPEAKERS HI-FI EQUIP	Hauptstrasse 14
BOARD OF DIRECTORS	(15)	
Hans Daniel - President	STARTED:	1929
Robert Peters - Vice Pres	PAYMENTS	PP
Joseph Peters - Treasurer	SALES	DM 15 900 000
	WORTH:	DM 4 345 000
	EMPLOYS:	560

SUMMARY
WELL ESTABLISHED BUSINESS SOUND FINANCIAL CONDITION WITH OPERATIONS PROFITABLE

HISTORY
Corporation chartered in 1945 with an authorized capital of DM 4 Million fully paid in to succeed a proprietorship established in 1929 by Hans Daniel. Daniel born 1900 married an electro-engineer graduate of the Berlin University Prior to 1929 employed by the Research Department of a similar firm in Hamburg

Robert Peters Vice President born 1910 married graduate of the University of Cologne Formerly was employed by several import and export houses in the same line of business prior to 1945 Joseph Peters Treasurer born 1912 brother of the aforementioned married Prior to 1945 was employed as sales manager by El ktrische Bedarfsartikel A G Frankfurt

FINANCES
Statement April 30 197- (Figures are in DMs quoted at 2752 in U S Currency)

ASSETS		LIABILITIES	
Cash on hand and at banks	2 235 000	Creditors Accts	2 094 000
Customers accounts	5 730 000	Notes payable	1 264 000
Inventory	4,128,000	Due bank	1 6,000
CURR ASSETS	12 093 000	CURR LIABS	714 000
Investment	329 000	Contingencies	1 838 000
Machy and tools	2 9 000	General Reserves	2 000 000
Real estate net	1 447 000	Legal Reserve	1 538 000
Deferred charges	307 000	Capital	4 000 000
		Surplus	34 ,000
TOTALS	14 435 000	TOTALS	14 435 000

Sales DM 1 900 000 (year ending April 30 97-) Net profit DM 625 365 - Dividends DM 700 000 Balance sheet prepared from figures submitted by Han Daniel President BANKING Satisfactory accounts maintained many years in four local banks balances low to medium 6 figures in each account Accommodations up to low 7 figure have been granted on an unsecured basis with that amount now outstanding

OPERATION:
Manufacturers of radios phonographs loud speakers hi-fi equipment Sales are on credit terms up to 60 and 90 day About 560 persons are employed LOCATION: Owns a three-story concret building maintained in good condition

PAYMENTS: June 20 197- (Figures in DMs)

HIGH CREDIT	OWE	P DUE	TERMS	PAYMENTS	REMARKS
800 000			30/60 days	Ppt	Sold yrs to dat
458 000	36 000		30 days	Ppt	Sold many yrs
37 000	29 000		30 days	Ppt	

6-28-7 (835-16-1)

International Reports

Provide a ready gauge of credit risk and market potentials

1 **SUMMARY**—Condenses the information needed for a sales or credit decision Highlights significant facts Credit data, on the right, shows year business started, trend of payments, annual sales, net worth, number of employees RATING, upper right, indicates estimated financial strength and composite credit appraisal

2 **HISTORY**—Identifies owners and their commercial experience, describes the background of the business Enhances understanding and makes it easier to establish confident business relations

3 **FINANCES**—The financial condition, how a firm is progressing, capital in use and borrowing record Analysis covers ability of the concern to meet its obligations

4 **OPERATION**—What the concern does, lines of merchandise and class of trade sold facilities and equipment Is it a profitable outlet for your goods and services? Can they supply your needs?

5 **PAYMENTS**—How they pay their bills, the answer to one of your most important questions A concise record of trade payments, high credits received, amounts owing and, if any, past due terms and pertinent comments from suppliers

Most reports on the more active international names are on file in New York, others are available from overseas upon request

THE BUSINESS INFORMATION REPORT

BEST AVAILABLE COPY

The Business Information Report is headed by a green- er-red strip This color band is used to inform sub- ...ers of the degree of urgency and suggest reading priorities by identifying the type of report within an appropriate color section

Use of a green heading indicates that there has been no rating change Use of the amber strip indicates that the rating has been changed from the previous report Such reports should be read without delay to determine whether the rating change warrants a revision in handling the account from either a sales or credit standpoint. The red strip signals important current developments or a new financial statement that should be reviewed immediately

The basic Business Information Report is characterized by the symbols, OR CD ' or ' SR ' in the dateline ... the top of the report. 'OR indicates the report is a ...v or original "CD indicates it is a complete revision or 'condensation" of all previous reports on the same name SR' indicates change in control of a business The ' successor report ' is the first report written on the new ownership

All report headings bear the designation 'BUSINESS INFORMATION REPORT" within the white box in the upper right hand corner of the report sheet The reports written on most businesses have no other designation printed in this box However, when the report is an Analytical Report the type written on larger and more ...plex businesses, the designation ' ANALYTICAL' ...pear under the words BUSINESS INFORMATION REPORT ' An Analytical Report contains more detail ...ut all reports present the information in sections as ...llows

a. D-U-N S- (DATA UNIVERSAL NUMBERING SYSTEM)

... 9-digit code that identifies a specific business name ... location This code developed and maintained by ... & Bradstreet, is widely used throughout the industry ... simplify record keeping through data processing ...pplications It is also the "address" of the detailed marketing and credit facts for each business listed in ...e Reference Book and in the Dun & Bradstreet Data ...ank, or files

A booklet describing D-U-N-S numbers and their uses is available at your D&B office, without charge

b. SUMMARY

The overall highlights at a glance buying name owner- ...ip line of business and date started Dun & Bradstreet ...ting and salient credit data facts

c. PAYMENTS

...is is the record of how the business pays its bills ...urrent ledger experiences are tabulated so the reader ... determine how obligations are being met

d. ...NANCE

Most reports that subscribers receive contain a financial statement or a description of the financial condition and ...siness trend In those instances where statements are ...t available estimates and financial data are obtained from outside sources such as bankers suppliers public records and other channels of information open to Dun & Bradstreet

e. BANKING

The relations with principal depositories

f. HISTORY

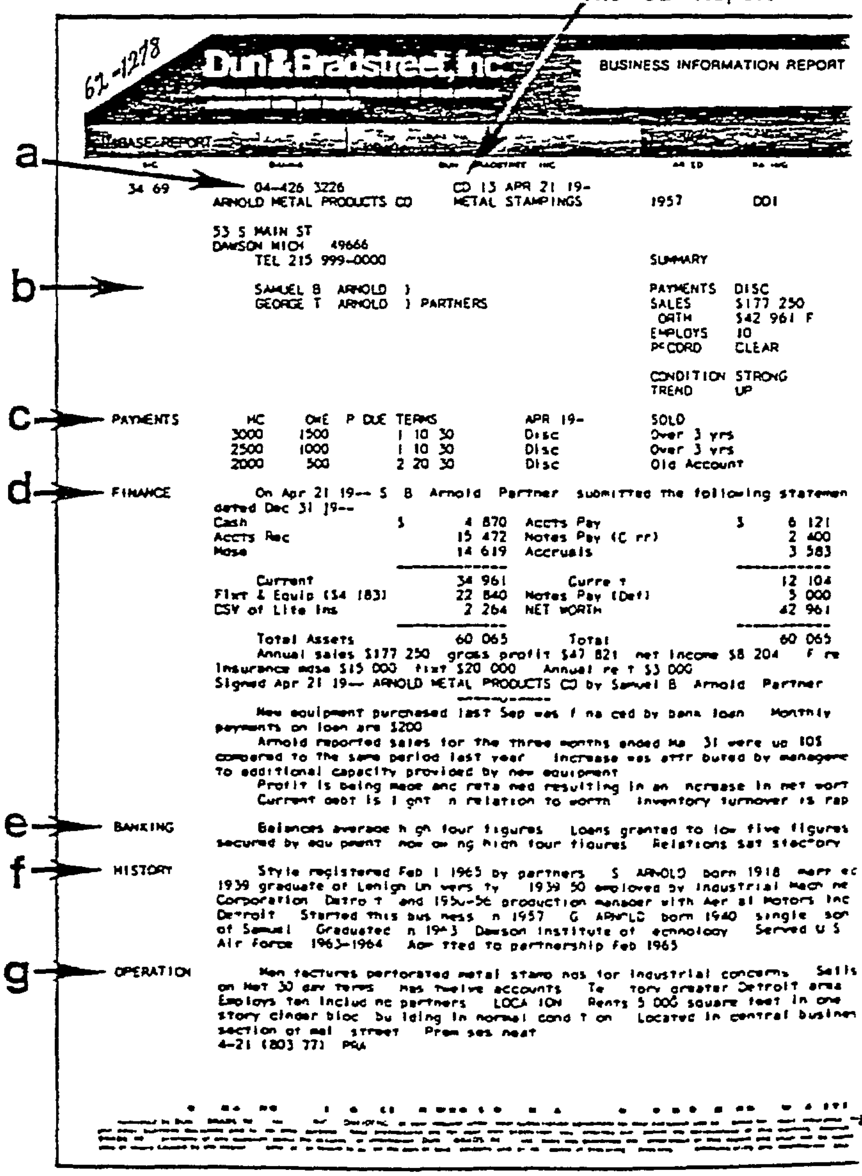
The background and experience of the principals and the record of the business itself Details of ownership

g. OPERATION

What the business does, how it does it, and the conditions under which it operates Description of premises Distribution, terms of sale, number of employees

NOTE For a detailed explanation of the principles upon which Dun & Bradstreet reports and ratings are based and for discussion or interpretation of credit information as presented in a Dun & Bradstreet report, refer to the booklet ' Ten Keys to Basic Credits and Collections ' A copy is available to subscribers without charge

The "CD' Report



34 69 04-426 3226 CD 13 APR 21 19-
ARNOLD METAL PRODUCTS CO METAL STAMPINGS 1957 DD1

53 S MAIN ST
DAWSON MICH 49666
TEL 215 999-0000

SAMUEL B ARNOLD)
GEORGE T ARNOLD) PARTNERS

SUMMARY
PAYMENTS DISC
SALES $177 250
ORTH $42 961 F
EMPLOYS 10
RECORD CLEAR
CONDITION STRONG
TREND UP

PAYMENTS

HC	OWE	P DUE	TERMS	APR 19-	SOLD
3000	1500		1 10 30	Disc	Over 3 yrs
2500	1000		1 10 30	Disc	Over 3 yrs
2000	500		2 20 30	Disc	Old Account

FINANCE On Apr 21 19-- S B Arnold Partner submitted the following statemen dated Dec 31 19--

Cash	$ 4 870	Accts Pay	$ 6 121
Accts Rec	15 472	Notes Pay (C rr)	2 400
Mdse	14 619	Accruals	3 583
Current	34 961	Curre t	12 104
Fixt & Equip ($4 183)	22 840	Notes Pay (Def)	5 000
CSV of Life Ins	2 264	NET WORTH	42 961
Total Assets	60 065	Total	60 065

Annual sales $177 250 gross profit $47 821 net income $8 204 F re Insurance mdse $15 000 fixt $20 000 Annual re t $3 000
Signed Apr 21 19-- ARNOLD METAL PRODUCTS CO by Samuel B Arnold Partner

New equipment purchased last Sep was f na ced by bank loan Monthly payments on loan are $200
Arnold reported sales for the three months ended Ma 31 were up 10% compared to the same period last year increase was attr buted by manageme to additional capacity provided by new equipment
Profit is being made and reta ned resulting in an ncrease in net wort Current debt is l ght n relation to worth Inventory turnover is rap

BANKING Balances average h gh four figures Loans granted to low five figures secured by equ pment now ow ng high four figures Relations sat sfactory

HISTORY Style registered Feb 1 1965 by partners S ARNOLD born 1918 marr ed 1939 graduate of Lehigh Un vers ty 1939 50 employed by Industrial Mach ne Corporation Detro t and 1950-56 production manager with Aer al Motors Inc Detroit Started this bus ness n 1957 G ARNOLD born 1940 single son of Samuel Graduated n 1963 Dawson Institute of echnology Served U S Air Force 1963-1964 Adm tted to partnership Feb 1965

OPERATION Man factures perforated metal stamp ngs for industrial concerns Sells on Net 30 day terms Has twelve accounts Te tory greater Detroit area Employs ten includ ng partners LOCA ION Rents 5 000 square feet in one story cinder bloc bu lding in normal cond t on Located in central busines section of mai street Prem ses neat
4-21 (803 77) PRA

10

BEST AVAILABLE COPY

FORM 1A 341
10/72

X New ☐ Rev

WORLD TRADERS DATA REPORT

U S DEPARTMENT OF COMMERCE
BUREAU OF INTERNATIONAL COMMERCE

PAGE 1 OF 3

Voluntary____ Trade or Investment Op____ Requested X Other____

This report submitted by the American Foreign Service under the direction of the Secretary of State is transmitted in confidence No responsibility can be assumed by the Government or its officers for any transactions had with any persons or firms herein mentioned The report is not for publication All correspondence relating to information in this report should be conducted with the Export Information Division U S Department of Commerce Washington D C 20230 SECONDARY DISTRIBUTION PROHIBITED

1 Country name: England

2 Country code: 4 1 2 (1 2 3)

3 Serial number: 1 1 8 3 2 0 0 (4 5 6 7 8 9 10)

4 Firm name: MAGRUDER and Sons Trading Company (11 70)

4A 4B 4C 4D: K A (71 72 73 74)

5 Street address and P O Box No: P.O. Box 322, 226 Barton Street (11 70)

6 City and country: London E.C. 2, England (11 38)

7 Year established: 1922 (43 45)

8 Number of employees: 220 (11 17)

SAMPLE

9 Relative size (Check one): Very large ☐ (18) Large ☒ (19) Medium ☐ (20) Small ☐ (21)

(As regarded in country)

10 Is subject considered a suitable contact for interested U S firms? Yes ☒ (22) No ☐ (23)

11 Sales area (Check appropriate blocks)

	Sales		Sales		Sales
Own Country	X (25)	Australia Oceania	(35)	Eastern Asia	(45)
United States	(27)	EFTA countries	(37)	Near East	(47)
Canada	(29)	European common market	(39)	Africa	(48)
Mexico Central Am Carib	(31)	Other Europe	X (41)		
South America	(33)	Southern Asia	(43)		

12 Date of information: Month 0 1 (58 59) Year 7 3 (60 61) (Last two digits)

71

WTD on Magruder and Sons Trading Company, 226 Barton St. London E.C. 2 England
Name and address

13 Product Description SIC and Business Codes - Up to 10 different products can be listed below for each product enter the product name SIC code and up to five business codes The business codes to be used are as follows

0 Manufacturer
1 Retailer
2 Agent (sales or indent)
3 Distributor (incl wholesale)
4 Exporter
5 Importer
6 Cooperative
7 Engineering
8 Construction
9 Other (Specify in Item 21)

	Description of Product	SIC Code	Business Codes
A	Construction Equipment	3 5 3 1 0	2 3 5
B	Mining Equipment	3 5 3 2 0	2 3 5
C	Diesel Engines	3 5 1 9 3	2 3 5
D	Materials Handling Equipment	3 5 3 7 0	2 3 5
E	Concrete Products Machinery and Equipment	3 5 5 9 5	2 3 5
F	Room Air Conditioners	3 5 8 5 2	2 3 5
G	Woodworking Machinery	3 5 5 3 0	2 3 5
H	Pumps	3 5 6 1 0	2 3 5
I			
J			
K			
L			
M			
N			

14 Name of an Executive Officer G.M. Magruder Title President

15 Cable Address MATRCO, London 16 Telex 664321 17 Phone 01-6337402

18 Financial References Barclays Bank, Strand Square, London E.C. 2
Names and addresses of banks etc.
Bank of America (London Branch), Grosvener Square, London E.C. 2

BEST AVAILABLE COPY

WTD on Magruder and Sons Trading Co., 226 Barton St., London E.C. 2, Engla-

Name of Firm

11 Trade References General Motors Corp., Fedders World Trade Corp. (see #20 for addresses), British Refrigerated Warehouses Ltd., 1422 West Chapel La., London, E.C. 4, Anglo American Contractors, Westgate Park, Dublin ~~Ireland.~~

20 Names of major foreign companies represented or with which licensing arrangements exist, major product lines, and year agencies or licenses were acquired as reported by subject firm (Indicate whether agency or licensing arrangement)

Name of Company	Address (City, Country)	Major Product Lines	Year Acquired
Fedders World Trade Corp. (Agency)	P.O. Box 2204 Woodbridge, N.J. 07095	Air Conditioners	1950
General Motors Corp. (Agency)	220 W. 42nd St. N.Y., N.Y. 10036	Diesel Engines	1954
Rex Chainbelt Co. (Agency)	4300 Madison St. Milwaukee, Wis. 53214	Construction, Mining, Concrete Products Machinery and Equipment	1960
Mannessman A.G. (Agency)	211 Feldstrasse Frankfurt Am Main, Germany	Pumps and Woodworking Machinery	1960
Henkel Machinery GmbH (Agency)	43 Duisburg Strasse 7110 Stuttgart Germany	Materials Handling Equipments	1964

21 Post's Evaluation of Firm This is one of the leading trading firms in England for the listed products. The firm maintains head offices in London with branch sales and service offices in Dublin and Glasgow. The owners have considerable technical and administrative experience in their line of business and are well respected in the business community. The firm acts as agents and distributors of the products it imports The firm represents a number of leading U.S. and foreign manufacturers and its sales ability is considered good throughout England, Scotland and Ireland Banking and Trade sources report the firm has good financial reputation and obligations are met promptly

Firm is highly recommended as a trade contact for U.S. business men

73

7

DUN & BRADSTREET GLOSSARY

Accounting Recording, classifying, summarizing and analyzing commercial transactions in monetary terms

Accounts Receivable Monetary payments owed by customers but not received

Accrual Basis Income when earned and expenses when incurred are reported rather than when received or paid

Annual Report Formal financial statement issued annually to shareholders or principals

Asset Property or resources owned by a person or business, such as money, equipment and building

Audit An examination to verify the accuracy of accounting and financial records

Balance Sheet A statement which shows what is owned and owed by a business on a specified date

Bank Acceptance Draft drawn on a bank and accepted by the bank

Bill of Lading Document indicating receipt of goods issued by a common carrier (transportation company)

Bond An IOU or promissory note issued as evidence of long-term indebtedness and a future promise to pay

Book Value Net worth of a business as reflected in its financial statements, net worth divided by shares outstanding is book value per share

Break Even Point when income covers all operating and administrative expenses

Budget A summary or plan of probable income and expenses for a given period

Capital Amount of long-term funds put into a business by principals or stockholders

Capital Gain or Loss Profit or loss from the sale of a capital asset

Capital Goods Long term or lasting goods such as buildings and machinery used to produce goods or products

Capital Stock All shares representing ownership of a business, including common and preferred stock

Cash Discount A sales price reduction granted customers who pay within a stipulated period

Cash Flow Difference between cash received and cash disbursed by a firm

Collateral Securities or other property pledged to guarantee a debt

Commercial Paper Notes of a short-term duration issued by corporations to raise money

Common Stock Securities representing ownership interest in a corporation

Conglomerate Corporation with diverse operations in varied industries

Consolidated Statement Financial statement of a corporation and its subsidiaries

Convertible Security Bond, debenture or preferred stock that may be exchanged for common stock or other securities

Corporation Artificial body created by law to carry on business as authorized in its articles of incorporation

Cost of Goods Sold Direct material cost of production

CPA Acronym indicating a state (registered) Certified Public Accountant

Current Assets Those assets that can be reasonably converted into cash within a year

Current Liabilities Money owed and payable within a year

Current Ratio Current assets of a business divided by current liabilities, this is one test of solvency

Debenture A promissory note backed by general credit of a company and usually not secured by property

Deficit A financial situation where expenses exceed income

Depletion Accounting method reducing a company's natural assets — oil, gas, timber — over a specified time period

Depreciation Accounting method of reducing a company's fixed assets to zero over a specified time period

Director A person elected by shareholders to establish corporate policies, appoint officers and approve dividends

Dividend Payment designated by corporate directors to be distributed pro rata among shareholders

Earnings Report A profit and loss statement showing earnings or losses for a given period

Efficiency Ratios Used to measure how efficiently a business uses and controls its assets

Equity Ownership interest of principals or stockholders in a company

First In First Out (FIFO) A method of valuing inventory which assumes that the first items bought are also the first sold

Fiscal Year The accounting year of a business

Fixed Assets Property owned by a business that has a life longer than a year such as buildings, equipment and land

Fixed Charges or Costs A company's fixed expenses — interest, rent, salaries that do not change much with varying amounts of goods produced

Fringe Benefits Expense accounts, insurance and other benefits given to employees in addition to salaries

Goodwill Arbitrary dollar value based on reputation and name of a business Should be valued conservatively

Government Bonds U S government obligations regarded as the highest grade issues in existence

Gross Income or Gross Profit Net Sales less Cost of Goods Sold
Holding Company A corporation that owns the securities of another, with voting control in most cases
Installment Buying Contract requiring buyer to periodically pay a sum of money, usually monthly
Intangible Assets Goodwill, copyrights, trademarks, development costs — not physical assets
Interest Payments a borrower makes to a lender for use of money
Inventory Merchandise, work-in-process, raw materials and finished goods of a business held, but not yet sold
Investment Use of money to make more money, to gain income or increase capital, or both
Invoice Detailed and descriptive statement of goods purchased
Last In First Out (LIFO) A method of valuing inventory which assumes that the last articles bought are the first sold
Leverage When a business relies on debt verses equity financing to earn a high return on invested equity funds
Liabilities All claims against a business
Lien Claim against property pledged or mortgaged to secure performance of an obligation
Limited Partner A business partner only to the extent of his or her investment — may not be a manager in the partnership
Line of Credit Dollar limit of money that a creditor lends a business for its activities
Liquidation Process of converting a business's assets into cash Can be a dissolution of a business
Liquidity Ease with which an item can be converted into cash
Listed Stock Stock of a business traded on a securities exchange Also referred to as publicly owned stock
Long term Liability Obligations of a business due after one year
Management Business officers, partners and owners who are responsible for the day-to-day operations
Marketing The act of getting products or services to consumers
Mark up In computing selling price, the sum added to cost to cover overhead and profit
Mean Total of a group of numbers divided by the amount of numbers in the group, average
Median Midpoint of a series of numbers set in order from lowest to highest or highest to lowest
Merger Act of one company permanently joining another
Negotiable Refers to a security that is transferable from one party to another
Net Profit Income remaining after expenses are deducted from sales
Net Sales Sales less returns for credit, allowances and discounts
Net Worth Total assets less total liabilities, also called owner's equity
No par Having no face value
Overhead Expenses not charged to a specific product but vary directly with sales
Par A dollar amount assigned to a common share of stock in a corporation by its charter
Preferred Stock A class of stock entitling owners to claim dividend payments before common stockholders
Profitability Ratios Used to measure how successfully a business earns a return on its investment
Proprietorship A business owned and operated by an individual
Proxy Written authority given by a shareholder to a representative to vote his or her shares
Retailer A business which sells goods directly to the consumer public
SEC An acronym for Securities and Exchange Commission, established by congress to protect investors and regulate the trading of securities
Security Asset held by a lender to guarantee payment, financial instruments such as stocks and bonds
Share Unit of stock into which ownership of a corporation is divided
Solvency Ratios Used to measure financial soundness of a company
Surplus Corporation net worth portion in excess of capital stock, also a financial situation where income exceeds expenses
Trade Discount Reduction from list price offered by manufacturers and wholesalers to customers
Treasury Stock Issued stock reacquired by a corporation Stock has no vote while held by company
Variable Costs Those costs that vary with production volume
Wholesaler A business that purchases goods from a manufacturer and sells to retailers
Working Capital Excess of current assets over current liabilities used to finance current business activities

75

Dun & Bradstreet

Credibility Gap

Dun's Credit Reports, Vital Tool of Business, Can Be Off the Mark

Company Ratings, Too High Or Too Low, Often Anger And Frustrate Customers

Estimates and 'Guesstimates'

By JOHNNIE L. ROBERTS
Staff Reporter of THE WALL STREET JOURNAL

Gunthrop Warren Printing Inc was a solid upstanding company last December according to Dun & Bradstreet Corp A credit report it issued that month said the commercial printing company was in good financial condition and gave it a top rating

Twenty nine days later Gunthrop-Warren Printing was forced into bankruptcy proceedings by angry creditors with long overdue bills

Mountain Hi Surplus & Sales Co was also solid another Dun & Bradstreet credit report said Based on that rating commercial lender Heller Financial Inc lent Mountain Hi $32 000 in August 1988 to buy inventory

Six weeks later Mountain Hi defaulted The lender couldn t find the woman whom the credit report listed as Mountain Hi s owner U S postal inspectors found her however—exposing a scheme that had bamboozled several companies out of about $1 million

An Essential Product

Surprising? Not to many customers of Dun & Bradstreet the information giant familiarly known as D&B Dun & Bradstreet credit reports they assert often contain information that is inaccurate outdated or skimpy Like Gunthrop-Warren and Mountain Hi many a rickety company has received an attractive credit rating from Dun & Bradstreet At the same time companies complain D&B has given poor ratings to some that deserved better

The complaints raise fundamental questions about a product whose importance to American business is difficult to overestimate Though little known to the general public D&B reports play a critical role in daily commerce The company provides information on the creditworthiness of 9 5 million companies D&B s customers use the reports thousands of times a day to help them decide whether to lend money to another company or sell to it on credit Many such business decisions are based almost entirely on the information in D&B credit reports As a result inaccuracies can have severe repercussions on both the subjects and users of D&B reports

Dun & Bradstreet unwaveringly rejects any suggestion that there are broad problems with the quality of its credit data The company s theme is Quality First During a lengthy interview and tour of D&B s operations top officials of its credit services business repeatedly emphasized the completeness timeliness and accuracy of D&B credit reports

'Investing in Quality'

There are a lot of safeguards to weed out flaws says Patrick C Sommers executive vice president of credit services We are reinvesting every gain that we make into quality Mr Sommers says that any quality problems that might have existed years ago are now behind the company

Because D&B maintains reports on so many companies it is of course inevitable that some inaccuracies will occur But a five month investigation by this newspaper involving company documents and interviews with numerous customers and former employees indicates that widespread problems have continued at least until the recent past Moreover the investigation indicates that the quality problems are in large part a result of internal D&B practices that encourage employees to prepare large numbers of reports quickly

Former D&B credit reporters tell how they were expected to meet unrealistic production quotas that made the preparation of accurate reports extremely difficult Struggling to complete as many as 20 reports a day, reporters have sometimes simply regurgitated information provided by companies without questioning its accuracy Where hard information particularly financial data, was unavailable or skimpy some ex-employees say they made their own estimates often based on flimsy evidence And in a few cases D&B reporters have fabricated information.

Just Too Much

It was literally impossible to do a good job on any of the reports says Owen Phillips a reporter in D&B s Lancaster Pa office until last fall

All former employees quoted in this story including Mr Phillips say they left the company on good terms This newspaper attempted to interview several current D&B reporters but they declined Some in

76

talk with the media D&B won t comment on reasons former employees left and it says company policy prohibits current employees from talking to the press without authorization)

Former employees assert that some managers were aware of the problems but tolerated them because of financial concerns They describe Dun & Bradstreet as a company almost obsessively concerned with attaining ambitious financial goals Vicky Hicks who worked as a D&B reporter for six years until June 1988 says her managers told her not to be overly concerned about the quality of her reports on many companies particularly smaller ones The reason? Those reports she says she was told were infrequently requested and didn t generate much revenue for the corporation

Dun & Bradstreet s sales culture has prompted other complaints from customers In March this newspaper reported on widespread allegations that the company misled many customers into purchasing more credit data services than they needed In June D&B agreed to settle several suits related to its sales practices for $18 million without admitting or denying the charges An investigation by U S Postal inspectors is continuing

The problems are an uncommon blemish on one of the most venerable of U S companies Founded in 1841 Dun & Bradstreet swiftly set to building a reputation for reliability and thoroughness An early credit report on a grocer for example even noted a rat hole in the shop that would bear looking into The report was prepared by Abraham Lincoln one of four D&B reporters who later became a U S president (The others were Grant McKinley and Cleveland)

D&B still has many admirers who regard its services as indispensable and its faults as tolerable For the massive number of names it reports on it is a good service says Russell J Hart an executive vice president at Republic Factors Corp a major source of financing in the retailing and garment industries Joe Mullen a New York private investigator describes D&B s wide range of services as being like 28 flavors of ice cream

D&B has in fact a virtual monopoly on the sale of commercial credit data While TRW Inc and a few other companies also sell commercial credit data D&B controls 90% of the market. Most of the company s customers have little choice but to use its services

At the same time they have little recourse when problems arise Courts have generally held D&B isn t liable for errors While there are federal and state laws governing companies that sell credit data on individuals D&B is largely unregulated

As a result it perhaps isn t surprising that the subject of Dun & Bradstreet makes many executives seethe Many small businessmen are particularly angry viewing the company as an arrogant Big Brother Perry Pinion, a D&B credit reporter in Greenville N C and Richmond Va. before quitting last year estimates that 75% of the firms he called for data were hostile to D&B and told him to drop dead

D&B reports on small businesses are dangerous to both those who seek them out as well as to the fragile reputations of

such as sales and assets a brief corporate history and the names and about two decades of background on each officer A full report also has a credit history that shows whether the company is behind on its bills whether it has ever had bad debt placed for collection and whether it has ever been refused credit Based on the credit history and financial data among other factors D&B assigns a credit rating

Gathering the Data

A large amount of the information is collected by D&B reporters ideally it is based largely on interviews with top officials of the subject company Other D&B employees stake out bankruptcy courts and public agencies from which this year they will collect an estimated 2 6 million pieces of information

In general another group of employees assembles the credit histories based on interviews with trade references information mailed in by creditors or computer tapes of accounts provided by creditors D&B estimates it will collect 120 million separate payment records this year

Substantial numbers of D&B reports are prepared at ticket centers in Lancaster Pa Tucson Ariz Greensboro N C and other relatively low cost cities Reporters at the ticket centers are often recent college graduates hired for modest salaries and then given three months training D&B began setting up the centers in the early 1980s ex-employees say to reduce the cost of preparing reports that aren t big sellers

There was a very big concern that costs were getting out of control recalls Ruth Boley a vice president of the data gathering operations until late 1986

While D&B does have reporters who visit companies in person those at the ticket centers do all their work by phone Former employees describe these centers as a kind of high technology sweatshop where reporters had to hustle to in a literal sense score points

For example reporters could score 50 points for landing an interview with management Reporters scores were tallied monthly and measured against the goals set by management Pay promotions and bonuses depended on meeting the goals several ex reporters say If you didn t make production you weren t eligible for anything recalls Ms Hicks

D&B says reporters are expected to meet productivity guidelines which it won t disclose but it denies former reporters assertions they were expected to do a certain number of reports a day It also says bonuses are based on the quality of reporters work not their productivity

Suspect Information

D&B reporters generally didn t make any attempt to verify information provided by companies ex reporters say Nor they say were they supposed to D&B asserts in a disclaimer on all its reports that it won t be held responsible for the accuracy of information But in their haste to meet production goals some former reporters say they would accept information even when they knew it was suspect

Sometimes you could just tell companies were exaggerating says Wendee Maniago who quit the Lancaster office in

77

Associates Inc last January Mr Naples says he told the reporter that projected sales were $20 million A sharp reporter would have questioned this Mr Naples suggests because he also indicated that his company which buys and sells power plant gear has only four employees

In fact Mr Naples says in several interviews his company had sales of no more than $1 million in its March fiscal year and under the best of circumstances can generate no more than $5 million But he says that when he got a sample copy of his D&B report the $20 million sales figure appeared He says disdainfully that he was proving the point that D&B will publish anything you give them

Dun & Bradstreet says reporters are expected to and do question information they find suspect Moreover the company says it is introducing an improved quality control system that will catch exaggerations like Mr Naples s The system is designed among other things to question data that fall outside industry norms calculated by D&B

But it isn t clear how well such monitoring will work D&B says the reporter who talked to Mr Naples did raise a question about the sales figure with her manager but D&B published it anyway after concluding it was possible for the business to generate sales of that size

Taking a Guess?

Reporters at least in the past have been free to make their own guesstimates for companies not providing complete financial statements In 1982 a Denver construction firm called Sunward Corp and two units sued D&B claiming that inaccurate credit reports were creating the perception Sunward was failing. A 1983 trial in Denver federal court revealed that a D&B reporter had used estimates assumptions and guesstimates to prepare financial statements that grossly understated the size of the Sunward enterprises The reports for example put total sales at less than $1 million when they actually exceeded $29 million

Sunward had refused to cooperate with D&B when it originally sought data Nonetheless it was awarded $3 8 million at trial after an appeals court ordered a retrial. Sunward and D&B settled out of court two years ago

Guesstimates about company data are dead and gone in Dun & Bradstreet, D&B s attorney said at the trial And in recent interviews D&B officials also say that reporters aren t allowed to estimate financial data But some former reporters say the practice continued after the Sunward case You filled in the blanks with whatever it took to make the bottom line add up says Mr Phillips who was a reporter until a year ago I can remember being told by my manager to do that sort of thing if that is what it took

Some customers complain that Dun & Bradstreet sometimes assigns a favorable rating to a company even though the report itself shows it woefully behind on its bills You look at it and say my God how can they assign these ratings? says Mel Langer a senior vice president at Heller Financial the U S commercial lending arm of Japan s Fuji Bank Ltd

In August 1988 Mr Langer complained in a letter to John P Kunz then president of D&B s credit services operations about a report on WB Thomas Installation D&B had rated the Huntington Beach Calif floor covering contractor favorably But the same report showed it had bills as much as six months overdue

In a similar peculiarity D&B s report last December on Gunthrop Warren Printing which was based largely on an interview with the company indicated it had financial strength of as much as $10 million But on the very same page the report said the company was up to three months late on some bills and others had been turned over to collectors

Mrs. Maniago the former reporter in Lancaster says inconsistencies between ratings and payment records weren t unusual In fact she says, reporters sometimes assigned a rating before the report was sent on to co workers whose job was to prepare the credit history It was kind of backwards Mrs Maniago admits

D&B officials concede that reports can be internally inconsistent but they attribute the problem to the fact that payment information is updated more often than ratings It says it is installing a monitoring system that will prompt reporters to review ratings when new payment information becomes available

Some customers also gripe that D&B is like the consultant who borrows your watch to tell you what time it is Reporters are encouraged to turn to the subscriber as a source of the very data the subscriber has requested from D&B For example a customer might request a report on a company that refuses to provide trade references The solution? In a June 1988 memo the manager of the Lancaster office urged reporters to call back the subscriber 90% of the time they will have some credit application to give you names of trade references

D&B officials acknowledge that customers are one of the firm s most important sources especially on new businesses or for original reports

The problem with that say some customers is that D&B sometimes doesn t bother to verify the data If they don t have a report on the business they will take information you gave them and send it back to you on a form without investigating it says Robert E Martin credit manager of Blackstone Co an East Brunswick N J building products firm

Production demands also provide an incentive for some reporters to tell subscribers that a company simply can t be located some former employees say To file a so-called unable to locate report they say a reporter had only to find two outside sources such as the Post Office or telephone company that didn t know the subject s whereabouts

Such reports are problematic A customer ordering a report on a company has to pay for it even if it comes back marked unable to locate and provides no information The subject of the report can suffer too since a potential creditor is less likely to extend credit to a firm that Dun & Bradstreet says it can t locate

But former D&B reporters say that while they could get poorer scores for filing incomplete reports on firms they found they didn t lose any points if they marked the firm unable to locate

Unwarranted UTL reports apparently are difficult to police and are a long standing problem Five years ago an internal audit of the Charlotte N C office easily found five of 20 companies that had been listed as not possible to locate a copy of the audit shows More recently in the Lancaster ticket center the volume of UTL reports swelled so large that the office manager warned reporters in a October 1988 memo to cut back

D&B s Mr Sommers says the company is working to reduce the number of unable to-locate reports Procedures put in place 18 months ago have reduced them by 36% he says He adds that UTLs aren t necessarily bad since they help some D&B customers spot phony companies

New Data and Old

Stale information is another common customer complaint Reports that are requested two or more times a year are revised annually and the rest are revised as needed the company says But many reports contain more outdated information customers say

Last July a Georgia Pacific Corp Midwest distribution division ordered a D&B report on Falb Construction a Columbiana, Ohio construction supply concern that was seeking a line of credit D&B rated the company highly says Jeff Yarnell credit manager for the Georgia Pacific cooperation but the rating was based on a two-year-old financial statement As a result Mr Yarnell says Falb got a smaller credit line than the $25 000 it would have gotten if the D&B report had contained fresher data He says D&B s information is so often outdated that his division has realized that it isn t prudent to be making decisions on D&B ratings

D&B s Mr Sommers says the Falb report was on the outer limits of what is acceptable standards for timeliness He says D&B has made tremendous progress in collecting and maintaining fresh financial statements through an effort called the statement timeliness program

BEST AVAILABLE COPY

Perhaps most troubling is evidence that some D&B reporters have fabricated data outright over the years Several years ago an employee in the Millburn N J office was found to have been making up scores of bank references according to a former manager In mid 1988 D&B also discovered that a reporter in Lancaster had falsified reports In Greensboro a reporter hadn t even produced reports that he had recorded on a log as being completed In each case D&B fired the employee

D&B says that given the size of its work force and the type of work such incidents are bound to happen from time to time Whenever we find it they re gone Mr Sommers says The company declines to provide details on such firings

A former manager in the Toledo Ohio ticket office was dismissed after a particularly troubling instance of falsification according to several former employees in Ohio The manager had prepared at least one report on a nonexistent company says David Ringenbach a Toledo employee who resigned in May Reports were also written on affiliated dummy companies according to him The reports apparently helped the phony companies to buy merchandise on credit he adds

Dun & Bradstreet says the former manager is no longer with the company but declines to discuss the incident The person couldn t be reached for comment

D&B in fact is a popular instrument of swindlers In a June 1988 memo to its reporters the company said it had recently uncovered many instances of fraudulent report writing on businesses that simply don t exist

Says William P Callahan a private investigator You have a lot of con men—the Robert Vescos of the world—who go out of their way to have D&B do a report

Mountain Hi Surplus appears to have been such a case The D&B report describes it as a five year old diversified wholesaler with estimated financial strength of as much as $500 000 The source of the information Mountain Hi itself D&B merely regurgitated the information none of which was true says Patrick Carr a U S postal inspector who investigated the company Last July Mountain Hi s owner Laura Pugh pleaded guilty in federal court in Denver to a conspiracy charge

Verification Process

D&B says that its own monitoring systems spotted the problem and that D&B subsequently warned customers We saved a lot of people a lot of money says Mr Sommers But according to Mr Carr several creditors including Heller Financial suffered losses

D&B does strive to monitor the accuracy of its reports Each local office has a verifier who checks a sample of each reporter s work D&B also sends teams of auditors unannounced to local offices at least once a year Finally its computer monitoring systems perform thousands of quality checks

But there are weaknesses in the defenses Although D&B officials say verification samples are statistically valid former reporters say verifiers in the local offices check only a handful of the hundreds each reporter prepares monthly Four years ago an internal audit of D&B s Tampa Fla office determined that the local verifier often confirmed nothing more than that the reporter had in fact contacted the subject company

Even the audits can be compromised says Stephen Feigenbaum a former reporter in Cleveland In an interview he said he was once told by his manager to take home some reports because of a pending audit leaving better prepared ones to be seen by the auditor D&B says it investigated this matter after being contacted by the Journal and denies the incident ever took place

A couple of years ago D&B instituted a computer system called Delta to help measure reporters performance In addition Delta kicks out an automatic sample of every reporter s work and those reports are read by hand by the data quality department says the system s designer Angus Carroll

Since 1986 Dun & Bradstreet also has sent copies of reports on companies to the companies for review But a company seeing wrong information about itself on a report can have a frustrating time setting the record straight

Cedric Blazer president of Zenith Cutter Co a Rockford Ill manufacturer of industrial blades says a 1988 report on his company indicated falsely that Zenith was late on a bill When he protested D&B went back to the creditor and then amended the report when no proof was forthcoming But D&B refused to give Mr Blazer the name of the creditor

Frustrated Zenith sued in Illinois state court late last year against John Doe Corp —the anonymous source—allowing it to subpoena D&B records The court case cost Zenith $2 500 in legal fees These guys because of their size really don t respond to anybody says Mr Blazer

Mr Arlauskas the part-owner of the Gloucester Va general contracting company offers several months of phone records correspondence and other documentation of his attempts to have D&B correct inaccurate information it distributed about his company D&B still hasn t corrected its report Mr Arlauskas says

D&B officials say they tried for about two years to satisfy Mr Arlauskas It appears that he is not real thrilled about the fact that Dun & Bradstreet is publishing anything on his business Mr Sommers says There are people out there who are never going to agree that we have a right to publish information and we are never going to totally resolve it

Like many other small businessmen Mr Arlauskas had refused to cooperate with D&B when it sought information So it might seem as though the inaccuracies are his own fault But Mr Arlauskas says he had good reason for not cooperating He says that D&B often sells its information o ...

W David Thompson president of Spectrum Research Inc an El Segundo Ca space research and development company says he learned last December that D&B had sold his company s name and phone number when he began receiving phone solicitations from various groups One company in Memphis promised a 1989 Nissan pickup truck for only $89 50 if he would only order a box of magic markers with his company name printed on them

I was absolutely dumbfounded and sickened that a reputable firm would stoop to selling lists of names of companies that you gathered in the name of credit and financial reporting to telemarketing and boiler room organizations Mr Thompson complained in a letter to D&B

Dun & Bradstreet says companies can request to have their names removed from mailing lists sold by D&B

D&B has in some cases supplied reporters with scripts to help them deal with uncooperative companies Family owned businesses that clam up should be told that the information D&B wants does not represent your family secrets suggests an internal memo received by Mr Phillips the former reporter To companies holding back because they got an unfavorable rating in the past the memo suggests saying Dun & Bradstreet doesn t give bad ratings

No Regulation

D&B and other concerns that sell commercial credit data are basically unregulated The 1971 Fair Credit Reporting Act applies only to companies selling credit data on individuals It gives consumers the right to correct information in their reports or submit a statement that must be included in the reports

Ten years ago the a Senate committee held hearings at which many small businessmen complained about Dun & Bradstreet One told how a rival had interfered with his business by getting D&B to publish false information on him But D&B s position that regulation was unnecessary prevailed and Congress hasn t taken up the issue since

Aggrieved companies can of course take D&B to court One notable case concluded in 1985 when the Supreme Court upheld a $350 000 libel judgment favoring Greenmoss Builders Inc of Vermont D&B had published a report that falsely said the company had filed for bankruptcy

But such judgments are relatively rare Generally U S business credit reporting agencies such as D&B enjoy a qualified legal privilege to make ordinary errors In any case D&B s contracts with subscribers purport to free it of liability for erroneous data.

A few companies are dropping D&B limiting their use of the service or seeking out data from suppliers who specialize in particular industries But such moves aren t likely to have much effect given D&B s monopoly position Last year Blackstone Co canceled its $13 000-a year contract with D&B because of complaints about quality But Mr Martin the company s credit manager doesn t pretend the move will prompt consternation at D&B headquarters The information giant he admits will survive nicely without ...

79

FORM IA 341
10/72

X New ☐ Rev

U S DEPARTMENT OF COMM[illegible]
BUREAU OF INTERNATIONAL COMME[illegible]

WORLD TRADERS DATA REPORT

PAGE 1

Voluntary____ Trade or Investment Op____ Requested X Other____

This report submitted by the American Foreign Service under the direction of the Secretary of State is transmitted in fidence. No responsibility can be assumed by the Government or its officers for any transactions had with any person firms herein mentioned. The report is not for publication. All correspondence relating to information in this report shoul conducted with the Export Information Division U S Department of Commerce Washington D C 20230 SECOND DISTRIBUTION PROHIBITED

1 Country name: England

2 Country code: 4 1 2

3 Serial number: 1 1 8 3 2 0

4 Firm name: MAGRUDER and Sons Trading Company

K A

5 Street address and P O Box No: P.O. Box 322, 226 Barton Street

6 City and country: London E.C 2, England

SAMPLE

7 Year established: 1922

8 Number of employees: 220

9 Relative size (Check one): Very large ☐ Large X Medium ☐ Small ☐

(As regarded in country)

10 Is subject considered suitable contact for interested U S firms? Yes X No ☐

11 Sales area (Check appropriate boxes)

	Sales		Sales		Sales
Own Country	X	Australia Oceania		Eastern Asia	
United States		EFTA countries		Near East	
Canada		European common market		Africa	
Mexico Central and Carib		Other Europe	X		
South America		Southern Asia			

12 Date of information: Month 0 1 Year 7 3

80

WTD on Magruder and Sons Trading Company, 226 Barton St London E.C. 2 Englan

Name and address

13 Product Description SIC and Business Codes - Up to 10 different products can be listed below for each product the product name SIC code and up to five business codes The business codes to be used are as follows

0 Manufacturer
1 Retailer
2 Agent (sales or indent)
3 Distributor (incl wholesale)
4 Exporter
5 Importer
6 Cooperative
7 Engineering
8 Construction
9 Other *(Specify in Item 21)*

	Description of Product	SIC Code	Business Code
A	Construction Equipment	3 5 3 1 0	2 3 5
B	Mining Equipment	3 5 3 2 0	2 3 5
C	Diesel Engines	3 5 1 9 3	2 3 5
D	Materials Handling Equipment	3 5 3 7 0	2 3 5
E	Concrete Products Machinery and Equipment	3 5 5 9 5	2 3 5
F	Room Air Conditioners	3 5 8 5 2	2 3 5
G	Woodworking Machinery	3 5 5 3 0	2 3 5
H	Pumps	3 5 6 1 0	2 3 5
I			
J			
K			
L			
M			
N			

14 Name of an Executive Officer G.M Magruder Title President

15 Cable address MATRCO London 16 Telex 664321 17 Phone 01-6337402

18 Financial References Barclays Bank Strand Square, London E.C 2

Bank of America (London Branch), Grosvener Square, London E.C 2

81

WTD on Magruder and Sons Trading Co , 226 Barton St., London E.C. 2, Eng
Name and Address

19 Trade References General Motors Corp., Fedders World Trade Corp. (see #20
Names and addresses of U.S./American firms

for addresses), British Refrigerated Warehouses Ltd., 1422 West Chapel La., London, E.C. 4, Anglo American Contractors, Westgate Park, Dublin ~~Ireland.~~

20 Names of major foreign companies represented or with which licensing arrangements exist, major product lines and year agencies or licenses were acquired as reported by subject firm (Indicate whether agency or licensing arrangement)

Name of Company	Address (City, Country)	Major Product Lines	Year Acquired
Fedders World Trade Corp (Agency)	P.O. Box 2204 Woodbridge, N.J. 07095	Air Conditioners	1950
General Motors Corp. (Agency)	220 W. 42nd St. N.Y., N.Y. 10036	Diesel Engines	1954
Rex Chainbelt Co. (Agency)	4300 Madison St. Milwaukee, Wis. 53214	Construction, Mining, Concrete Products Machinery and Equipment	1960
Mannessman A.G (Agency)	211 Feldstrasse Frankfurt Am Main, Germany	Pumps and Woodworking Machinery	1960
Henkel Machinery GmbH (Agency)	43 Duisburg Strasse 7110 Stuttgart Germany	Materials Handling Equipments	1964

21 Post's Evaluation of firm This is one of the leading trading firms in England for the listed products. The firm maintains head offices in London with branch sales and service offices in Dublin and Glasgow. The owners have considerable technical and administrative experience in their line of business and are well respected in the business community. The firm acts as agents and distributors of the products it imports The firm represents a number of leading U.S. and foreign manufacturers and its sales ability is considered good throughout England, Scotland and Ireland Banking and Trade sources report the firm has good financial reputation and obligations are met promptly

Firm is highly recommended as a trade contact for U S. business men

82

DUN & BRADSTREET GLOSSARY

Accounting Recording, classifying, summarizing and analyzing commercial transactions in monetary terms
Accounts Receivable Monetary payments owed by customers but not received
Accrual Basis Income when earned and expenses when incurred are reported rather than when received or paid
Annual Report Formal financial statement issued annually to shareholders or principals
Asset Property or resources owned by a person or business, such as money, equipment and building
Audit An examination to verify the accuracy of accounting and financial records
Balance Sheet A statement which shows what is owned and owed by a business on a specified date
Bank Acceptance Draft drawn on a bank and accepted by the bank
Bill of Lading Document indicating receipt of goods issued by a common carrier (transportation company)
Bond An IOU or promissory note issued as evidence of long-term indebtedness and a future promise to pay
Book Value Net worth of a business as reflected in its financial statements net worth divided by shares outstanding is book value per share
Break Even Point when income covers all operating and administrative expenses
Budget A summary or plan of probable income and expenses for a given period
Capital Amount of long-term funds put into a business by principals or stockholders
Capital Gain or Loss Profit or loss from the sale of a capital asset
Capital Goods Long term or lasting goods such as buildings and machinery used to produce goods or products
Capital Stock All shares representing ownership of a business including common and preferred stock
Cash Discount A sales price reduction granted customers who pay within a stipulated period
Cash Flow Difference between cash received and cash disbursed by a firm
Collateral Securities or other property pledged to guarantee a debt
Commercial Paper Notes of a short-term duration issued by corporations to raise money
Common Stock Securities representing ownership interest in a corporation
Conglomerate Corporation with diverse operations in varied industries
Consolidated Statement Financial statement of a corporation and its subsidiaries
Convertible Security Bond, debenture or preferred stock that may be exchanged for common stock or other securities
Corporation Artificial body created by law to carry on business as authorized in its articles of incorporation
Cost of Goods Sold Direct material cost of production
CPA Acronym indicating a state (registered) Certified Public Accountant
Current Assets Those assets that can be reasonably converted into cash within a year
Current Liabilities Money owed and payable within a year
Current Ratio Current assets of a business divided by current liabilities, this is one test of solvency
Debenture A promissory note backed by general credit of a company and usually not secured by property
Deficit A financial situation where expenses exceed income
Depletion Accounting method reducing a company's natural assets — oil, gas, timber — over a specified time period
Depreciation Accounting method of reducing a company's fixed assets to zero over a specified time period
Director A person elected by shareholders to establish corporate policies, appoint officers and approve dividends
Dividend Payment designated by corporate directors to be distributed pro rata among shareholders
Earnings Report A profit and loss statement showing earnings or losses for a given period
Efficiency Ratios Used to measure how efficiently a business uses and controls its assets
Equity Ownership interest of principals or stockholders in a company
First In First Out (FIFO) A method of valuing inventory which assumes that the first items bought are also the first sold
Fiscal Year The accounting year of a business
Fixed Assets Property owned by a business that has a life longer than a year such as buildings equipment and land
Fixed Charges or Costs A company's fixed expenses — interest rent salaries that do not change much with varying amounts of goods produced
Fringe Benefits Expense accounts insurance and other benefits given to employees in addition to salaries
Goodwill Arbitrary dollar value based on reputation and name of a business Should be valued conservatively
Government Bonds U S government obligations regarded as the highest grade issues in existence

Gross Income or Gross Profit Net Sales less Cost of Goods Sold

Holding Company A corporation that owns the securities of another, with voting control in most cases

Installment Buying Contract requiring buyer to periodically pay a sum of money, usually monthly

Intangible Assets Goodwill, copyrights, trademarks, development costs — not physical assets

Interest Payments a borrower makes to a lender for use of money

Inventory Merchandise, work-in-process, raw materials and finished goods of a business held, but not yet sold

Investment Use of money to make more money, to gain income or increase capital, or both

Invoice Detailed and descriptive statement of goods purchased

Last In First Out (LIFO) A method of valuing inventory which assumes that the last articles bought are the first sold

Leverage When a business relies on debt verses equity financing to earn a high return on invested equity funds

Liabilities All claims against a business

Lien Claim against property pledged or mortgaged to secure performance of an obligation

Limited Partner A business partner only to the extent of his or her investment — may not be a manager in the partnership

Line of Credit Dollar limit of money that a creditor lends a business for its activities

Liquidation Process of converting a business's assets into cash Can be a dissolution of a business

Liquidity Ease with which an item can be converted in to cash

Listed Stock Stock of a business traded on a securities exchange Also referred to as publicly owned stock

Long term Liability Obligations of a business due after one year

Management Business officers partners and owners who are responsible for the day-to day operations

Marketing The act of getting products or services to consumers

Mark up In computing selling price, the sum added to cost to cover overhead and profit

Mean Total of a group of numbers divided by the amount of numbers in the group average

Median Midpoint of a series of numbers set in order from lowest to highest or highest to lowest

Merger Act of one company permanently joining another

Negotiable Refers to a security that is transferable from one party to another

Net Profit Income remaining after expenses are deducted from sales

Net Sales Sales less returns for credit, allowances and discounts

Net Worth Total assets less total liabilities also called owner's equity

No par Having no face value

Overhead Expenses not charged to a specific product but vary directly with sales

Par A dollar amount assigned to a common share of stock in a corporation by its charter

Preferred Stock A class of stock entitling owners to claim dividend payments before common stockholders

Profitability Ratios Used to measure how successfully a business earns a return on its investment

Proprietorship A business owned and operated by an individual

Proxy Written authority given by a shareholder to a representative to vote his or her shares

Retailer A business which sells goods directly to the consumer public

SEC An acronym for Securities and Exchange Commission, established by congress to protect investors and regulate the trading of securities

Security Asset held by a lender to guarantee payment financial instruments such as stocks and bonds

Share Unit of stock into which ownership of a corporation is divided

Solvency Ratios Used to measure financial soundness of a company

Surplus Corporation net worth portion in excess of capital stock, also a financial situation where income exceeds expenses

Trade Discount Reduction from list price offered by manufacturers and wholesalers to customers

Treasury Stock Issued stock reacquired by a corporation Stock has no vote while held by company

Variable Costs Those costs that vary with production volume

Wholesaler A business that purchases goods from a manufacturer and sells to retailers

Working Capital Excess of current assets over current liabilities used to finance current business activities

Dun & Bradstreet

Credibility Gap

Dun's Credit Reports, Vital Tool of Business, Can Be Off the Mark

Company Ratings, Too High Or Too Low, Often Anger And Frustrate Customers

Estimates and 'Guesstimates'

BEST AVAILABLE COPY

By JOHNNIE L. ROBERTS
Staff Reporter of THE WALL STREET JOURNAL

Gunthrop-Warren Printing Inc. was a solid, upstanding company last December, according to Dun & Bradstreet Corp. A credit report it issued that month said the commercial printing company was in good financial condition and gave it a top rating.

Twenty nine days later Gunthrop-Warren Printing was forced into bankruptcy proceedings by angry creditors with long overdue bills.

Mountain Hi Surplus & Sales Co. was also solid, another Dun & Bradstreet credit report said. Based on that rating, commercial lender Heller Financial Inc. lent Mountain Hi $32,000 in August 1988 to buy inventory.

Six weeks later, Mountain Hi defaulted. The lender couldn't find the woman whom the credit report listed as Mountain Hi's owner. U.S. postal inspectors found her, however—exposing a scheme that had bamboozled several companies out of *about $1 million.*

An Essential Product

Surprising? Not to many customers of Dun & Bradstreet, the information giant familiarly known as D&B. Dun & Bradstreet credit reports, they assert, often contain information that is inaccurate, outdated or skimpy. Like Gunthrop-Warren and Mountain Hi, many a rickety company has received an attractive credit rating from Dun & Bradstreet. At the same time, companies complain, D&B has given poor ratings to some that deserved better.

The complaints raise fundamental questions about a product whose importance to *American business is difficult to overestimate.* Though little known to the general public, D&B reports play a critical role in daily commerce. The company provides information on the creditworthiness of [illegible] million companies. D&B's customers use the reports thousands of times a day to help them decide whether to lend money to another company or sell to it on credit. Many such business decisions are based almost entirely on the information in D&B credit reports. As a result, inaccuracies can have severe repercussions on both the [illegible] D&B reports

Dun & Bradstreet unwaveringly rejects any suggestion that there are broad problems with the quality of its credit data. The company's theme is "Quality First." During a lengthy interview and tour of D&B's operations, top officials of its credit services business repeatedly emphasized the completeness, timeliness and accuracy of D&B credit reports.

'Investing in Quality'

"There are a lot of safeguards to weed *out flaws,*" says Patrick C. Sommers, executive vice president of credit services. "We are reinvesting every gain that we make into quality." Mr. Sommers says that any quality problems that might have existed years ago are now behind the company.

Because D&B maintains reports on so many companies, it is of course inevitable that some inaccuracies will occur. But a five month investigation by this newspaper involving company documents and interviews with numerous customers and former employees indicates that widespread problems have continued at least until the recent past. Moreover, the investigation indicates that the quality problems are in large part a result of internal D&B practices that encourage employees to prepare large numbers of reports quickly.

Former D&B credit reporters tell how they were expected to meet unrealistic production quotas that made the preparation of accurate reports extremely difficult. Struggling to complete as many as 20 reports a day, reporters have sometimes simply regurgitated information provided by companies without questioning its accuracy. Where hard information, particularly financial data, was unavailable or skimpy, some ex-employees say, they made their own estimates, often based on flimsy evidence. And in a few cases, D&B reporters have fabricated information.

Just Too Much

"It was literally impossible to do a good job on any of the reports," says Owen Phillips, a reporter in D&B's Lancaster, Pa., office until last fall.

All former employees quoted in this story, including Mr. Phillips, say they left the company on good terms. This newspaper [illegible] several [illegible] D&B [illegible] they declined. [illegible]

85

[illegible] talk with the media. D&B won't comment on reasons former employees left, and it says company policy prohibits current employees from talking to the press without authorization.)

Former employees assert that some managers were aware of the problems but tolerated them because of financial concerns. They describe Dun & Bradstreet as a company almost obsessively concerned with attaining ambitious financial goals. Vicky Hicks, who worked as a D&B reporter for six years until June 1988, says her managers told her not to be overly concerned about the quality of her reports on many companies, particularly smaller ones. The reason? Those reports, she says she was told, were infrequently requested and didn't generate much revenue for the corporation.

Dun & Bradstreet's sales culture has prompted other complaints from customers. In March, this newspaper reported on widespread allegations that the company misled many customers into purchasing more credit data services than they needed. In June, D&B agreed to settle several suits related to its sales practices for $18 million without admitting or denying the charges. An investigation by U.S. Postal inspectors is continuing.

The problems are an uncommon blemish on one of the most venerable of U.S. companies. Founded in 1841, Dun & Bradstreet [illegible] set to building a reputation for reliability and thoroughness. An early credit report on a grocer, for example, even noted a rat hole in the shop that would bear looking into. The report was prepared by Abraham Lincoln, one of four D&B reporters who later became a U.S. president. (The others were Grant, McKinley and Cleveland.)

D&B still has many admirers who regard its services as indispensable and its faults as tolerable. "For the massive number of names it reports on, it is a good service," says Russell J. Hart, an executive vice president at Republic Factors Corp., a major source of financing in the retailing and garment industries. Joe Mullen, a New York private investigator, describes D&B's wide range of services as being "like 28 flavors of ice cream."

D&B has, in fact, a virtual monopoly on the sale of commercial credit data. While TRW Inc. and a few other companies also sell commercial credit data, D&B controls 90% of the market. Most of the company's customers have little choice but to use its services [illegible]

At the same time, they have little recourse when problems arise. Courts have generally held D&B isn't liable for errors. While there are federal and state laws governing companies that sell credit data on individuals, D&B is largely unregulated.

As a result, it perhaps isn't surprising that the subject of Dun & Bradstreet makes many executives seethe. Many small businessmen are particularly angry, viewing the company as an arrogant Big Brother. Perry Pinion, a D&B credit reporter in Greenville, N.C., and Richmond, Va., before quitting last year, estimates that 75% of the firms he called for data were hostile to D&B and told him to "drop dead."

D&B reports on small businesses are dangerous to both those who seek them [illegible] vague reputations of [illegible]

[illegible] such as sales and assets, a brief corporate history and the names and about two decades of background on each officer. A full report also has a credit history that shows whether the company is behind on its bills, whether it has ever had bad debt placed for collection and whether it has ever been refused credit. Based on the credit history and financial data, among other factors, D&B assigns a credit rating.

Gathering the Data

A large amount of the information is collected by D&B reporters. Ideally, it is based largely on interviews with top officials of the subject company. Other D&B employees stake out bankruptcy courts and public agencies, from which this year they will collect an estimated 2.6 million pieces of information.

In general, another group of employees assembles the credit histories based on interviews with trade references, information mailed in by creditors, or computer tapes of accounts provided by creditors. D&B estimates it will collect 120 million separate payment records this year.

Substantial numbers of D&B reports are prepared at "ticket centers" in Lancaster, Pa., Tucson, Ariz., Greensboro, N.C., and other relatively low-cost cities. Reporters at the ticket centers are often recent college graduates hired for modest salaries and then given three months' training. D&B began setting up the centers in the early 1980s, ex-employees say, to reduce the cost of preparing reports that aren't big sellers.

"There was a very big concern that costs were getting out of control," recalls Ruth Boley, a vice president of the data gathering operations until late 1986.

While D&B does have reporters who visit companies in person, those at the ticket centers do all their work by phone. Former employees describe these centers as a kind of high-technology sweatshop where reporters had to hustle to, in a literal sense, score points.

For example, reporters could score 50 points for landing an interview with management. Reporters' scores were tallied monthly and measured against the goals set by management. Pay, promotions and bonuses depended on meeting the goals, several ex-reporters say. "If you didn't make production, you weren't eligible for anything," recalls Ms. Hicks.

D&B says reporters are expected to meet productivity guidelines, which it won't disclose, but it denies former reporters' assertions they were expected to do a certain number of reports a day. It also says bonuses are based on the quality of reporters' work, not their productivity.

Suspect Information

D&B reporters generally didn't make any attempt to verify information provided by companies, ex-reporters say. Nor, they say, were they supposed to. D&B asserts in a disclaimer on all its reports that it won't be held responsible for the accuracy of information. But in their haste to meet production goals, some former reporters say they would accept information even when they knew it was suspect.

"Sometimes you could tell the companies were exaggerating," said [illegible] who cut the Lancaster office [illegible]

BEST AVAILABLE COPY

86

Associates Inc last January Mr Naples says he told the reporter that projected sales were $20 million A sharp reporter would have questioned this Mr Naples suggests because he also indicated that his company which buys and sells power plant gear has only four employees

In fact, Mr Naples says in several interviews his company had sales of no more than $1 million in its March fiscal year and under the best of circumstances can generate no more than $5 million But he says that when he got a sample copy of his D&B report the $20 million sales figure appeared He says disdainfully that he was proving the point that D&B will publish anything you give them

Dun & Bradstreet says reporters are expected to and do question information they find suspect Moreover the company says it is introducing an improved quality control system that will catch exaggerations like Mr Naples s The system is designed among other things to question data that fall outside industry norms calculated by D&B

But it isn t clear how well such monitoring will work D&B says the reporter who talked to Mr Naples did raise a question about the sales figure with her manager but D&B published it anyway after concluding it was possible for the business to generate sales of that size

Taking a Guess?

Reporters at least in the past have been free to make their own guesstimates for companies not providing complete financial statements In 1982 a Denver construction firm called Sunward Corp and two units sued D&B claiming that inaccurate credit reports were creating the perception Sunward was failing A 1983 trial in Denver federal court revealed that a D&B reporter had used estimates assumptions and guesstimates to prepare financial statements that grossly understated the size of the Sunward enterprises The reports for example put total sales at less than $1 million when they actually exceeded $29 million

Sunward had refused to cooperate with D&B when it originally sought data Nonetheless it was awarded $3 3 million at trial after an appeals court ordered a retrial Sunward and D&B settled out of court two years ago

Guesstimates about company data are dead and gone in Dun & Bradstreet D&B s attorney said at the trial And in recent interviews D&B officials also say that reporters aren t allowed to estimate financial data But some former reporters say the practice continued after the Sunward case You filled in the blanks with whatever took to make the bottom line add up says Mr Phillips who was a reporter until a year ago I can remember being told by my manager to do that sort of thing ... that s what it took

Some customers complain that Dun & Bradstreet sometimes assigns a favorable rating to a company even though the report itself shows it woefully behind on its bills You look at it and say my God how can they assign these ratings? says Mel Langer a senior vice president at Heller Financial the U S commercial lending arm of Japan s Fuji Bank Ltd

In August 1988 Mr Langer complained in a letter to John P Kunz then president of D&B s credit services operations about a report on WB Thomas Installation D&B had rated the Huntington Beach Calif floor covering contractor favorably But the same report showed it had bills as much as six months overdue

In a similar peculiarity D&B s report last December on Gunthrop Warren Printing which was based largely on an interview with the company indicated it had financial strength of as much as $10 million But on the very same page the report said the company was up to three months late on some bills and others had been turned over to collectors

Mrs. Maniago the former reporter in Lancaster says inconsistencies between ratings and payment records weren t unusual In fact she says reporters sometimes assigned a rating before the report was sent on to co workers whose job was to prepare the credit history It was kind of backwards Mrs Maniago admits

D&B officials concede that reports can be internally inconsistent but they attribute the problem to the fact that payment information is updated more often than ratings It says it is installing a monitoring system that will prompt reporters to review ratings when new payment information becomes available

Some customers also gripe that D&B is like the consultant who borrows your watch to tell you what time it is Reporters are encouraged to turn to the subscriber as a source of the very data the subscriber has requested from D&B For example a customer might request a report on a company that refuses to provide trade references The solution? In a June 1988 memo the manager of the Lancaster office urged reporters to call back the subscriber 90% of the time they will have some credit application to give you names of trade references

D&B officials acknowledge that customers are one of the firm s most important sources especially on new businesses or for original reports

The problem with that say some customers is that D&B sometimes doesn t bother to verify the data If they don t have a report on the business they will take information you gave them and send it back to you on a form without investigating ... says Robert E Martin credit manager of Blackstone Co an East Brunswick ... building products ...

Production demands also provide an incentive for some reporters to tell subscribers that a company simply can t be located some former employees say To file a so-called unable to locate report they say a reporter had only to find two outside sources such as the Post Office or telephone company that didn t know the subject s whereabouts

Such reports are problematic A customer ordering a report on a company has to pay for it even if it comes back marked unable to locate and provides no information The subject of the report can suffer too since a potential creditor is less likely to extend credit to a firm that Dun & Bradstreet says it can t locate

But former D&B reporters say that while they could get poorer scores for filing incomplete reports on firms they found they didn t lose any points if they marked the firm unable to locate

Unwarranted UTL reports apparently are difficult to police and are a long standing problem Five years ago an internal audit of the Charlotte N C office easily found five of 20 companies that had been listed as not possible to locate a copy of the audit shows More recently in the Lancaster ticket center the volume of UTL reports swelled so large that the office manager warned reporters in a October 1988 memo to cut back

D&B s Mr Sommers says the company is working to reduce the number of unable to locate reports Procedures put in place 18 months ago have reduced them by 36% he says He adds that UTLs aren t necessarily bad since they help some D&B customers spot phony companies

New Data and Old

Stale information is another common customer complaint Reports that are requested two or more times a year are revised annually and the rest are revised as needed the company says But many reports contain more outdated information customers say

Last July a Georgia Pacific Corp Midwest distribution division ordered a D&B report on Falb Construction a Columbiana, Ohio construction supply concern that was seeking a line of credit D&B rated the company highly says Jerry Varnell credit manager for the Georgia Pacific operation but the rating was based on a two-year-old financial statement As a result Mr Varnell says Falb got a smaller credit line than the $25 000 it would have gotten if the D&B report had contained fresher data He says D&B s information is so often outdated that his division has realized that it isn t prudent to be making decisions on D&B ratings

D&B s Mr Sommers says the Falb report was on the outer limits of what ... acceptable standards for timeliness ... says D&B has made tremendous progress in collecting and maintaining financial statements through an ... timeliness program

Perhaps most troubling is evidence that some D&B reporters have fabricated data outright over the years Several years ago an employee in the Millburn N J office was found to have been making up scores of bank references according to a former manager In mid 1988 D&B also discovered that a reporter in Lancaster had falsified reports In Greensboro a reporter hadn t even produced reports that he had recorded on a log as being completed In each case D&B fired the employee

D&B says that given the size of its work force and the type of work such incidents are bound to happen from time to time Whenever we find it they re gone Mr Sommers says The company declines to provide details on such firings

A former manager in the Toledo Ohio ticket office was dismissed after a particularly troubling instance of falsification according to several former employees in Ohio The manager had prepared at least one report on a nonexistent company says David Ringenbach a Toledo employee who resigned in May Reports were also written on affiliated dummy companies according to him The reports apparently helped the phony companies to buy merchandise on credit he adds

Dun & Bradstreet says the former manager is no longer with the company but declines to discuss the incident The person couldn t be reached for comment

D&B in fact is a popular instrument of swindlers In a June 1988 memo to its reporters the company said it had recently uncovered many instances of fraudulent report writing on businesses that simply don t exist

Says William P Callahan a private investigator You have a lot of con men—the Robert Vescos of the world—who go out of their way to have D&B do a report

Mountain [illegible] Surplus appears to have been such a case The D&B report describes it as a five year old diversified wholesaler with estimated financial strength of as much as $500 000 The source of the information Mountain [illegible] self D&B merely regurgitated the information none of which was true says Patrick Carr a U S postal inspector who investigated the company Last July Mountain [illegible]s owner Laura Pugh pleaded guilty in federal court in Denver to a conspiracy charge

Verification Process

D&B says that its own monitoring systems spotted the problem and that D&B subsequently warned customers We saved a lot of people a lot of money says Mr Sommers But according to Mr Carr several creditors including Heller Financial suffered losses

D&B does strive to monitor the accuracy of its reports Each local office has a [illegible] who checks a sample of each reporter s work D&B also sends teams of auditors unannounced to local offices at [illegible] once a year Finally its computer monitoring systems perform thousands of [illegible]

But there are weaknesses in the defenses Although D&B officials say verification samples are statistically valid former reporters say verifiers in the local offices check only a handful of the hundreds each reporter prepares monthly Four years ago an internal audit of D&B s Tampa, Fla. office determined that the local verifier often confirmed nothing more than that the reporter had in fact contacted the subject company

Even the audits can be compromised says Stephen Feigenbaum a former reporter in Cleveland In an interview he said he was once told by his manager to take home some reports because of a pending audit leaving better prepared ones to be seen by the auditor D&B says it investigated this matter after being contacted by the Journal and denies the incident ever took place

A couple of years ago D&B instituted a computer system called Delta to help measure reporters performance In addition Delta kicks out an automatic sample of every reporter s work and those reports are read by hand by the data quality department says the system s designer Angus Carroll

Since 1986 Dun & Bradstreet also has sent copies of reports on companies to the companies for review But a company seeing wrong information about itself on a report can have a frustrating time setting the record straight

Cedric Blazer president of Zenith Cutter Co a Rockford Ill manufacturer of industrial blades says a 1988 report on his company indicated falsely that Zenith was late on a bill When he protested D&B went back to the creditor and then amended the report when no proof was forthcoming But D&B refused to give Mr Blazer the name of the creditor

Frustrated Zenith sued in Illinois state court late last year against John Doe Corp —the anonymous source—allowing it to subpoena D&B records The court case cost Zenith $2 500 in legal fees These guys because of their size really don t respond to anybody says Mr Blazer

Mr Arlauskas the part owner of the Gloucester Va general contracting company offers several months of phone records correspondence and other documentation of his attempts to have D&B correct inaccurate information it distributed about his company D&B still hasn t corrected its report Mr Arlauskas says

D&B officials say they tried for about two years to satisfy Mr Arlauskas It appears that he is not really thrilled about the fact that Dun & Bradstreet is publishing anything on his business Mr Sommers says There are people out there who are never going to agree that we have a right to publish information and we are never going to totally resolve it

Like many other small businessmen Mr Arlauskas had refused to cooperate with D&B [illegible] sought [illegible] It might seem as though the inaccuracies [illegible] Mr Arlauskas [illegible] had good reason to [illegible] [illegible]

W David Thompson president of Spectrum Research Inc an El Segundo Calif space research and development company says he learned last December that D&B had sold his company s name and phone number when he began receiving phone solicitations from various groups One company in Memphis promised a 1989 Nissan pickup truck for only $89 50 if he would only order a box of magic markers with his company name printed on them

I was absolutely dumbfounded and sickened that a reputable firm would stoop to selling lists of names of companies that you gathered in the name of credit and financial reporting to telemarketing and boiler room organizations Mr Thompson complained in a letter to D&B

Dun & Bradstreet says companies can request to have their names removed from mailing lists sold by D&B

D&B has in some cases supplied reporters with scripts to help them deal with uncooperative companies Family owned businesses that clam up should be told that the information D&B wants does not represent your family secrets suggests an internal memo received by Mr Phillips the former reporter To companies holding back because they got an unfavorable rating in the past the memo suggests saying Dun & Bradstreet doesn t give bad ratings

No Regulation

D&B and other concerns that sell commercial credit data are basically unregulated The 1971 Fair Credit Reporting Act applies only to companies selling credit data on individuals It gives consumers the right to correct information in their reports or submit a statement that must be included in the reports

Ten years ago the a Senate committee held hearings at which many small businessmen complained about Dun & Bradstreet One told how a rival had interfered with his business by getting D&B to publish false information on him But D&B s position that regulation was unnecessary prevailed and Congress hasn t taken up the issue since

Aggrieved companies can of course take D&B to court One notable case concluded in 1985 when the Supreme Court upheld a $350 000 libel judgment favoring Greenmoss Builders Inc of Vermont D&B had published a report that falsely said the company had filed for bankruptcy

But such judgments are relatively rare Generally U S business credit reporting agencies such as D&B enjoy a qualified legal privilege to make ordinary errors In any case D&B s contracts with subscribers purport to free it of liability for erroneous data

A few companies are dropping D&B limiting their use of the service or seeking out data from suppliers who specialize in particular industries But such [illegible] aren t likely to [illegible] much effect [illegible] D&B s monopoly position [illegible] Blackstone Co canceled its $3 [illegible] contract with D&B because of complaints about quality But Mr [illegible] the company s credit manager doesn t [illegible] [illegible] [illegible] headquarters The [illegible] [illegible] [illegible]

APPENDIX C

Problems in Measuring Accounting Profit

certain unaccounted-for costs Actually, the discrepancies are not too serious in the case of the corporation Rather, they are most likely to exist in the small proprietorship

In the corporation, management is hired and receives, presumably and opportunity-cost wage These wages are treated as expenses along with the wage payments to all employees, and are deducted in determining final profit Properties are ordinarily rented, and these rents are deductible in profit calculations To the extent that real estate is owned rather than rented, it is frequently segregated into a special real estate or building corporation subsidiary from which the property is rented If this is not done, the real estate is treated as part of the total investment that the firm seeks to use profitably (the rental value being readily determinable) This leaves, therefore, one possible source of discrepancy between accounting and economic profit—the earnings on the invested capital

A corporation derives its long-term capital from one or a combination of three external sources the sale of bonds, preferred stock, or common stock The bondholder s contribution is obtained, however, at an opportunity-cost interest rate, and this cost is recognized in determining profit As for the preferred stockholder, while legally an owner his or her position is really that of a limited partner Profit is computed before the preferred dividend is paid, and the board of directors can decide not to pay the preferred dividend if profits are insufficient On the other hand, the amount of the preferred dividend is limited, no matter how large the company's profits may be Thus, from the point of view of the common stockholder, the preferred dividend constitutes an opportunity-cost payment for the use of the preferred stockholder s capital, and nothing more This is, of course, objectively determinable, and in fact is always deducted in determining net profits available for the common stock

We are then left with only one significant element of discrepancy between accounting and economic profit the cost of the use of the common stockholder's contribution (including reinvested earnings) to the corporation This "normal profit" on the stockholder s capital is the amount by which accounting profit exceeds economic profit in the corporation Furthermore, this element is measurable—it is the amount that would be earned elsewhere on investments of equivalent risk Unless the existing investment process is capable of producing this opportunity rate of return, the capital will be gradually withdrawn

Since the economist views profit as a surplus in excess of all opportunity costs, past outlays have only partial significance Cost allocations arising from these past transactions must be modified by current facts Thus, the profit earned in some period is equal to the growth in value of the enterprise from the beginning of the period to the end of the period (after adjusting for any distributions by, or contributions to, the firm during the period) This increase in value is a reflection, not only of what we ordinarily understand to be the results of operations during the period, but also of changes in asset values (plant equipment, inventories) as well Thus, *profit, in an economic sense is the difference between the cash value of the enterprise at the beginning and end of the period* This may be contrasted with the accounting concept of profit as the difference between total revenue and total expense during the accounting period

Reasons for Measuring Profit

Various factors compel the periodic determination and reporting of profits Periodic financial reports are required by

1 Stockholders (owners), who want to know how their investments are faring
2 Tax collectors, both state and federal, who want their shares of the profits if any
3 The Securities Exchange Commission, which requires certain financial reports from publicly held corporations
4 Bankers and other financiers, who want to monitor the progress of firms in which they have investments
5 Management, which needs financial data for decision making, control, and as a measure of success (or failure) of past decisions

Given the discrepancy between the accountant s and the economist's conceptions of profit, certain problems emerge in the periodic calculation of profit for reporting purposes In examining these issues in the sections that follow, we shall conduct our analysis from the economist s point of view

Problems in Measuring Accounting Profit

Accountants, for legal and other reasons, are concerned only with historical facts Further, generally accepted accounting principles decree that the books must carry only those entries that can be substantiated by reasonably objective evidence in the form of *source documents* such as invoices, receiving reports cancelled checks, and bank statements Thus, accounting profit is an *ex post* concept based on past transactions as recorded on the company s books Unfortunately, this leads to incomplete cost analyses The failure to give consideration to certain economic costs has already been discussed In addition to these oversights even more serious errors arise from the generally accepted accounting techniques themselves

The difficulties that exist in accounting methodology are not due to the failure of the accounting profession to produce the right techniques Rather, they arise simply because the true profitability of an investment cannot be precisely determined until the process has been terminated. For any period other than the full life of the investment, profits can only be estimated. This in turn means that revenues and costs must, to some extent, be arbitrarily allocated to the period in question. The problem is that generally accepted and perfectly legal cost accounting methods can vary these allocated costs by as much as 40 percent. These wide variations are particularly apparent in the procedures for calculating depreciation expense and for the valuation of assets.

Depreciation of Assets

In carrying on a business activity, the firm's fixed assets other than land (e.g., buildings, machinery, and equipment) wear out or become obsolete from use and the passage of time. If the useful life of an asset is more than one year, it is considered to be a *depreciable asset*. The concept of depreciation is based on the premise that a depreciable asset produces revenues throughout its useful life. Therefore, in order for the company's annual income (profit) to be properly stated, a portion of the asset's cost is charged as an expense against the revenues in each fiscal year of the asset's life. This charge is called *depreciation*. The exact amount to be charged is established by company policy. However, for income tax reporting, depreciation must conform to federal and state laws.[7]

Since depreciation is an expense item, it serves as a direct reduction of the company's income. Thus the accounting measurement of profit depends in a very direct way upon the firm's methods of depreciation. The importance of this operating cost will vary widely from one company to another, depending on the composition of the firm's assets. Companies that are engaged in steelmaking, railroad and airline transportation, chemical processing, and the production of primary aluminum are characterized by extremely large depreciation charges. On the other hand, insurance companies, banks, investment funds, and advertising and merchandising establishments bear relatively small depreciation costs.

Methods of Depreciation

Depreciation methods can be grouped into two broad categories:

1. *Natural methods*, that is, methods that reflect the actual rate of wear and tear or obsolescence over the useful life of the asset. Natural methods include *straight-line* and *service life* methods.
2. *Accelerated methods*, that is, methods that accelerate cost recovery. The sole purpose of accelerated methods is tax manipulation. This category includes the *declining balance* method, the *sum of the years digits* method, the *remaining-life* method, and the new *accelerated cost recovery system* (ACRS).

Under the rules laid down both in the generally accepted accounting principles and by the Internal Revenue Service (IRS), a company must decide what method of depreciation to use on each asset or class of assets. These methods need not be the same for all the firm's assets, and there are many methods to choose from. Moreover, the firm may legitimately keep two sets of depreciation records for the same assets. One set using natural methods may be used to prepare financial statements that more accurately reflect actual wear and tear or obsolence. The other set may use accelerated methods for preparation of income tax returns.

Straight-Line Method Under the straight line method, the depreciable cost (original cost less the expected salvage value) is spread equally over the expected life of the depreciable asset. For instance, suppose a company car is purchased for $9,000. It has a useful life of three years, after which it can be sold for $3,000. The annual depreciation would be ($9,000 − $3,000) ÷ 3, or $2,000.

The straight-line method is not only simple and easy to apply, it is also theoretically correct for any asset that is used at a uniform rate. For that reason, the straight-line method is often used as a standard for comparison with other methods. It is also the basis for one method offered in the new accelerated cost recovery system (ACRS), created by the Economic Recovery Tax Act of 1981.

Service-Life Method For assets that are not used at a uniform rate, a service-life method may be more appropriate. When the rate of wear and tear is irregular, the useful life of the asset may be expressed either in terms of *working hours* or in terms of *units of production*. The depreciation that is charged then bears the same ratio to the asset's depreciable cost (cost less salvage) as the year's usage bears to the asset's useful life. For example, suppose that a bulldozer that cost $50,000 is expected to last for 20,000 hours of operation. If in one year, it is operated for 1,000 hours, depreciation would be (1,000/20,000) × $50,000 = $2,500. If in the next year, the machine is operated for 2,000 hours, the depreciation would be (2,000/20,000) × $50,000 = $5,000. Thus, in each year the depreciation charge reflects the actual portion of the assets's life that is used.

Depreciation and Tax Policy

For assets placed in service before January 1, 1981, the IRS permits the taxpayer to use "any method that is reasonable if you apply it consist

[7] Internal Revenue Service (IRS) rules and regulations with respect to all methods of depreciation are explained in IRS Publication 534, *Depreciation*. State laws usually follow the IRS rules.

ently " This includes accelerated methods such as the declining balance and the sum-of-the-year's-digits, as explained in IRS Publication 534, *Depreciation* For assets placed in service after December 31, 1980 tax payers are required to use the accelerated cost recovery system (ACRS) introduced by the Economic Recovery Tax Act of 1981 However the ACRS provides an alternate system that is based upon the straight line method

Both the old and the new accelerated methods provide larger depreciation charges in the early years of an asset s life, and correspondingly smaller taxable income and taxes, than is the case with straight line depreciation If the asset in question is kept in the business for all or most of its useful life, depreciation charges fall off rapidly in later years to amounts substantially below those that would prevail under straight line depreciation Assuming no change in tax rates or in income before depreciation, taxable income and income taxes are substantially larger, thereby offsetting the lower taxes of earlier years All other things being equal, however, the corporation still has the advantage, under accelerated methods, of having the productive use of cash that would otherwise be paid out in taxes were the straight-line method to be applied Depending on the useful life of the asset, this cash can be used in the business for a number of years for any of a number of purposes, thereby reducing the need for outside financing

Whether a company's choice of an accelerated method ultimately proves to have been wise depends on at least two factors, each of which is subject to change Since accelerated methods result in only a postponement of taxes rather than a permanent avoidance of them, the wisdom or folly of adopting a given course of action depends on (1) the income tax rates prevailing at the time the deferred tax has to be paid, and (2) the level of taxable income at that time Therefore, management must evaluate the future in terms of these uncertainties before adopting its depreciation policy

But this is not all Other considerations complicate the picture as well so that decisions will vary from firm to firm even in the same industry Among the more important complicating factors are (1) current versus anticipated future working capital requirements, (2) the extent and timing of planned capital expansion programs, and (3) the fact that a present dollar is worth more than a future dollar (something that makes the company s cost of capital a very important consideration) The relative weight given to each of these considerations will depend, of course upon current taxable income and the organizational form of the company

Proprietorships and partnerships face a tax situation that differs considerably from that of corporations, since the entire profit or loss that a proprietorship or a partnership accrues is attributed to the owners as personal income Because income tax rates are graduated the actual tax that a partner or proprietor must pay depends not only on the size of the business income but also on whether or not he or she has other sources of income Thus the selection of a method of depreciation is more difficult than in corporations, particularly if the partners have conflicting interests Thus, accelerated depreciation has its greatest appeal for young, growing corporations with limited access to capital markets and relatively great need for funds to finance expansion

Price Level Changes and Asset Valuation

Accountants, managers, and economists must evaluate three broad categories of assets

1 Land, which is a fixed asset but not depreciable
2 Fixed assets other than land, almost all of which are depreciable
3 Physical inventories of goods held for the purpose of manufacturing or trading

Valuation of Land

The value of land may appreciate not only because of inflation, but also because of changes in its potential use As a case in point, we take Castle and Cooke, Inc , parent of Dole Company, the packers of Dole pineapple In the 19th century Castle and Cooke acquired extensive pineapple-growing land in Hawaii In accordance with generally accepted accounting principles, this land is carried on the company balance sheet at its original cost of approximately $30 million, although its current market value is many times that amount

The significance of this understatement of land value depends upon one s point of view If profit is measured by the increase in value of the firm from one accounting period to the next, then we must conclude that the profitability of this concern has been grossly understated On the other hand, if we assume that the firm will continue to use this land for growing pineapple, the appreciation of the land is irrelevant because it cannot be realized in terms of cash flow However, much of this land represents potentially valuable building sites, and Castle and Cooke has already responded to growing population pressures by converting some of the land into housing developments Therefore the increased market value of the land can hardly be ignored when evaluating the profit potential of the company The implication is that valuation of land assets must go beyond either cost or market value alone Consideration of ways in which the land will be used is necessary to establish the economic value of land assets

Valuation of Other Fixed Assets

In preparing balance sheets and income statements, accountants operate on the "going-concern" convention that the business will continue indefinitely. Hence, on the assumption that the company will not sell its fixed assets, it is customary to value these in terms of original cost rather than current market value. Thus, generally accepted accounting practices prevent market fluctuations from entering into the fixed asset accounts.

If the asset is depreciable, the depreciation expense is recorded on the income statement, and the net value of the asset is correspondingly reduced on the balance sheet. If the asset is not depreciable, only the balance sheet is affected. Accounting procedures do exist whereby the increased (market) value of assets can be recorded on the books, however, the accounting profession has been very reluctant to use anything other than historical cost as a basis for depreciation.

The subject of depreciation is complicated by controversy over three of its aspects:

1. Its true function
2. Its proper use as a tool for stimulating capital formation and for directing investment along lines deemed to be in the national interest
3. The proper method for measuring it when reporting net income to stockholders and tax authorities

As for its purpose, in theory, charging annual depreciation not only matches costs with resulting revenues, it also provides for recovery, in cash, of the original cost of the asset. This is supposed to provide for replacement of the worn-out or obsolete asset. But in this era of substantial inflation, the mere recovery of nominal dollars spent years ago is not sufficient to replace the asset today, even with an identical make and model. The replacement problem is further complicated by the fact that we are living in an era of rapid technological change, it may well be that an identical replacement simply is not available. The improved replacement may provide greatly increased earnings in the future and thus be well worth its greater cost. Such considerations require that a larger portion of the reported income should be made available for the purchase of future assets rather than for distribution to owners.

As for the proper use of depreciation as a tool for stimulating capital formation, this is primarily a political consideration that is built into the tax laws. These laws are changed from time to time by the Congress.

Our primary concern is with the measurement of depreciation for reporting income. Here the accounting profession, amid much controversy, has been unable to arrive at any satisfactory improvement on the current method, which is to deduct a prorated recovery of historical cost from current operat[redacted], revenue [redacted] beside[redacted] re[redacted] problem previously mentioned, a major objection to this procedure arises from inflation. The accounting procedure is to match increments of capitalized cost with resulting revenues but the dollars that comprised the capitalized cost of years past are worth much more than the dollars of revenue that they presumably offset. From the economist's point of view, these accounting practices, by failing to recognize inflation, result in substantial distortion of the firm's financial position. The company's income is overstated on the income statement and the value of its assets is understated on the balance sheet.

Many accountants have also recognized this problem, and have offered three different solutions:

1. *Constant dollar accounting*, which is also called the general price level model. This solution restates the historical cost from nominal dollars to constant dollars. The method of attack is to adjust the data by the application of appropriate indexes to obtain measurements in dollars of constant purchasing power. This approach is easy to compute, easy to understand, and completely objective.
2. *Current value accounting*, which abandons historical cost as a basis for valuation in favor of some measure of current value. Proponents of this approach argue that users of financial statements are more concerned with what the enterprise is worth now than what it cost in the past. The major drawback is that not all assets can be objectively evaluated.
3. *Current value/constant dollar accounting* is a method that would change both the unit of measurement and the historical cost model. Proponents of this approach argue that constant dollars should be used to measure current values of assets.

Constant-dollar accounting was approved by the American Institute of Certified Public Accountants (AICPA) in 1963, but only for supplemental information.[8] Its use in the provision of additional information was further encouraged in 1969 by the Accounting Practices Board (APB).[9]

Valuation of Inventories

If all goods purchased or manufactured within a given accounting period were sold during the same period, the only problem would be to determine the cost of the goods. But this is not the way a business normally operates. Goods are bought, stored, and sold throughout the accounting period. Under normal accounting procedures, the cost of

[8] Staff of the Accounting Research Division, Reporting the Financial Effects of Price Level Changes, *Accounting Research Study No. 6* (New York: AICPA, 1963).

[9] Financial Statements Restated for General Price Level Changes, *APB Statement No. 3* (New York: AICPA, 1969).

goods sold must be determined for the income statement so that their costs can be charged against the revenues from their sale. The cost of goods that remain in the inventory and that will produce revenues at a later date must be determined for the balance sheet, where they are listed as current assets.

Accountants insist that cost must be accepted as the primary basis for inventory valuation. If prices were constant and the quantity in stock always the same, accounting for inventory would present no particular problem. But when prices fluctuate, inventory replacement at varying costs raises the problem of measuring the costs to be applied both to goods sold and to goods remaining in the inventory. Accountants have devised various methods of measurement, but two methods, called first-in, first-out (FIFO) and last in, first-out (LIFO), are most common.

In order to understand the difference between FIFO and LIFO a distinction must be made between the physical item and its cost. To help clarify this distinction, let us visualize a warehouse with two doors. Newly acquired goods enter by one door, sold goods exit by the other door. In between, the goods are stored in such a way that the order in which they are acquired is preserved. This means that the first item acquired is the first item sold. That is, the oldest merchandise is sold first. (This is normal practice regardless of the costing method used.)

Now suppose that each item entering through the acquistion door has a tag attached that states the item's cost. If the tag remains attached to the item, then the cost of the first item in is the cost of the first item out. That is FIFO—first-in, first-out. In contrast, suppose that as each item enters the warehouse, the cost tag is removed and placed upon a spike. Then as an item is sold and goes out the other door, an attendant removes one tag from the spike and attaches it to the sold item. The tag that the attendant removes from the spike is the last tag that was placed there by the attendant at the acquisition door. That is to say, the cost attached to the sold item is the most recent cost of acquisition. That is LIFO—last in, first-out.

Effects of Inventory Valuation by FIFO When prices are rising, the value of goods sold or used up is recorded at the earlier, lower price levels. The item entitled "cost of goods sold" on the income statement therefore is below the replacement cost of the goods sold. This means that gross profit is overstated. On the other hand, if prices are falling, cost of goods sold will be reported on the income statement at a value greater than replacement cost. This means that gross profit is understated. In other words, unless prices are completely stable, FIFO will cause gross profit to be either overstated or understated. On the balance sheet, however, the valuation of goods remaining in the inventory is at or near current replacement cost. Therefore, whether prices are rising or falling, the valuation of inventory on the balance sheet is fairly accurate.

Effects of Inventory Valuation by LIFO The effects of LIFO on the income statement and balance sheet are directly opposite to those of FIFO. Under LIFO, whether prices are rising or falling, goods sold or used up are evaluated at the latest prices of acquisition. Hence the cost of goods sold, as reported on the income statement, is at or near replacement cost. This means that gross profit is fairly stated whether prices are rising or falling. This is the chief virtue of LIFO.

On the balance sheet, however, goods remaining in the inventory are valued at the earlier costs of acquisition. In a time of falling prices this would cause the value of the inventory to be overstated. In a time of rising prices, the value of the inventory will be understated. In companies that maintain a safety stock—that is, a minimum level of inventory on hand—the inventory can retain items valued at costs that date back many years. Under this circumstance, the value of the inventory may be grossly understated on the balance sheet. Furthermore, if the company ever has to dip into the safety stocks, some very strange things can happen to the income statement.

For example, suppose that a company has been on LIFO for a 10-year period during which prices were moving up steadily and operations were proceeding at a pace that permitted stocks to be maintained at desired physical levels. Labor difficulties set in, and a strike is called that forces the company to operate out of inventory for a prolonged period. Soon the inventory that has been carried at prices that prevailed 10 years earlier is brought into sales, and huge inventory profits are realized. It is even conceivable, in fact, that these very large profits result in reported earnings far in excess of those realized for the equivalent period before the strike began. For these reasons there has developed in some quarters a disenchantment with LIFO valuation and a desire to return to what is felt to be the more logical and realistic FIFO approach.

The Economic Concept of Replacement Cost Accounting

While there are very cogent reasons why accountants insist upon using historical costs to value assets and also refuse to recognize any profits held in the inventory, there are equally persuasive arguments in favor of relaxing such practices for the purposes of decision making. From an internal, managerial perspective, the economist's concept of replacement cost accounting can be quite useful. Accounting procedures approach replacement cost accounting with the LIFO method of inventory valuation. However, because of the undesirable aspects of LIFO, a more generalized replacement cost approach would be preferred, to be uniformly applied to both inventories and fixed assets. The essential idea is to report a profit figure that reflects the revenues and costs of the present period, not the revenues of the present year and the costs of the previous years The difference between the accounting concept and the economic concept can be illustrated by the following example

Suppose that a hypothetical company deals in a completely homogeneous product and makes all transactions in cash, suppose further that it has the following balance sheet as of December 31, 1983

Cash	$30 000
Inventory 3 000 units @ $10	30 000
Total assets	$60 000
Owner s equity	$60 000

Now suppose the following activities take place in 1984

Sales	20 000 units @ $15	$300 000
Purchases	3 000 units @ $10	30 000
	15 000 units @ $11	165 000
	5 000 units @ $12	60 000
Operating expenses		20 000

The firm's income statement as of December 31, 1984, would depend upon whether it used FIFO or LIFO

	FIFO	*LIFO*
Sales 20 000 units @ $15	$300 000	$300 000
Cost of goods sold		
Beginning inventory		
3 000 units @ $10	30 000	30 000
Purchases		
3 000 units @ $10	30 000	30 000
15 000 units @ $11	165 000	165 000
5 000 units @ $12	60 000	60 000
Cost of goods available for sale	285 000	285 000
Less ending inventory		
FIFO 5 000 units @ $12	60 000	—
1 000 units @ $11	11 000	—
LIFO 6 000 units @ $10	—	60 000
	71 000	60 000
Net cost of goods sold	214 000	225 000
Gross profit on sales	86 000	75 000
Operating expenses	20 000	20 000
Operating income	$ 66 000	$ 55 000

The difference of $11,000 in operating income is due solely to the difference in the method of inventory valuation, and these results reveal

ample grounds for the continuing controversy in the accounting profession But by invoking the economist's definition of profit—the difference between the cash value of an enterprise at the beginning and end of the period—perhaps we can clarify the issue In our hypothetical example, the change in cash on hand is

Cash on hand January 1		$ 30 000
Plus sales		300 000
		$330 000
Subtract		
Purchases	$255 000	
Operating expenses	20 000	$275 000
Cash on hand December 31		$ 55 000

There are also on hand 6,000 units of merchandise that are valued at their replacement cost of $12 per unit for a total of $72,000 That is to say, if the 6,000 units could be returned to the supplier at the last price paid ($12), the cash value of the enterprise clearly would be

Cash	$ 55 000
Inventory 6 000 @ $12	72 000
Cash value of the firm Dec 31	$127 000

The increase in cash value of the firm (profit) is

Cash value of the firm Dec 31	$127 000
Less Cash value of the firm Jan 1	60 000
Economic profit	$ 67 000

The $67,000 profit can be further divided into its two components *trading profit* and *holding profit* Traders are well aware that goods that are sold must be replaced if business is to continue Trading profit, then may be defined as net sales minus operating expenses and the current replacement cost of the goods that were sold For our hypothetical company, trading profit is

Sales		$300 000
Operating expenses	$ 20 000	
Replacement cost 20 000 units @ $12	240 000	260 000
Trading profit		$ 40 000

Holding profit or loss is defined as the increase or decrease in replacement cost of an item held in inventory This profit has nothing to do with the trading skills of the persons managing the enterprise It is more a capital gain or loss that results from a general increase or decrease in prices For our hypothetical company, holding profit is

$$
\begin{aligned}
6{,}000\ (\$12\ 00 - \$10\ 00) &= \$12{,}000 \\
15{,}000\ (\$12\ 00 - \$11\ 00) &= \ \ 15{,}000 \\
5{,}000\ (\$12\ 00 - \$12\ 00) &= \ \ \underline{-0-} \\
&\ \ \ \underline{\underline{\$27{,}000}}
\end{aligned}
$$

The trading profit of $40,000 plus the holding profit of $27,000 adds up to the economic profit of $67,000

The purpose of the foregoing illustration has been twofold (1) it sheds some light on the FIFO-LIFO controversy as it relates to economic decision making, and (2) it provides an opportunity to show how the economist s definition of profit can lead to better profit analysis A decision maker should be in a better position to understand and evaluate profit performance when profit is viewed in the comprehensive manner shown above, rather than as a single figure without any breakdown and separation of its basic sources Further, the economist's concept of net income avoids the necessity of stating the inventory value at a historical cost that is substantially different from its current replacement cost as is the case with LIFO

Summary

The history of economic thought abounds in profit theories, but most of them fall into three major categories

1 *Compensatory or functional theories*, which hold that profit is the entrepreneur's reward for coordinating and controlling the enterprise
2 *Friction and monopoly theories*, which explain profit as the result of frictions that prevent the smooth operation of the model of perfect competition
3 *Technology and innovation theories*, which hold that profits are the rewards for innovation, that is, the adaptation of an *invention* to business use

In the measurement of profit, there is a difference between generally accepted accounting methods and economic concepts The accountant calculates profit as the difference between total revenue and total costs The economist would divide the accountant s profit into two parts One part, called *normal profit*, represents recovery of opportunity costs which are not recognized by accountants The remainder represents *economic profit* (which is sometimes called *surplus profit* or *excess profit*)

Accounting methods have great difficulty with charges for depreciation of assets and with the valuation of assets, especially goods carried in inventories Depreciation methods can be grouped into two broad categories (1) *natural methods*, which reflect the actual rate of wear and tear or obsolescence, and (2) *accelerated methods* which are used to manipulate taxes by accelerating cost recovery

From the economist's point of view accounting practices that use historical cost for asset valuation result in substantial distortion of the values of three broad categories of assets

1 *Land*, which may increase in nominal value due to inflation or in real value due to changes in potential use
2 *Fixed assets other than land*, almost all of which are depreciable
3 *Physical inventories of goods* which are held for the purpose of manufacturing or trading

The standard accounting practice of basing depreciation on historical cost in nominal dollars results in substantial distortions on both the balance sheet and the income statement On the balance sheet, assets are undervalued in terms of current dollars On the income statement, the charge for depreciation is understated, thus causing taxable income to be overstated

This problem has been recognized by many accountants as well as by economists, and three different solutions have been proposed

1 *Constant dollar accounting*, which states depreciation charge and asset valuation in dollars of constant purchasing power
2 *Current value accounting*, which abandons historical cost in favor of some objective valuation of the asset in current dollars
3 *Current value/constant dollar accounting*, which combines the other two methods

Valuation of inventories is necessary to determine cost of goods sold and to determine the value of goods remaining in the inventory for the firm s balance sheet The two most common methods of inventory valuation are FIFO (first-in, first-out) and LIFO (last in, first out) The FIFO method assigns the earliest costs to the income statement as cost of goods sold and retains the latest costs for the balance sheet The LIFO method does just the opposite But neither FIFO nor LIFO can result in an accurate valuation on both the income statement and the balance sheet unless prices are completely static

The economist s solution is to value both goods sold and goods retained in inventory at replacement cost Profit can then be calculated as the difference in the firm's cash value at the beginning and end of the period This economic profit can be divided into two parts

1 *Trading profit (loss)* is the direct result of trading activities of the firm It is defined as net sales minus operating expenses and the *replacement cost* of goods sold
2 *Holding profit (loss)* is a capital gain or loss that results from a general increase or decrease in prices while goods are being held for sale

Neither the accounting profession nor the Internal Revenue Service will accept replacement cost accounting for preparation of financial statements However, it can and should be used for managerial purposes, as it provides a more accurate indication of the success or failure of the firm's activities

Problems

1 It has been argued that the major difference between accounting profit and economic profit is that accountants recognize depreciation while economists do not Do you agree with this position? If economists do recognize depreciation, is it measured in the same way that accountants measure it? Discuss these issues

2 In reporting financial leases, large business firms are now required to "capitalize" future lease payments and record the capitalized value as a liability and also as an asset Both of these values are then reduced as lease payments are made Previously, these lease payments were treated as ordinary expenses in the year in which they were made From the economist's point of view, explain which method you believe more accurately measures the value of the firm at any given time

3 In the following situations, explain why you would suggest using a straight-line or accelerated depreciation method

a A new corporation with a low credit rating
b A corporation currently operating at or below the break-even point but expecting future long-run profits
c A corporation that estimates that its taxable income will remain steady for the next 10 years
d A corporation in an industry targeted by government for incentive tax breaks over the next five years

4 Describe carefully three currently acceptable methods of depreciation accounting for assets acquired before January 1, 1981, and explain the profit-reporting consequences of each

5 Westphall Products, Inc , is a new firm with a promising long run future However, the company expects to show income tax losses

during the first five years of operation Moreover, during this period it must acquire about $2 million of assets that qualify for the full 10 percent investment tax credit and for accelerated depreciation as well Westphall's president is attempting to arrange financing for these assets The local bank is willing to extend a 10 year loan at an interest rate of the prime plus 3 percent However, the bank's loan officer indicated that she knew of a wealthy private investor who would most likely buy the assets and then in turn lease them to Westphall at an effective interest cost of the prime rate only The president is suspicious of this latest arrangement since he cannot understand how an individual could possibly charge a lower interest rate than a bank Explain how the above situation might be possible

6 Accelerated depreciation and shorter service lives are both merely substitute methods of adjusting depreciation for changes in the price level True or false? Explain

7 Suppose you bought a house 20 years ago for $45,000 and sold it this year for $145,000 During this period the accumulated depreciation on the house was $25,000, leaving a book value of $20,000

a Did you make an accounting profit? If so, how much?
b Is your accounting profit your "real" profit? Explain

8 Vincent quit his $18,000 a year job to work full time on his growing wholesale vodka distributorship He began the year with $10,000 in cash and 700 bottles of premium vodka The following is a record of purchases made during the year

Date	*Number of Bottles*	*Price/Bottle*
January 1	100	$7 50
March 7	500	8 25
May 14	1 000	8 50
July 2	800	8 50
October 3	500	9 00
December 6	600	9 50

At the end of the year, Vincent calculated total sales of $50 000 and operating expenses of $2,700 The ending inventory is 650 bottles and the current purchase price of a bottle of vodka is $9 50

a What is the ending cash value of Vincent's distributorship?
b What is the total economic profit for operations during the year?
c Divide the total economic profit into trading and holding profit
d Should Vincent stay in business?

9 The Midwest Electric Power Company purchased plant and equipment in the following years

Year	Asset	*Estimated Life (years)*	*Price Index*
1964	$ 20 000	25	50
1967	40 000	20	100
1973	100 000	40	150
1984	125 000	25	200
1985	60 000	10	300

a Assuming that these assets were purchased on January 1 of the year in which they were acquired, compute the total depreciation charge for 1985 based on original cost Assume straight-line depreciation

b Compute the total depreciation charge for 1985 in terms of 1985 dollars

c The company s revenues for 1985 are $100,000 Fuel expenses are $18,000, labor expense, $9,000, taxes, $25,000 Prepare two profit and loss statements, one without the adjusted depreciation and one with depreciation adjusted according to the price index

d On the basis of your calculations, what is the effect of the adjustment in depreciation on the company's operating income? Are stockholders better or worse off? Discuss

10 Jack's Radio Wholesalers, Inc , has accumulated the following information on its KX-15 speakers during 1983

Date	*Units*	*Price/Unit*
January 1 (inventory)	600	$18 00
March 11 (purchase)	650	18 50
July 9 (purchase)	700	19 75
November 20 (purchase)	400	20 50
December 1 (purchase)	200	21 00
December 31 (inventory)	650	

a Calculate the value of inventory on January 1, 1984, using both FIFO and LIFO

b What effect would each method of inventory valuation have on Jack's income statement?

c What effect would each method have on Jack s balance sheet?

Case Problem Wilco Machine Tools

11 Accountants at Wilco Machine Tools are working on the following financial statements

WILCO MACHINE TOOLS
Comparative Balance Sheets
($000)

	Dec 31 1982	Dec 31 1983 (LIFO)	Dec 31 1983 (FIFO)
Assets			
Cash	$245	$502	$502
Inventory	90	___	___
Total assets	$335	$ ___	$ ___
Equities			
Owner s equity	$335	$ ___	$ ___

Inventories and Purchases, 1983

Date	*Units*	*Price/Unit*
Jan 1 (inventory)	1 200	$
Mar 15 (purchase)	1 700	85
June 15 (purchase)	2 000	90
Sept 25 (purchase)	2 500	95
Dec 25 (purchase)	1 200	105
Dec 31 (inventory)	1 400	

Note Average selling price during the year was $150

WILCO MACHINE TOOLS
Income Statement
For the Year Ended December 31 1983

Sales	$
Cost of goods sold	___
Gross profit	
Operating expenses	135 000
Net profit before tax	$

Questions

a Complete Wilco Machine Tools balance sheet and income statement using both FIFO and LIFO methods of inventory valuation

b Which inventory valuation method would be preferable for
(1) Tax purposes?
(2) Showing potential investors?

c From an economist's view, thoroughly analyze 1983's operations
d Discuss why an economist's view might be better for decision making

References

Anthony Robert N The Trouble with Profit Maximization *Harvard Business Review* November–December 1969 pp 126–34

Anthony Robert N and G A Welsch *Fundamentals of Management Accounting* 3d ed Homewood Ill Richard D Irwin 1981

Curran, Ward S Depreciation in Economic Theory and Capital Budgeting *Quarterly Review of Economics and Business* Spring 1968 pp 61–68

Horngren Charles T *Cost Accounting A Managerial Emphasis* 5th ed Englewood Cliffs N J Prentice Hall 1982

Pyle, William W and Kermit D Larson *Fundamental Accounting Principles* 9th ed Homewood Ill Richard D Irwin, 1978 chap 20 This text provides a basic but thorough discussion of general price level adjusted accounting (GPLA) methods

Solomons, David Economic and Accounting Concepts of Incomes *Accounting Review* July 1961 pp 374–83

14

Profit: Planning and Control

Profit planning refers to operating decisions in the areas of product line, volume of production, and pricing Whatever the firm's profit goals may be, profit planning must take into account the expected demand for the firm's products, its capacity to meet the demand, and all of its costs A good profit plan will establish objectives and prescribe the means for achieving the objectives It will also establish a timetable for actions necessary to carry out the plan Profit management not only is a vital function for directing short-run operations but also is essential for optimizing investment and financing decisions in the long run

There are a number of approaches to profit planning that are commonly used by accountants and economists In this chapter we shall discuss three of these

1 The profit budget
2 Break even analysis
3 Regression analysis

Each of these may be used separately or in combination with others depending on the information available and the purpose of the analysis

APPENDIX D

Understanding Financial Statements -
A guide for non-financial professionals

Understanding Financial Statements

A guide for non-financial professionals.

Dun & Bradstreet Credit Services

101

1

UNDERSTANDING FINANCIAL STATEMENTS for Non-financial Professionals – INTRODUCTION

This booklet is intended to give non-financial professionals a basic understanding of how to read and analyze financial statements presented by Dun & Bradstreet Credit Services It is a basic guide and not meant to give you the skills of a seasoned financial analyst or accountant However, it is intended to give you working knowledge of financial statements and the use of ratios as presented in Dun & Bradstreet's business information products and specialized financial services

In order to understand financial statements, we will be referring to a hypothetical privately-held company, Gorman Manufacturing We'll go step-by-step through its financial statement to find out what the figures reveal about the company's performance Then we'll show how to use solvency, efficiency and profitability ratios on Gorman's statements and what their significance can be to you In the final pages, you'll find a glossary defining frequently used financial terms, a Duns Financial Profile® report on Gorman, and highlights of some of Dun & Bradstreet's products and services

102

Key Business Ratios

The 14 most widely used financial ratios.

Every Dun's Financial Profile® Report, PRO Report, Model Statement and Industry Norm Report delivers the advantage of D&B Norms and Key Business Ratios. These specific measures of business performance provide significant insights into a company's financial condition, based on its performance compared to others in its industry.

The Key Business Ratios used in Customized Information Systems & Services include more than 800 lines of business segmented by up to 15 asset ranges and four geographic areas. Enables you to simplify your evaluation of a company's financial condition with objective, quantitative measures of performance.

Here's what each of the 14 Key Business Ratios used by Customized Information Systems and Services means

Solvency Ratios

Quick Ratio $= \dfrac{\text{Cash + Accounts Receivable}}{\text{Total Current Liabilities}}$

Shows the dollars of liquid assets available to cover each dollar of current debt.

Current Ratio $= \dfrac{\text{Total Current Assets}}{\text{Total Current Liabilities}}$

Measures the margin of safety present to cover any possible reduction of current assets.

Current Liabilities to Net Worth $= \dfrac{\text{Total Current Liabilities}}{\text{Net Worth}}$

Contrasts the amounts due creditors within a year with the funds permanently invested by the owners. The smaller the Net Worth and the larger the Liabilities, the greater the risk.

Current Liabilities to Inventory $= \dfrac{\text{Total Current Liabilities}}{\text{Inventory}}$

Tells you how much a firm relies on funds from disposal of unsold inventories to meet debt.

Total Liabilities to Net Worth $= \dfrac{\text{Total Liabilities}}{\text{Net Worth}}$

Compares the company's total indebtedness to the venture capital invested by the owners.

Fixed Assets to Net Worth $= \dfrac{\text{Fixed Assets}}{\text{Net Worth}}$

Reflects the portion of net worth that consists of fixed assets. Generally, a smaller ratio is desirable.

Efficiency Ratios

Collection Period $= \dfrac{\text{Accounts Receivable}}{\text{Sales}} \times \text{365 Days}$

Reflects the average number of days it takes to collect receivables. Quality of receivables can be determined when compared with selling terms.

Inventory Turnover $= \dfrac{\text{Sales}}{\text{Inventory}}$

Determines the rate at which merchandise is being moved and the effect on the flow of funds into a business.

Assets to Sales $= \dfrac{\text{Total Assets}}{\text{Sales}}$

This rate ties in sales and the total investment in assets that is used to generate those sales.

Sales to Net Working Capital $= \dfrac{\text{Sales}}{\text{Net Working Capital}}$

(Net Working Capital = Current Assets – Current Liabilities)

Measures the efficiency of management to use its short term assets and liabilities to generate revenues.

Accounts Payable to Sales $= \dfrac{\text{Accounts Payable}}{\text{Sales}}$

Measures the extent to which the supplier's money is being used to generate sales. When this ratio is multiplied by 365 days, it reflects the average number of days it takes the company to repay its suppliers.

Profitability Ratios

Return on Sales (Profit Margin) $= \dfrac{\text{Net Profit after Taxes}}{\text{Sales}}$

Reveals profits earned per dollar of sales and measures the efficiency of the operation.

Return on Assets $= \dfrac{\text{Net Profit after Taxes}}{\text{Total Assets}}$

This is the key indicator of profitability for a firm. It matches operating profits with the assets available to earn a return.

Return on Net Worth (Return on Equity) $= \dfrac{\text{Net Profit after Taxes}}{\text{Net Worth}}$

Analyzes the ability of the firm's management to realize an adequate return on the capital invested by the owners of the firm.

Industry Norms and Key Business Ratios are available on computer diskettes in directories or on magnetic tape.

For more information, contact Customized Information Systems and Services at 1-800-342-2477 (in New Jersey call 201-665-5330 collect).
Or contact your D&B sales representative or your local D&B office.

SOLVENCY RATIOS

Solvency Ratios — Quick Ratio

The ***quick ratio***, sometimes called the "acid test" or "liquid" ratio, measures the extent to which a business can cover its current liabilities with those current assets readily convertible to cash. Only cash and accounts receivable would be included, as inventory and other current assets would require time and effort to convert into cash. A minimum ratio of 1.0 to 1.0 ($1 of cash receivables to $1 current liabilities) is desirable. Gorman had a .50 to 1.0 (.50¢ to $1) in 1987 unchanged from 1986. This indicates weakness, especially when compared to the median for the industry.

Formula: Cash + Accounts Receivable ÷ Current Liabilities, or in the Gorman example:

$$\frac{\$212,597+\$1,733,380}{\$4,192,046} = \text{Quick Ratio} = .5$$

Industry median or norm = 1.2

Solvency Ratios — Current Ratio

The ***current ratio*** expresses the working capital relationship of current assets to cover current liabilities. A rule of thumb is that at least 2 to 1 is considered a sign of sound financial strength. However, much depends on the standards of the specific industry you are reviewing. Gorman shows a 1.6 to 1.0 ($1.60 to $1) as its current ratio, which is down from 1.8 in 1986. The industry average is 1.9. If a company's inventory is slow in selling, a stronger current ratio is required.

Formula: Current Assets ÷ Current Liabilities, or in the Gorman example:

$$\frac{\$6,770,968}{\$4,192,046} = \text{Current Ratio} = 1.6$$

Industry median or norm = 1.9

Solvency Ratios — Current Liabilities To Net Worth

Current liabilities to net worth ratio indicates the amounts due creditors within a year as a percentage of the owners or stockholders investment. The smaller the net worth and the larger the liabilities, the less security for creditors. Normally a business starts to have trouble when this relationship exceeds 80 percent. Gorman's ratio shows 120.4 percent, up from the 1986 ratio of 103.2 percent. The industry median or norm is 63.8%.

Formula: Current Liabilities ÷ Net Worth, or in the Gorman example:

$$\frac{\$4,192,046}{\$3,482,600} = \text{Current Liabilities to Net Worth Ratio} = 120.4\%$$

Industry median or norm = 63.8%

Solvency Ratios — Current Liabilities To Inventory

Current liabilities to inventory ratio shows you, as a percentage, the reliance on available inventory for payment of debt (how much a company relies on funds from disposal of unsold inventories to meet its current debt). Gorman shows a 94.4 percent, up from 78.7 percent in 1986. The industry median is substantially higher at 173.3 percent.

Formula: Current Liabilities ÷ Inventory. In the Gorman example:

$$\frac{\$4,192,046}{\$4,439,597} = \text{Current Liabilities to Inventory Ratio} = 94.4\%$$

Industry median or norm = 173.3%

Solvency Ratios — Total Liabilities To Net Worth

Total liabilities to net worth ratio shows how all of the the company's debt relates to the equity of the owners or stockholders. The higher this ratio, the less protection there is for the creditors of the business. Gorman's ratio is shown at 132.0 percent, up from 115.5% in 1986 and is slightly below the industry's. The industry median ratio of 130.2 percent has deteriorated recently and is heavy for the period under review.

Formula: Total Liabilities ÷ Net Worth, or in the Gorman example:

$$\frac{\$4,597,743}{\$3,482,600} = \text{Total Liabilities to Net Worth Ratio} = 132.0\%$$

Industry median or norm = 130.2%

Solvency Ratios — Fixed Assets To Net Worth

Fixed assets to net worth ratio shows the percentage of assets centered in fixed assets compared to total equity. Generally the higher this percentage is over 75 percent, the more vulnerable a concern becomes to unexpected hazards and business climate changes. Capital is frozen in the form of machinery and the margin for operating funds becomes too narrow for day to-day operations. Gorman appears to have a favorable ratio at 36.5 percent, up slightly from 32.6 percent in 1986. The industry ratio median is 48.0.

Formula: Fixed Assets ÷ Net Worth. In the Gorman example:

$$\frac{\$1,271,811}{\$3,482,600} = \text{Fixed Assets to Net Worth Ratio} = 36.5\%$$

Industry median or norm = 48.0%

EFFICIENCY RATIOS

Efficiency Ratios — Collection Period

Collection period ratio is helpful in analyzing the collectability of accounts receivable, or how fast a business can increase its cash supply Although businesses establish credit terms, they are not always observed by their customers for one reason or another In analyzing a business, you must know the credit terms it offers before determing the quality of its receivables While each industry has its own average collection period (number of days it takes to collect payments from customers), there are observers who feel that more than 10 to 15 days over terms should be of concern Gorman's terms of sale are net (or full amount) due within 30 days Its average collection period was 33 4 days based on the 1987 statements, up from 24 3 days in 1986 While the trend for Gorman is downward, its receivables are still being converted to cash faster than the industry median, which was 48 0 days in 1987

Formula Accounts Receivable – Sales × 365 Days, or in the Gorman example

$$\frac{\$1\ 733\ 380}{\$18\ 931\ 956} \times 365 = \text{Average Collection Period} = 33\ 4 \text{ Days}$$
Industry median or norm = 48 0 Days

Efficiency Ratios — Sales to Inventory

Sales to inventory ratio provides a yardstick for comparing stock-to-sales ratios of a business with others in the same industry When this ratio is high it may indicate a situation where sales are being lost because a concern is understocked and/or customers are buying elsewhere If the ratio is too low, this may show that inventories are obsolete or stagnant Gorman's average turnover is 4 3 times for 1987 In 1986 it was 4 0 times The industry average was 12 6 times annually Gorman's below-average turnover indicates the cash flow into the business is slow, since inventories are being converted to cash only four times per year

Formula Annual Net Sales – Inventory, or in the Gorman example

$$\frac{\$18\ 931\ 956}{\$4\ 439\ 597} = \text{Average Inventory Turnover} = 4\ 3 \text{ Times}$$
Industry median or norm = 12 6 Times

Efficiency Ratios — Assets To Sales

Assets to sales ratio measures the percentage of investment in assets that is required to generate the current annual sales level If the percentage is abnormally high it indicates that a business is not being aggressive enough in its sales efforts, or that its assets are not being fully utilized A low ratio may indicate a business is selling more than can be safely covered by its assets Gorman has a 42 7 percent ratio, up from 41 1 percent registered in 1986 Compared to the industry median of 47 6 per cent, this ratio appears to be adequate

Formula Total Assets – Net Sales, or in the Gorman example

$$\frac{\$8\ 080\ 343}{\$18\ 931\ 956} = \text{Assets to Sales} = 42\ 7\%$$
Industry median or norm = 47 6%

Efficiency Ratios — Sales To Net Working Capital

Sales to net working capital ratio measures the number of times working capital turns over annually in relation to net sales A high turnover rate can indicate overtrading (an excessive sales volume in relation to the investment in the business) This ratio should be reviewed in conjunction with the assets to sales ratio A high turnover rate might also indicate that the business relies extensively upon credit granted by suppliers or the bank as a substitute for an adequate margin of operating funds Gorman registered 7 3 times in 1987, up from 6 7 times in 1986 This appears to be in line with the industry median of 7 2 times

Formula Sales – Net Working Capital, or in the Gorman example

$$\frac{\$18\ 931\ 956}{\$2\ 578\ 922} = \text{Sales to Net Working Capital} = 7\ 3 \text{ Times}$$
Industry median or norm = 7 2 Times

Efficiency Ratios — Accounts Payable To Sales

Accounts payable to sales ratio measures how the company pays it suppliers in relation to the sales volume being transacted A low percentage would indicate a healthy ratio Gorman has a 10 1 percent, up from its 6 2 percent in 1986 which should be of concern since the industry median is 5 3 percent In all probability Gorman is paying its bills slowly and missing out on some supplier discount incentives

Formula Accounts Payable – Net Sales, or in the Gorman example

$$\frac{\$1\ 921\ 028}{\$18\ 931\ 956} = \text{Accounts Payable to Sales Ratio} = 10\ 1\%$$
Industry median or norm = 5 3%

PROFITABILITY RATIOS

Profitability Ratios — Return On Sales (Profit Margin)

Return on sales (profit margin) ratio measures the profits after taxes on the year's sales The higher this ratio, the better prepared the business is to handle downtrends brought on by adverse conditions Gorman earned 0 2 percent in 1987 compared to 0 3 percent in 1986 This compares with the industry median of 3 4 percent In this category, Gorman's performance is weak

Formula Net Profit After Taxes – Net Sales, or in the Gorman example

$$\frac{\$32\ 892}{\$18\ 931\ 956} = \text{Return on Sales Ratio} = 2\% \quad \text{Industry median or norm} = 3\ 4\%$$

Profitability Ratios — Return On Assets

Return on assets ratio is the key indicator of the profitability of a company It matches net profits after taxes with the assets used to earn such profits A high percentage rate will tell you the company is well run and has a healthy return on assets Gorman has a 0 4 percent eturn on total assets compared to 0 8 percent in 1986 This is unfavorable in light of the industry median of 5 7 percent

Formula. Net Profit After Taxes – Total Assets, or in the Gorman example

$$\frac{\$32\ 892}{\$8\ 080\ 343} = \text{Return on Assets Ratio} = 4\% \quad \text{Industry median or norm} = 5\ 7\%$$

Profitability Ratios — Return On Net Worth (Return Of Equity)

Return on net worth ratio measures the ability of a company's management to realize an adequate return on the capital invested by the owners in the company Gorman has earned 0 9 percent on net worth in 1987 compared to 1 7 percent in 1986 This percentage is very low and the trend is down The industry median is a considerably higher at 12 7 percent

Formula Net Profit After Taxes – Net Worth, or in the Gorman example

$$\frac{\$32\ 892}{\$3\ 482\ 600} = \text{Return on Net Worth Ratio} = 9\% \quad \text{Industry median or norm} = 12\ 7\%$$

6

SUMMARY

How does Gorman Manufacturing Company match up? Gorman's 1987 balance sheet and income statement appears to present only a "fair" situation Through comparative analysis we learned that the balance sheet condition deteriorated in most every item compared with its 1986 condition While profits were earned in 1987, they decreased in line with the sales decline from Gorman's 1986 level Profits compared unfavorably with the industry's average of 3 4% Gorman's balance sheet showed an unfavorable condition and a very slow inventory turnover Gorman has concentrated its investment in current assets, the major portion of which is inventory Cash has declined and coupled with a high accounts ayable, an unfavorable trend is developing in cash flow Total current liabilities of Gorman grew in 1987 and remained heavy in comparison to the industry Net worth declined and as a result remained below the industry norm As for the solvency of Gorman, it has a fair condition overall Short-term liquidity, evidenced by its quick ratio, is below the industry median Net working capital declined moderately and appeared limited for the company's total scope of operations Its net working capital position was hampered by a large amount of unsold inventories

* * * * * *

Hopefully, from reading this booklet, it becomes apparent that financial statements play the biggest role of all in developing knowledge about a business While it is helpful to know about a company's management products produced and sold, as well as its reputation in the industry, only an analysis of its finances will give you a true picture of a business's progress

APPENDIX E

Types of (Auditor's) Opinions According to GAAP Regulations

II THE TYPES OF OPINIONS ARE (covered in more detail later)

A **Unqualified (clean) opinion** - An unqualified opinion states that the financial statements present fairly, in all material respects, the financial position, results of operations, and cash flows of the entity in conformity with GAAP This is the opinion expressed in the standard report

B **Explanatory language** added to the auditor's standard (unqualified) report - Certain circumstances, even those not affecting the auditor's unqualified opinion on the financial statements, may require that the auditor add an explanatory paragraph (or other explanatory language) to his report

C **Qualified opinion** - A qualified opinion states that, **except for** the effects of the matter(s) to which the qualification relates, the financial statements present fairly, in all material respects, the financial position, results of operations, and cash flows of the entity in conformity with generally accepted accounting principles

[illegible]

D **Adverse opinion** - An adverse opinion states that the financial statements **do not present fairly** the financial position, results of operations, or cash flows of the entity in conformity with **GAAP**

E **Disclaimer of opinion** - A disclaimer of opinion states that the auditor does **not** express an opinion on the FS because he was not able to perform an audit sufficient in scope to render an opinion

III Brief Summary of when to use different opinions (covered in much more detail later in this lecture).

[illegible]

DEVIATIONS FROM GAAS OR GAAP		
MATERIALITY OF DEVIATIONS	ADHERENCE TO GAAS	CONFORMITY WITH GAAP
None or **immaterial** =	Unqualified	Unqualified
Medium =	Qualified **Opinion** (modify **Scope** and **Opinion** paragraphs)	Qualified **Opinion** (modify **Opinion** paragraph)
High =	Disclaimer of Opinion	Adverse Opinion

[illegible]

Material [illegible]

APPENDIX F

Credit Analysis Tying It All Together

Credit Analysis: Tying It All Together—Part I

by Dennis C Eisenreich

The following is the first part of a two-part article on credit analysis that places more emphasis on the need for sound judgment than on technical skills Among the topics discussed in Part I are the judgment of credit risk the consideration of human variables, and the interpretation of economic variables Part II is the article immediately following

The author is vice president and manager Small Business Division Mellon Bank N A , Pittsburgh Pennsylvania At the time this article was first published in December 1981 Mr Eisenreich was a vice president at Mellon

Successful commercial lending requires judgment more than it requires technical skills An understanding of accounting, financial analysis and various types of loans may help a lender ask the right questions But the critical issues must be judged from the numerous variables under consideration Judgment may also be required to verify those critical issues with objective sources

Judging credit risk

Since repayment always occurs in the future, the lender must judge whether the borrower s expectations about the capacity to repay are reasonable If he judges that they are not the lender must then assess the capacity to repay from alternative sources If the lender becomes confident of repayment the appropriate type of financing must be fit to the circumstances in order to have the payment record help the lender monitor the loan s progress Throughout the process the lender s technical skills may be invaluable in asking the right questions However, determining whether the answers are reasonable requires judgment often conditioned with time and experience

The purpose of credit analysis

While credit analysis must always be directed at the capacity to repay, what is it that a lender is trying to identify in the financial statements and other information that may have been gathered? Unless that is clear, the lender may waste a great deal of valuable time, not to mention the consequences of reaching the wrong decision. Thus, any discussion of credit analysis must begin with some definitions of credit risk. The ultimate risk characteristics may be either:

- The *inability* of cash inflows to meet necessary cash outflows (so called cash insolvency), or
- The *inability* of cash inflows to meet necessary cash outflows *on schedule* (referred to as cash inadequacy).

While the consequences of cash insolvency for the bank would typically be a loss, cash inadequacy may simply mean slow payment. Unfortunately, the inability to pay the bank on time probably implies things have not gone as expected. To fully pay the bank, management may have to make decisions (for example, an unusual asset liquidation) that would otherwise be undesirable for the firm, the owners, and possibly other creditors. Since it is never clear what management might do under these conditions, cash inadequacy may quickly lead to cash insolvency and a loss.

Since banks are theoretically in the business of taking risk, why are lenders so concerned about losses? All lenders should have a clear understanding of the basis for such concern. Although the rate may be raised with the probability of loss for a given loan, an individual loan cannot be priced for a loss. For example, if the bank's net interest margin (that is, interest income less interest expense over average assets) is equal to 4% for a year, it would take 25 years to cover the loss of 100% of principal, not to mention related overhead costs. With a clear understanding of the fact that banks *cannot* lose much on average, the initial response may be to avoid lending. Loan income is, however, required to cover costs and show any earnings for the bank. Therefore, lenders must make loans without losing very much. Herein lies the dilemma that can only be solved with careful credit analysis and sound credit judgment.

Credit judgment

Figure 1 outlines a decision making process for systematically formulating and updating a credit judgment. Along the left side, the more extensive process associated with a totally new credit is broadly outlined. On the right side, the process of updating a judgment for existing customers is covered. Both sides are directed at the fundamental principle of evaluating the risk of not getting paid on schedule. Too often with prospects representing significant relationship

Figure 1—Outlining the Process of Forming/Updating Credit Judgments

Formulating Credit Judgments for Prospects	**Updating Credit Judgments for Existing Customers**
1 Acquire Basic Information about Borrower	
A Historical and Current Financial Statements	A Current Financial Statements
B Background Information	B Broad Explanation of Current Performance
2 Acquire Basic Information about Loans	
A Size and Purpose of Proposed Needs	A Size and Purpose of New Loans
B Sources of Repayment	B Status and Use of Existing Loans
	C Sources of Repayment
	D Condition/Value of Collateral (If Any)
3 Preliminary Review of Risk (including identification of need for more information or clarification)	
A Assess Commitment, Experience and Track Record of Human Variables	A Evaluate Change or Inconsistencies in Human Variables
B Assess Broad Political and Economic Risks	B Reevaluate Changing Political or Economic Risks
C Identify Operating Strengths and Weaknesses Apparent in Track Record	C Evaluate Current Operating Performance Against Expectations
D Evaluate Strength and Stability of Cash Flow in Relation to Historical Demands	D Evaluate Recent Cash Flow and Investment Decisions in Relation to Plans and Financial Consequences
E Anticipate Future Operating Performance and Investment Needs (Considering Proposed Loan) and Capacity to Service Debt	E Anticipate Future Operating Performance and Investment Needs (Considering Proposed Loan) and Capacity to Service Debt
F Evaluate Balance Sheet Strengths and Weaknesses and Consequences of Loan	F Evaluate Balance Sheet Strengths and Weaknesses and Consequences of Loan
G Determine Superficial Risk Rating to Guide the Rest of the Process	G Evaluate Loan Covenants and Supplementary Information
	H Determine Any Likely Change in Existing Risk Rating

Figure 1, continued

4 Acquire More Complete Information

A Details of Proposed Deal	A Details of Proposed Deal
B Details of Important Human Considerations	B Explanation of Changes in Human Variables
C Details of Important Operating Considerations	C Explanations of Significant Operating Issues or Problems
D General Financial Objectives and Plans	D Expectations of Significant Investments or Problems Requiring Financing
E Supplemental Financial Information (such as Projections)	E Supplemental Financial Information (such as Projections)

5 Verify Critical Information

A On site Visits	A On site Visits
B Routine Bank Trade and Possibly Customer Checks	B Specific Investigation
C Routine Trade Information	C Routine Trade Information
D Broad Industry Checks (Public Sources or Direct Investigation)	D Check Industry Problems/ Outlook
E Require Audited Statements	E Dispatch Collateral Auditors

6 Refined Analysis of Risk

A Establish Commitment of Owners and Labor	A Reassess Commitment
B Assess Management s Success and Determination to Pay Loans	B Assess Recent Human Decision Making
C Judge Political and Economic Risk for Future	C Interpret Changes in Political and Economic Risks
D Identify and Weigh Operating Strengths and Weaknesses	D Identify and Weigh Operating Strengths and Weaknesses
E Evaluate Expectations for Operating Performance (Considering Proposed Loan)	E Evaluate Expectations for Operating Performance (Considering Proposed Loan)
F Evaluate Project and Estimate Strength of Cash Flow in Relation to All Demands (including Proposed Debt Service)	F Evaluate Project and Estimate Strength of Cash Flow in Relation to All Demands (including Proposed Debt Service)
G Estimate Current or Potential Pressures on Working Capital	G Estimate Current or Potential Pressures on Working Capital
H Evaluate Secondary Protection of Balance Sheet Collateral or Guarantees	H Evaluate Secondary Protection of Balance Sheet Collateral or Guarantees

Figure 1, continued

7 Make Overall Decision

A Assign an Overall Risk Rating (Formally or Informally)	A Keep or Change Existing Risk Rating
B If Rating Is Unacceptable the Process Ends	B If Rating Becomes Unacceptable Collection Must be Assessed and a Plan Proposed

8 Structure Loan

A Determine Appropriate Type Maturity and Pricing to Fit Needs and Risk	A For New Loans Determine Appropriate Type Maturity and Pricing to Fit Needs and Risk
B If Terms Required Are Unacceptable able the Process Ends	B If Terms Are Unacceptable the Project May Need to be Reconsidered
C Seek Appropriate Approvals	C Seek Appropriate Approvals
D Negotiate Acceptable Terms	D Negotiate Acceptable Terms
E Document and Close Loan	E Restructure Deal to Meet Changing Needs for Existing Loans
	F Review Problem Loans with Appropriate Collection Area
	G Document and Close New Loans

potential, busy lenders assume the capacity to repay and move on to pricing considerations far too early However, lenders considering existing customers whose circumstances are deteriorating probably have the most difficulty at least initially, in clearly evaluating the growing risks of not getting paid As a result, the basic elements of formulating or updating a credit decision are the same

While Figure 1 is only one individual s version of the decision making process, several elements are fundamental Foremost is the ' Catch 22'' of bank lending To determine risk requires complete' information But to know what complete information means for a given credit requires a determination of risk Since no standard amount of information will necessarily be complete, the basic information gathered about the borrower and proposed loan will be used to formulate a preliminary judgment Of course such a judgment is made carefully since the information is potentially incomplete and typically unsubstantiated If the risk is judged to be minimal or normal, the next step may be principally for clarification and verification. If the risk is judged to be above normal, a great deal of additional information may be required to assess the risk properly. Otherwise, credits that may be more unusual than risky would be rejected and potentially good customers lost. At any rate, the preliminary judgment guides the nature and depth of the subsequent analysis.

Acquiring more complete information from a borrower is a logical part of the process, *not* something the lender should be timid about. Another *critical* aspect is the verification of important information. Typical forms of verification include audited statements (as the credit rises and especially for unsecured loans), direct investigations (with suppliers, customers, and possibly competitors), and on-site visits. With on-site visits, lenders should:

1. Anticipate what they expect to see.
2. Try to understand how the business works generally.
3. Ask about things they do not understand (especially as they relate to profitable operations and asset/collateral values).

If management's explanations and expectations correspond to credible industry sources, such information may be considered to some extent verified.

After doing a refined analysis of the facts, the difficult step of judging the risk must be taken. Figure 1 suggests assigning a credit risk rating. While some lenders fight the very notion of rating credits, most of those same lenders have no difficulty identifying the above average, average, and below average credits in their loan portfolios. One may suspect risk ratings have been the best kept secrets of good lenders for a very long time. Of course, to assign a rating, the lender must assign weights of importance to the facts that may be, by themselves, both positive and negative. Choosing what is and is not potentially significant is *the* critical part of a credit judgment.

With the overall decision on the credit risk, the process will either end (if the risk is too great) or move to the structure of the loan. Before leaving this issue, some discussion of risk ratings is in order. Good credit risks are not necessarily good customers. The best customers (in terms of profitability and loyalty) tend to be average or slightly below average credits. While Figure 1 ends with the closing of an appropriately structured and priced loan for prospects, it should be clear that the prospect then becomes an existing customer. As such, the judgment must be periodically updated.

Subsequent sections discuss some of the traditional elements of risk (that is, human, economic, and financial elements). Each must be understood individually before it can be properly evaluated within the overall context of the credit. Considering the ultimate task is to weight various factors in arriving at a credit judgment, the lender must appreciate the importance of individual issues.

Considering human variables

Human decisions can have some of the most profound and unpredictable consequences for a firm. For this reason, human considerations must take a priority position in all credit judgments. Such human variables usually involve owners, managers, and labor.

Potential consequences of concentrated ownership

The first human consideration is always an understanding of the principal owners. A clear identification of owners and affiliated companies is critical to any expectations about the future of the firm under consideration. If the owner has a heavy debt burden to meet and few alternative sources of income, is it reasonable to expect dividends to be restricted? If the firm under consideration is supplied by or sells to an affiliate company at something other than market prices, how valuable is historical operating performance in projecting future profitability? In other words, a modest dividend in the past and a profitable track record as a result of significant sales to an affiliate with a marginal performance record are not necessarily good indicators of the future.

The potential for unpredictable decisions by ownership concentrated in a few hands may reduce the value of the track record as an indicator. To the extent professional managers run the firm, owners may actually replace management which may completely reduce the value of the track record. Concentrated ownership may also represent a strength. Owners of proprietorships or general partnerships may directly contribute significant alternative strength. Corporate owners through guarantees may also offer substantial alternative strength. If lenders must rely on the certainty of such secondary protection, the owner's worth should exclude the investment in the borrowing firm and any other assets (for example, loans and single purpose buildings) used in the firm to clearly identify alternative strength and to avoid double counting the circumstances of the borrowing firm.

Management: the intangible variable

Although a great deal is written about the management factor, the consideration can be reduced to (1) the evaluation of management's success and (2) the estimate of management's determination to repay. In evaluating management's ongoing success, the clearest evidence is successful and related experience through good and bad times. Future success may depend on an active role for successor managers. As the business grows or changes, additional skills (particularly, financial) must be developed or bought.

The more difficult issue to evaluate is management's determination to repay. Words like *character*, *willingness*, and *integrity* are commonly used to describe this issue But if management has a clear determination to pay, any circumstances that lead to cash inadequacy will probably not lead to serious collection problems A determination to pay can easily be portrayed in what a management says but it can only be reliably established in what a management does Thus actions taken to reduce debt during difficult times in the past (possibly during the recession) represent concrete evidence Conservative financial managers always illustrate a determination to repay More aggressive managers may show the determination to repay through realistic financial planning (such as through projections) that has been reliable in the past Of course, the lender must also respect the customer's integrity or honesty Since the majority of information will come from the borrower as discussed under the section on credit judgment the lender must have confidence in the raw material of the judgment If not or if critical facts cannot be verified the lender cannot make the decision It would be a gamble rather than a calculated risk

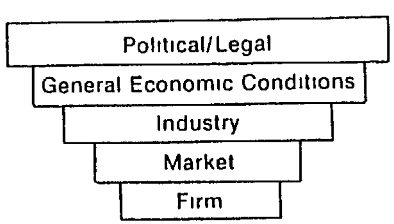
Labor

The attitude of labor can make or break most firms As the required level of skill increases labor can represent a severely limiting factor Although contract negotiations with unions may represent temporary disruptions that are more serious for some firms than others, chronic and unpredictable wildcat strikes probably cause more problems The productivity of labor compared to competitors is often the principal explanation of comparatively low profits or losses It is neither an easy variable to identify nor an easy problem to solve

Interpreting economic variables

Assuming reasonable human decisions, much of the risk is essentially related to the economic environment Measuring the economic considerations must begin with distinctions made between economic levels The diagram in Figure 2 suggests a method of categorizing economic levels

Figure 2—Economic Levels

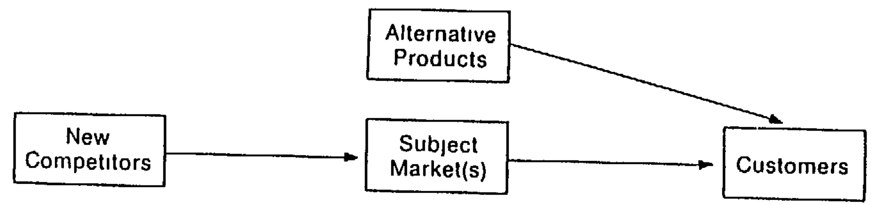


Before a lender can successfully deal with economic analysis at the firm level, some understanding of the other levels is required The other levels may introduce risk or uncertainty that is beyond the control of managers

Market where the competition is

Most firms operate on a regional or local level The market represents the demand for their products or services in a reasonably defined geographic market Understanding the existing and potential markets of firms will help in identifying who their customers are and who their competitors are The diagram in Figure 3 identifies some of the basic considerations

Figure 3—Market Variables



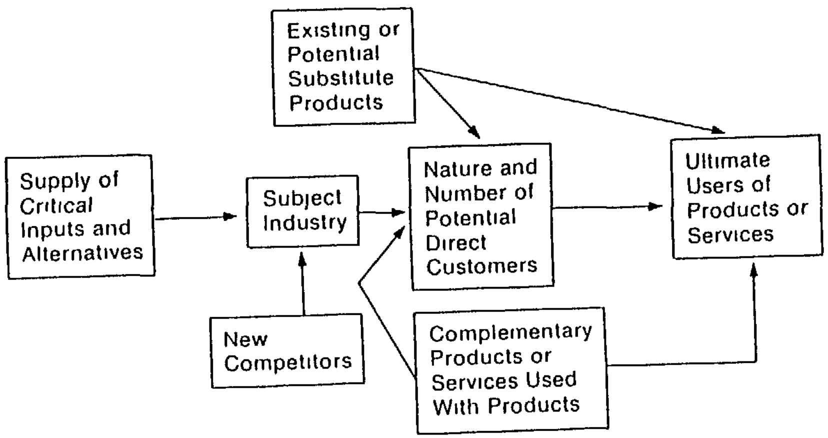
The track record performance can be transformed by new competitors and alternative products that serve the same need Existing competition may become more pronounced as the growth in the underlying customer base slows Market considerations dominate the evaluation of retailers and wholesalers because product lines can be altered As a result, the location with respect to customers is always a critical consideration

Industry understanding the character of operations DYNAMICS

The industry represents the *supply* of products that are close substitutes in satisfying the same needs In order to identify anything that could affect a firm's operating costs, sales volumes, or prices (that is, business risks), some understanding of the industry is required Lenders should take every opportunity to learn about their customers' business from all credible sources Although no lender can be an expert in all industries to which a loan may be made, the lender can be sufficiently knowledgeable to ask questions and identify reasonable answers After all, it requires far less to understand *how* something works than it does to make it work

Many of the basic industry risks can be identified by the diagram in Figure 4

Figure 4—Industry Variables



First, the borrower (particularly an industrial firm) should be fit into the stages of production. Knowing what it buys, what it does with it, who it sells it to, and what must be used with it represents the obvious beginning. A plant visit and tour may give the banker an opportunity to understand the nature of the business, to view managers in their own element, and to demonstrate an interest.

Second, the characteristics of "ultimate" demand should be identified. In this process, cyclical and secular trends that could affect the level of future sales potential are considered. Typically, a clear understanding of the causes of past trends at the firm and industry levels helps to anticipate future trends. Of course, fundamental change in the industry or firm diversification may result in more or less volatile operating results in the future than indicated by the track record.

To understand the need, a lender may have to identify the borrower's customers (or possibly customers' customers). If that need is easily filled by others in the industry or by substitute products, competition may be based on price so cost advantages would be required. If the need requires a quality product or ongoing service, price may be less important than superior design features, durability, and service (with their associated costs). Such an understanding of the nature of competition will help the lender evaluate past and anticipate future operating results.

The third step includes the identification of substitutes, new competitors, or complements. Existing or potential substitutes represent alternatives for the firm's customers that can affect future sales levels and prices suddenly.

New competitors with significant financial, technical, or marketing advantages may dramatically change the rules of the game. If the cost of using a product rises because of the price of a product used with it (tires to gasoline), the firm's sales may be affected. Each of these circumstances can reduce the value of the track record in anticipating the future.

Finally, the ability to cover costs and ensure availability of critical inputs represents potential supply problems. The consequences of rapidly rising costs for a firm can be significant if other producers have more stable costs or the rising price makes a close substitute increasingly more attractive. In addition, a firm in a competitive industry that sells to relatively few customers may be forced to absorb part of the cost increases. As bad as rising costs are, the inability to access a critical input is worse. A product cannot be sold unless it can be finished. Thus, in addition to labor strikes and raw material shortages, transportation bottlenecks, pollution curtailments, natural gas shortages (without backup), and severe weather can all affect actual production.

The broad secular trend of an industry can probably be divided into developmental, growth, mature, and declining phases. The phase can affect opportunities for loans, potential for repayment, and analytical considerations.

In the developmental phase, the industry is characterized by (1) slow and uncertain sales growth and (2) unpredictable costs and asset values. Since both primary and secondary sources of repayment are at best uncertain, very good alternative protection would be required to meet the indicated borrowing need. In the growth phase, an obvious need for funds to support the growth in assets could possibly be justified with a track record demonstrating a capacity to generate cash over and above minimal requirements. In the mature phase, significant competition may result from individual firms attempting to maintain growth rates. If an industry appears to have reached a *long term* declining phase, lenders should be particularly careful in considering term loan requests. Controlled short term lending may continue to be reasonable.

General business conditions: interpreting the "big picture"

Since the bulk of published economic information concerns the economy, the lender must be able to interpret the implications of broad economic trends for individual borrowers. The logical connection is with the industry or the market. An industry may be cyclical if it manufactures a product or provides a service that is easily postponed by its customers (discretionary) or that is dependent on a broad level of business activity (such as industrial products and transportation services). Of course, not all industries are affected significantly by the business cycle. The general business conditions in a particular market can have disastrous results on firms locked into those markets. Such conditions may be related to (1) regional economic trends (general unemployment, personal income, and inflation) that gradually affect discretionary income or (2) specific regional events (closing of a significant employer and a flood) that suddenly affect numerous businesses.

Even firms insulated from significant economic shocks may have to bear a broad economic consequence through the bank. Banks that must raise interest rates in line with higher cost sources of purchased funds will force this economic condition onto their customers. Different firms will have more or less difficulty in covering interest. At the extreme, tight money may dramatically restrict a firm's potential. To anticipate rising interest rates, the borrower will always look to the banker for information on what to expect. Although predicting future interest rates is one part speculation and one part wild guess, lenders must help borrowers address this issue. A significant misjudgment of carrying costs in a new project can be the difference between accepting or rejecting a proposal.

Political framework: knowing the rules of the game

Beyond the impact government fiscal and monetary policies may have on general business conditions, the political framework has various effects on a firm. Government policies affect taxes and numerous costs such as environmental and health and safety expenditures. In regulated industries, government action affects prices and possibly volumes such as forced curtailments. The political framework may also affect the legal composition chosen by the borrower. Thus lending to proprietorships, partnerships, or corporations requires different considerations. Borrowers who utilize numerous legal corporations introduce additional complications for the lender in having access to assets. Properly documenting the loan is a necessary skill for the lender to master.

The political framework is a particularly difficult part of the analysis to anticipate because it is subject to compromise decision making. Fortunately, most competitors will be equally affected by federal political decisions. To the extent local political decisions are involved (for example, state taxes or environmental requirements), firms may be put at a competitive disadvantage. Thus lenders must factor political considerations into the lending decision. □

Credit Analysis: Tying It All Together—Part II

by Dennis C. Eisenreich

In Part II of his article on credit analysis, Dennis Eisenreich discusses the importance of working capital, short- and intermediate-term lending, and the various facets of financial analysis. Part I is the article immediately preceding.

The author is vice president and manager, Small Business Division, Mellon Bank N.A., Pittsburgh, Pennsylvania. At the time this article was first published in January 1982, Mr. Eisenreich was a vice president at Mellon.

Much of the risk in commercial lending—the risk of not getting paid on schedule due to cash inadequacy—is related to human and economic variables. However, the clearest evidence of risk is related to financial variables.

Evaluating financial variables

To define financial variables, it may be easiest to consider cash inflows separately from cash outflows. Since the major cash inflows for any successful firm will depend on sales levels and prices, the ability to get enough sales at the right prices is a key element of the overall risk (often called *business risk*). Cash outflows typically result from necessary business activity such as the payment of wages and raw material purchases and financial decisions as reflected in, for example, capital expenditures and debt service. The need to meet these obligations is often referred to as *financial risk*.

To avoid cash inadequacy, expected cash inflows must be capable of meeting minimum cash outflows on schedule. As long as creditors and owners have confidence in this capacity over the long run borrowings and possibly equity contributions will probably be available for temporary shortfalls or discretionary outflows such as conscious decisions to expand or add plant equipment

Working capital Why is it so important?

In an attempt to limit financial considerations to a manageable set the financial element of risk is defined as the inability of cash generation to

1 Maintain working capital
2 Maintain productive assets
3 Meet debt service on schedule
4 Pay reasonable dividends
5 Maintain some borrowing power

Cash generation is defined as profits plus depreciation Assuming the accountant s matching concept is working properly (one indication of the need to understand accounting) profits represent the portion of sales dollars that are otherwise uncommitted to period expenses

Depreciation represents a return of previous cash investment that is often considered committed either to replacing fixed assets (that is necessary capital expenditures) or to servicing debt originally used to purchase the property Of course *cash* generation (sometimes called *cash flow* or *cash throw off*) is somewhat of a misnomer since the actual cash may remain tied up in uncollected sales (receivables) or be quickly reinvested in necessary inventories Nevertheless cash generation is the most reliable source of internal funds eventually available to meet various long term demands Because cash generation is important as an indicator of the future it should always be adjusted for nonrecurring events both positive and negative

Any firm that does not show sufficient cash generation to cover these additional demands is already in a state of cash inadequacy A temporary cash shortfall with little prospect for improvement can have serious consequences Much of the subsequent financial analysis will be built around these demands on cash generation

Of the alternative long term demands on the cash generated most lenders clearly acknowledge the maintenance of capital expenditures, the requirement of debt service and dividend requirements While excessive or unproductive capital expenditures may be restricted by a loan agreement, no lender would consciously restrict required capital expenditures The consequence could be costly breakdowns

Slow debt repayment may be the most current clue a banker has as to cash inadequacy Naturally, all bankers follow past due principal and interest reports for this reason In fact by the time a borrower is forced to delay paying any debt, numerous payments such as for trade debt, may already have been delayed

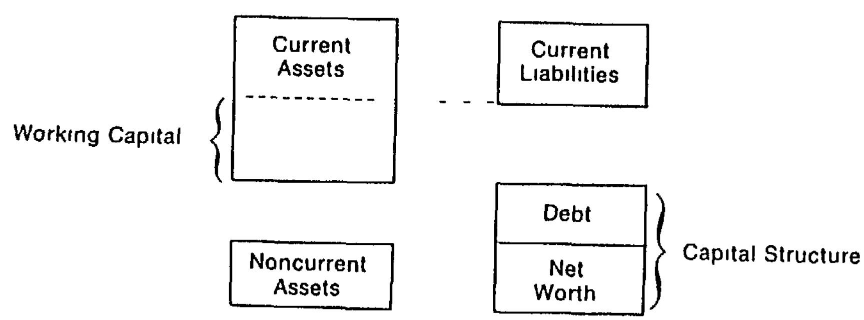
Finally, a reasonable dividend payout is probably justified in all but high risk situations Most term loan covenants acknowledge this claim by restricting only a cumulative percentage of profits Of course all dividends may be restricted but the lender may be giving concentrated owners an incentive to circumvent the agreement or to replace management

The additional requirements for cash generation to satisfy minimum working capital requirements and to provide some borrowing power are less well understood The borrowing power issue will subsequently be discussed A clear understanding of working capital is a critical aspect of financial statement analysis Pressures on working capital represent a valuable indicator of problems prior to slow debt service For this reason lenders need to evaluate working capital clearly using the financial statements

This section will develop two perspectives of working capital, static and dynamic The term working capital is used to mean both current assets (as in a short term loan for working capital purposes) and net current assets (that is current assets less current liabilities) Our concern will be to establish whether sufficient net working capital (subsequently to be called working capital) is available to support the sales level

In a static sense (based on a balance sheet review), working capital is necessarily linked to the capital structure As of a balance sheet date the diagram in Figure 1 illustrates the relationship Since the capital structure simply illus

Figure 1—Balance Sheet Relationship of Working Capital to the Capital Structure



trates the source of capital committed beyond one year. *Working* capital represents the portion of that capital that is constantly revolving through the business. The revolving issue will be further developed under the dynamic perspective.

The static view is used at the seasonal low point (when receivables and inventory are at minimum levels) to establish the ability of the capital structure to support the permanent or core assets of the firm. Short-term borrowed debt at that date is the key. If receivable and inventory turnovers represent minimum levels in relation to sales, the existence of any significant short-term debt (without corresponding excess cash) indicates pressure on working capital. The rationale is simply that if core assets must be liquidated to meet short-term debt in the short term, the inability to meet cash outflows *on schedule* (that is, cash inadequacy) is already apparent. Obviously, the time-tested proof of working capital adequacy is the ability to clear an unsecured line of credit for an extended period of time, preferably at the statement date, to ensure against simply shifting the burden to other creditors.

Several problems arise with the static perspective. One is secured debt made on a demand note. A lender who does not have confidence in the ability to service term debt out of cash generation over a reasonable term but who does have confidence in the secondary protection of current assets (particularly, receivables) may make a secured loan on a demand note. While the demand feature ensures the lender's ability to call the loan, it also means the debt will be classified as a current liability for statement purposes. Since part of such debt is revolving and supporting core needs, the working capital definition is distorted. Such debt is unlikely to be cleared. Another problem is the fact that the lender's view of this critical issue is limited to the number of balance sheets received during the year. This introduces the potential for window dressing through unusual receivable or inventory liquidations at statement dates. While historical turnovers are useful in establishing "normal" levels, a lender who represents the customer's only bank can employ the customer's borrowing record (that is, high borrowings, low borrowings, clearance periods) over the years. Average borrowings and deposits (possibly overdrafts) may illustrate a growing reliance on bank debt to support working capital. The timing of high, low, and clean-up periods may help the lender to understand seasonal patterns.

The *dynamic* need for permanent working capital revolves around the typical lag between cash inflows and cash outflows. To illustrate a more dynamic perspective of working capital, the long-respected cash cycle analysis will be employed. The examples shown in Table 1 will assume that each firm has a sales rate of $1,000 per day and the turnovers are at the low point of a seasonal cycle (that is, core levels below which unusual circumstances would be required).

Table 1—Cash Cycle Illustrations

	Captions	Companies A	B	C
1	Sales rate per day	$ 1M	$ 1M	$ 1M
2	Days sales in receivables	30	60	15
3	Days sales in inventory	60	90	0
4	Days in trading cycle (2 + 3)	90	150	15
5	Days sales in payables	−45	−30	−15
6	Days sales of working capital required	45	120	0
7	Receivable investment (1 × 2)	$30M	$ 60M	$15M
8	Inventory investment (1 × 3)	60M	90M	0
9	Trading cycle investment (1 × 4)	$90M	$150M	$15M
10	Payable support (1 × 5)	−45M	−30M	−15M
11	Required working capital support	$45M	$120M	0
12	Current ratio relationship (9 − 10)	2×	5×	1×

It should be pointed out that the simplistic examples in Table 1 wash cash out with accruals and compute all turnovers with sales (as opposed to cost of sales for inventory) for consistency. However, the need for permanent working capital is caused by the necessary delay of cash inflows—as a result of uncollected sales (receivables) or necessary reinvestments in inventory—in satisfying current cash outflows that may be delayed somewhat. The three company examples illustrate that a required level of working capital will be solely dependent on these cycles. The cycles are influenced by the industry, setting up some external comparisons within the industry. But *no* absolute current ratio relationships exist.

The companies illustrated could have the following characteristics. Company A is an assembler of a fairly standard product. Many of the parts are purchased (giving rise to the high payables) and assembled (accounting for the reasonable inventory turnover). Thirty-day terms are given to customers. Therefore, at the rate of sales of $1,000 per day, Company A would require $45,000 of permanently available cash (that is, working capital) to avoid a cash shortage.

Company B produces a sophisticated, high-technology product. Most costs are the skilled labor and engineering costs associated with specialized products. The extended production cycle is required by the individual work, and the low payable support is related to the relatively minor portion of sales dollars represented by purchased materials. All employees are paid weekly. Since the product must be set up at the customer's location and tested prior to becoming operational, extended receivable terms must be given. Although advance payments on specialized products are sometimes required in such cases Company B would otherwise require $120 000 in working capital to support the significant lag between cash inflows and cash outflows

Company C could be an advertising company or an insurance broker (most likely a service oriented middleman) No inventory and spontaneous creditors willing to wait until cash is collected may eliminate the need for significant levels of working capital

Such a dynamic approach is useful in distinguishing between a permanent and a short term need If Company A must build inventory to twice its low point prior to a selling season such a temporary need would naturally be filled by short term debt However if Company B s sales rate doubles to $2 000 per day, the doubling need for permanent working capital may easily lock a short term bank loan into the company for an extended period

In addition the dynamic approach is a useful technique in understanding what the static current ratio relationship implies If Company B had a current ratio of 2x much of the need for working capital to cover for a stable or growing company the permanent void between inflows and outflows would have to be supported by short term borrowed debt in an accounting sense Such debt could only be cleared under the most undesirable circumstances (that is, unusual asset liquidation)

A successfully growing firm may, however illustrate the capacity to service a term loan Making a term loan (committing to the firm s capital structure for permanent working capital requirements) would satisfy the permanent need While such pressures on working capital are otherwise the clearest sign of cash inadequacy, the borrowing power implied by an adequate collateral position may make the loan acceptable on a secured basis

Evaluating working capital is complicated by the borrowing power issue A firm that shows signs of working capital pressures but continues to have sufficient borrowing power to satisfy the problem has more of an academic than a real problem assuming interest can be covered Otherwise, the working capital evaluation may be the best clue in the financial statements of a pending cash shortage While it is certainly the most important analytical issue to any creditor getting paid in cash it is also the most difficult to evaluate

Short term lending What does short term mean?

All appropriate financing is based on understanding the purpose of the loan The purpose could be to buy seasonal inventory Such a purpose usually implies a primary source of repayment (sale of the inventory in the ordinary course of the selling season) and a secondary source of repayment (forced

liquidation of inventory at the best possible price) In addition, alternative protection may be available from other assets or owners With legitimate short term lending it is usually presumed that the lender *can* get paid in the ordinary course of events in the short term (such as within a year) Thus the lender requires a clear understanding of the working capital adequacy already discussed If permanent working capital is inadequate, slow payment or continuous refinancing beyond a year should be anticipated If cash generation is sufficient to service additional debt, a term loan may be more appropriate If cash generation is unlikely to service the debt over a reasonable term without causing an identical problem, the loan may still be made on a strong collateral position If working capital is judged to be adequate, flexible short term lending is easily accomplished

The elements of appropriate short term financing include

1 Understanding the *specific* purpose

2 Structuring the *maturity* in line with the *primary* source of repayment

3 Identifying the *certainty* of secondary sources of repayment implicit in the purpose

4 Evaluating alternative protection available from the balance sheet and possibly

5 Ensuring access to secondary protection by taking security

While the following discussion will be limited to general situations the elements can be applied to any situation no matter how specialized As the alternative protection of a strong working capital position and clear borrowing power decline, the loan must be structured in line with the primary source of repayment so that slow payment initiates an inquiry by the lender Secondary sources may continue to represent excellent protection, but collecting against secondary sources will force management to make decisions it might otherwise avoid Showing interest may be all that is required

Two types of facilities will be discussed, transaction loans and lines of credit Normal recurring needs to support temporary (such as seasonal) receivables and inventories or to take cash discounts may justify a line of credit The line may be disclosed or undisclosed (sometimes called a guidance line) Such purposes have primary sources of repayment that can easily be evaluated with the track record To justify the flexibility of an unsecured line that could actually be used for anything, the firm must also illustrate an adequate working capital position In addition, no significant changes in the firm s financial condition would be expected If the leverage is high or subject to significant change collateral may be required even if the line is otherwise considered short term

Short term transaction loans are typically made on time notes as the need arises. Such loans may actually be for recurring purposes, but because the lender has no clear track record to evaluate (for instance in start up or turn around situations) a transaction loan would probably be appropriate. Otherwise unusual needs (unusual buildup in receivables or inventory) or concentrated needs (loan to a contractor to support one receivable) should be satisfied with short term notes structured in line with the expected end of the need. Thus slow payment or refinancing should be accompanied by an explanation of what went wrong. Since the track record does not necessarily help evaluate such situations, the payment record more than financial statements must help monitor the credit. If the alternative protection in the firm is also weak, reasonable collateral may need to be taken to do the deal. Although demand notes may be used with collateral, using an unsecured demand note destroys the best monitoring technique available to a lender—the payment record.

Intermediate term lending Does the purpose help pay the loan?

Intermediate term loans must be structured according to the productivity of the need and the availability of the primary source of repayment. The elements of appropriate intermediate financing are

1 Understanding whether the specific *purpose* will be productive in *supplementing* cash generation

2 Structuring the *maturity* in line with the availability of the primary source of repayment

3 Identifying the certainty of secondary sources implicit in the purpose

4 Evaluating alternative protection from existing cash generation (possibly diluted by additional interest), the financial condition or guarantees

5 Possibly ensuring access to secondary protection by taking and controlling collateral when primary sources are uncertain, difficult to judge over the term or subject to significant alternative demands (such as dividends)

While specialized types of financing such as leases and mortgage loans are part of this category, space limits the discussion to more common types of intermediate term financing. Term loans may be used for fixed asset requirements (for example, equipment) that are expected to generate additional cash immediately. Term loans may also be used when the purpose may not be expected to supplement cash generation. If the purpose is to solve an existing working capital weakness, buy back stock, acquire the company, extend the maturity of existing debt or support unproductive capital expenditures such as for pollution equipment, the cash generation indicated by the track record may not increase. Cash generation may actually decline as additional interest is

introduced without expanding productive assets (for example, acquisitions, buying back stock or unproductive investments). Thus, if the debt service becomes too much of a burden, the payment record will help the lender monitor the credit quality.

Term loans may be combined with revolvers or standbys under certain circumstances. Smaller buildings (that may not require the controls of construction financing) or equipment may not be productive in generating cash during a construction or start up period. During that period, it is unreasonable to force repayment. Thus, the grace period, a standby credit, or possibly a revolver (for very good credits) may be used. Once cash generation starts, the lender ordinarily will put his claim on the cash flow by amortizing the loan. Permanent working capital requirements that result from successful growth may also justify a revolver and term loan. Such a facility does not require repayment during the revolving period, acknowledging that much of the cash generation is tied up in growing receivable and inventory investments. Forcing repayment would reduce the growth potential. However, the capacity to pay under slower growth conditions must always be clear. The term loan puts the creditor's claim on the cash generation as it is expected to be available in the future.

Other important financing issues beyond the scope of this article are pricing, documentation, planning maturities, and specialized financing. Of course, pricing and documentation are secondary issues until the credit is judged to be acceptable and the loan is properly structured.

Borrowing power A look at the balance sheet

Measuring borrowing power is a matter of identifying how much *additional* debt the firm may be able to attract and handle. If a firm can attract little or no additional debt, an unexpected setback could have serious consequences. To attract additional debt, a firm must be capable of servicing the debt. Debt to solve problems probably implies that no additional earning power would result. Thus, existing earnings would have to be able to cover higher levels of interest (perhaps, after adjusting discretionary expenses). The level of interest coverage is an obvious consideration. Beyond handling interest, sufficient excess cash generation over minimum demands must be available to service principal. While cash flow coverage of current maturities is often employed, the minimum demands of capital expenditures, working capital (under growth conditions), and possibly dividends on cash generation must also be considered. Although leverage relationships are often employed in evaluating borrowing power, debt must be serviced so no static leverage relationships necessarily apply.

General approach to financial analysis

Financial analysis represents the focal point of evaluating risk. Of course, understanding accounting represents a necessary evil. This section will briefly outline a general approach.

Evaluating operating successes and failures

Analysis ordinarily begins with sales which represent the principal cash inflow. The stability of trends and the rate of growth have implications for borrowing needs as well as the capacity to pay. Success is, however, measured by discretionary profitability, not sales levels. Discretionary profits, possibly including obvious adjustments such as profit sharing, must be able to cover volatile interest and provide sufficient cash generation to cover long term needs. Economic and human considerations are obviously critical to understanding and anticipating gross and operating margins.

Interpreting financial consequences and decisions

Analysis generally moves from the income statement into the funds flow. The funds flow is the most underrated aspect of analysis. As defined, financial risk represents the inability of cash generation to meet the five demands previously discussed. The consideration begins with the trend in cash generation which is largely a summary of operating results. After adjusting for nonrecurring events, confidence in future cash generation is usually based on a stable rather than volatile trend.

Whether the level of cash generation is sufficient depends on the various demands. Some firms will need to meet significant demands for dividends, capital expenditures, debt service, and working capital. Others may have minimal demands for dividends, etc. Of course, the lender must attempt to distinguish between essential needs, such as required capital expenditures and contractual maturities, and reported expenditures which may be in part discretionary. Capital expansion and prepayments of debt would be examples of the latter. The funds flow analysis concludes with a change in working capital.

Using the best clue as to risk

A significant decline in working capital to cover long term needs (established in the funds flow) or rapidly growing receivables and inventories (with sales) may easily lock short term debt into the firm's capital structure. If cash generation is sufficient to justify refinancing, the pressure can be easily relieved. Or, if a strong collateral position exists, the loans may be secured. In either case, the

pressures on working capital and on the ability to meet obligations on schedule are clear.

In addition to the inability to clean the line, the payment of trade debt may be delayed to the point that the actual need for working capital is vastly understated by short term bank debt. Significant trade slowness is also a sign of working capital pressures and can only be established through trade services or investigation. Although working capital pressures are the best symptoms of cash inadequacy in financial statements, evaluating work capital in conjunction with borrowing power is an acquired skill. The previous discussion on working capital should help in developing it.

Projecting everything forward

Because lenders get paid in the future, financial statement analysis is only useful as an indicator of the future. If the track record is expected to represent a reasonable indicator of the future, this projection may be informal. If the size or circumstances of the loan or fundamental change in the human or economic elements reduces the value of the track record, formal projections may be required. Analyzing those projections follows a pattern similar to evaluating historical statements except such projections are statements of hope rather than fact. Projections should always be tested by considering lower sales, lower profit margins, higher interest, heavier inventory, and higher receivables which tend to be the most optimistic areas.

Estimating the options

Lenders always reach the point of considering the worst case. What if things do not work out as expected? This aspect can be called estimating the options. The static balance sheet strength is a part of this consideration. But although the leverage (debt to worth) may be low, the firm may not have the dynamic capacity to meet interest and principal. In such a case, additional debt may simply add to the problem. If some capacity to handle the debt is clear, a strong balance sheet or a balance sheet dominated by liquid and certain asset value such as the value of receivables may indicate the potential collateral available to ensure repayment. In addition, significant off balance sheet value may justify borrowing power. Any reliance on off balance sheet value must be accompanied by consideration of such off balance sheet liabilities as guarantees and by some independent verification of such value (for example, an appraisal).

Making the credit judgment

Eventually, good lenders put the pieces of the puzzle together. They will arrive at a decision in their own way regardless of how similar their training may be However some difficulty often arises as the lender attempts to communicate that judgment to a senior lender a loan committee an examiner etc For this reason in part risk ratings can be invaluable in positioning a credit on a risk spectrum

Table 2 describes some characteristics that might be identified with various categories of risk The issues down the left column follow roughly the topics previously discussed Under each risk category (high quality average ' etc), a general characteristic is described for each topic These are designed principally to provoke thought, not to provide a checklist Risk ratings are not intended to make arriving at a credit judgment any easier On the contrary they force a lender to think through a credit more precisely and completely While many rating schemes use a narrow set of ratios to assist lenders those ratios should never replace the conscientious consideration of all the facts before the lender As a further point a credit will rarely fit nicely into one risk category (column) for all issues Thus the lender must weigh the importance of each issue

Deciding how to lend monitor, and control

If a positive decision is made, the lender must always identify the sources of repayment implied by the purpose The loan must also be put in the context of the firm Thus, a short term loan for seasonal inventory should be easily liquidated unless existing working capital pressures divert the funds realized to other needs Although the firm s track record may appear sound an aquisition or stock repurchase loan that replaces equity with debt will require existing profits to absorb more interest and existing cash generation to service more debt An unusually large loan may fundamentally change the track record and require the success of the purpose of the loan Such a situation would require the careful consideration of projections

If some problem with payment is possible and perhaps likely the maturity must be structured according to the primary source of repayment In high risk situations, the limited access to cash implies that the subsequent problems will eventually affect the payment schedule Thus, the lender is in a better situation to monitor problems on a current basis as opposed to awaiting financial statements that may arrive along after the problem occurs Before the problem becomes so serious the careful evaluation of financial statements, particularly the working capital can indicate growing problems (Knowing this, some borrowers may delay submission of financial statements which may present a clue to problems)

Finally the lender must exercise some control over the sources of repayment if any uncertainty exists For term loans loan agreement covenants may re

Table 2—Risk Rating Characteristics for Bankable Credits

Issues	High Quality	Above Average	Average	Below Average	Increased Risk
Sales and earnings (historical and expectations if different)	• Stable/growing market • Stable sales growth and expectations • Significant earning power in relation to assets	• Market may be periodically subject to minor weakness • Sales follow or exceed market • Controlled growth and costs but periodic margin declines • Significant earning power in relation to assets on average	• Market may suffer periodic weakness or experience rapid growth • Sales follow market • Earning power may be average but subject to market weakness or contingent on growth	• Market may reflect more volatility or significant competition • Sales trend illustrates market or specific problems or risks • Earning power is low in relation to assets or volatile	• Market may be very mature highly cyclical or have intense competition • Sales trend may be very slow subject to dramatic problems or very rapid growth • Earning power in relation to assets is chronically low declining or subject to significant losses
Interest coverage (historical and expected component of borrowing power)	• Substantial interest coverage under all conditions or expected conditions	• Substantial interest coverage on average though may show minor weakness due to margin declines or rising rates	• More than adequate interest coverage on average but subject to periodic weakness	• Coverage is generally acceptable but subject to periodic pressures that may limit borrowing power	• Coverage is marginal subject to periodic weakness but managed or limits significant added borrowing
Cash flow trends and demands (historical and expected debt servicing capacity)	• Strong and stable trend in cash generation • Significant internal financing of	• Cash generation may flatten or show minor declines but generally improves	• Cash generation illustrates slow growth market pressures or is contingent on	• Cash generation is very slow growing in relation to assets or volatile • High dividend	• Cash generation is low declining or significantly lagging asset growth

122

Table 2—continued

	asset growth • Cash flow ability to service term debt is strong and stable and able to support added term debt	• Capacity to service debt is consistently clear and significant on average • Dividends and asset control are reasonable	sales growth but is consumed by assets • Capacity to service debt is adequate on average	payouts • Capacity to service existing debt is acceptable on average but subject to pressures causing refinancing	• Excessive dividend payouts • Limited long term debt and borrowing power due to inability to service over reasonable term
Working capital adequacy	• Consistent ability to clear bank lines • Efficient receivable and inventory turnovers • Payables on discount basis	• Consistently able to clear bank lines • Unusual receivable or inventory building associated with market may periodically increase proportionate usage	• Typically able to clear lines • Unusual building associated with market may prevent clearing periodically • Rapid growth may lock in short term borrowings to be refinanced	• Periodic problems or diversion of cash may cause working capital pressures • Heavy reliance on short term bank debt or payables is common	• Obvious working capital pressures • Reliance on adequately secured borrowings with periodic limits on borrowing power implicit in acceptable asset protection
Leverage (historical and expected margin for error in assets)	• Absolute level related to asset turnover • Reliance on borrowed debt is low in relation to ability to service • Leverage is stable and provides significant asset (perhaps liquid) coverage of debt	• Leverage is generally stable but subject to temporary asset building that is subsequently controlled • Asset coverage is significant with perhaps a liquid asset base	• Leverage is slightly more volatile or marginally declining due to asset building or periodically weak earnings • Asset coverage is adequate on average and controlled after unusual building	• Leverage may be subject to uncontrolled asset growth periodically • Volatile earnings or high dividends may restrict equity growth • Asset coverage is dependent on less liquid assets but more than adequate collateral exists	• Leverage is high • Specific asset coverage of collateral for loans is acceptable • Repayment over reasonable term would be partially dependent on asset liquidation

strict alternative uses of cash generation through dividend restrictions (or owner guarantees), capital expenditure limits and acquisition prohibitions Covenants may protect the financial condition evaluated through financial ratios (worth to debt and current ratios), financial amounts (tangible net worth and working capital), and insurance coverage Covenants may also protect the lender s position with regard to alternative creditors through negative pledge negative debt and cross default clauses If collateral is required the status of collateral (particularly changing collateral such as receivables) should be reported regularly and checked for value by the lender Periodically the physical existence and quality of collateral should be verified by on site visits or collateral audits

A lender who properly structures, monitors and controls loans going in will have much less trouble coming out

Summary No one said it was easy

Good commercial lending is an acquired skill To acquire it, a lender must understand the technical areas of accounting economics and finance However only careful consideration (analysis) and deliberate decision making (judgment) can lead to developing the necessary skill All lenders make mistakes but good lenders will learn from their mistakes Such experience is invaluable to developing lending skill Since, in the final analysis most lenders are self taught, the hope is that this article will help guide lenders through appropriate thought processes so that they can avoid learning the hard way ☐

APPENDIX G

Outlining the Process of Forming & Updating Credit Judgments

OUTLINING THE PROCESS OF FORMING & UPDATING CREDIT JUDGEMENTS

FORMING CREDIT JUDGEMENTS

1) ACQUIRE THE BASIC INFORMATION ABOUT THE BORROWER

A) HISTORICAL & CURRENT FINANCIAL INFORMATION
B) BACKGROUND INFORMATION

2) ACQUIRE BASIC INFORMATION ABOUT THE LOAN

A) SIZE & PURPOSE OF THE LOAN
B) SOURCES OF REPAYMENT

3) PRELIMINARY REVIEW OF RISK

A) ASSESS COMMITMENT EXPERIENCE & TRACK RECORD OF HUMAN VARIABLES
B) ASSESS BROAD POLITICAL & ECONOMIC RISKS
C) IDENTIFY OPERATING STRENGTHS & WEAKNESSES APPARENT IN TRACK RECORD
D) EVALUATE STRENGTH & STABILITY OF CASH FLOW IN RELATION TO HISTORICAL DEMANDS
E) ANTICIPATE FUTURE OPERATING PERFORMANCE & INVESTMENT NEEDS & CAPACITY TO SERVICE DEBT

UPDATING CREDIT JUDGEMENTS

A) CURRENT FINANCIAL INFORMATION

B) BROAD EXPLANATION OF CURRENT PERFORMANCE

A) SIZE & PURPOSE OF THE LOAN
B) STATUS & USE OF EXISTING LOANS
C) SOURCES OF REPAYMENT
D) CONDITIONS / VALUE OF COLLATERAL

A) EVALUATE CHANGE OR INCONSISTENCIES IN HUMAN VARIABLES
B) RE EVALUATE CHANGING POLITICAL OR ECONOMIC RISKS
C) EVALUATE CURRENT OPERATING PERFORMANCE AGAINST EXPECTATIONS
D) EVALUATE RECENT CASH FLOW & INVESTMENT DECISIONS IN RELATION TO PLANS AND FINANCIAL CONSEQUENCES
E) ANTICIPATE FUTURE OPERATING PERFORMANCE & INVESTMENT NEEDS & CAPACITY TO SERVICE DEBT

APPENDIX H

Four Steps to F/S Analysis

FOUR STEPS TO F/S ANALYSIS

1) Look at the F/S and read the notes first and then the auditors opinion which will be one of the five following statements

a) Unqualified (clean) opinion
b) Unqualified but with "Explanatory" language
c) Qualified opinion
d) Adverse opinion
e) Disclaimer of opinion

1) If you have more than one year, spread the statements by accounts and look for differences and trends

2) Construct the ratio's

Liquidity ratio
Coverage ratio
Leverage ratio
Operating ratio

3) Compare ratio s to similar industries

APPENDIX I

10 Practical Web Sites of Export Pro's

10 Practical Trade Web Sites for Export Pros

Export professionals can waste a lot of time browsing the Internet, or save real time and money by knowing where to locate international trade resources that are useful—and even critical—to your operation *ME* screened dozens of sites to assemble the following list of 10 "best picks"

Tradeport
www tradeport org Looking for a banker, freight forwarder, or trading company to help you export your products? Looking for qualified international trade leads? Need comprehensive market and industry research? Wondering what trade shows and events are going on? Just beginning to export but need some help from an interactive international trade tutorial? This site, with support from the U S Commerce Department, will help you It also features a powerful company search engine

U S Customs Service
www customs ustreas gov/travel/forms htm Download 32 commonly used international trade forms such as Cargo Declaration NAFTA Certificate of Origin & Continuation Sheet, and Air Cargo Manifest Customs regularly adds informational materials The latest is the 144-page book, "Importing Into the United States "

Export Legal Assistance Network
www nemonline org/elan Sponsored by the Federal Bar Association, Commerce Department, and U S Small Business Administration, the site puts exporters in touch with a network of 250 lawyers in 70 U S cities on topics such as export licensing, foreign taxation, boycott laws, export finance, and intellectual property protection First half-hour of consultation is free

World Exports
www usaexports net This is a multilingual site designed "to assist exporters and importers meet directly through the Internet " The site links to hundreds of U S exporters' Web sites, World Trade Centers, U S embassies, American Chambers of Commerce, U S government agencies, and an SIC database

Cargolog
www cargolog com Specializing in cargo data research, this new site provides free Web and e-mail links to 900 transport companies and services by geographic lo-

IOMA s REPORT ON MANAGING EXPORTS (ISSN 1090 9427) is published monthly for $259 per year by the Institute of Management & Administration Inc 29 West 35th St New York NY 10001-2299 ©1999 Institute of Management & Administration Inc Subscribers are invited to make periodic copies of sections of this newsletter for professional use However routine photocopying or electronic distribution to others is a copyright violation For information on our site license multi-copy pricing electronic site license programs and reprints contact Sofie Kourkoutakis at 212-244 0360 ext 200 Periodicals postage rates paid at New York NY and additional mailing offices POSTMASTER Send address changes to IOMA s REPORT ON MANAGING EXPORTS 29 West 35th St New York NY 10001 2299 (212) 244-0360 fax (212) 564-0465 Internet address for subscription inquiries SUBSERVE@IOMA COM Editor s e mail address CHORNER@IOMA COM

129

cation (city and country) and services offered

Trade Show Central **www tscentral com** This site lists international trade shows, seminars, and conferences, along with extensive directories of suppliers, venues and facilities, and Webcasts around the world and in the United States Sign up to exhibit online and take advantage of Internet-based tools and services to assist with event management and promotion

NAFTA

www nafta net Business directories, trade data, and articles on NAFTA and GATT, as well as data on NAFTA member nations and links to other relevant sites

Sealink

www sealink com This site, aimed at ocean shippers, features the Export 2000 system that lets export pros file declarations ($0 75 to $2 50 each) with Customs and master bills of lading ($0 50 to $1 00) with ocean carriers online The site also allows filing of air shipment documentation

Trade Compass

www tradecompass com A new feature of this site is the Caravan system, which uses the 'Net to enable traditional types of EDI letting exporters transmit data from their computers to Customs and business partners Caravan receives your data, translates it into specialized EDI formats, and routes it to the proper destinations The site also features the Logistics Management System

Export Essentials (IHS TransPort Data Solutions)

www exportessentials com This site features classification and research data and links to Trade Expert for classifying imports There are daily updates of export-related Federal Register notices a FAQ page and related links ❑

Exclusive ME Survey:

Export Pros Report Latest Int'l Trade Terms To Asia & Middle East

With signs that the "Asian flu" is abating somewhat, export professionals may be starting to see some light at the end of the tunnel Crisis or no crisis, this vast region is just too important to turn away from, and *Managing Export's* latest survey—of what Incoterms your competitors coast-to-coast are negotiating with their Asian customers—will provide you with valuable data *ME*'s survey results cover 20 nations in Asia and the Middle East and are organized by country, type of industry, company size, and the international trade terms negotiated The data appears on pages 4 and 5

With the Asian Development Bank forecasting that growth could resume in most Asian economies by the latter part of 1999, our data is also timely In 1998, 10 Asian nations accounted for 30% of U S exports of goods and services (China and Hong Kong, India, Indonesia, Japan, Malaysia, the Philippines, Singapore, Taiwan, Thailand, and South Korea) A whopping 60% of exports from the Northwest states, and 50% from the Southwest, went to these same 10 markets

CIF Terms Dominate Asian Market

As the graph on the front page shows, when we ask export managers nationwide what Incoterms they use when shipping to Asia, 43% indicate CIF (Cost, Insurance, and Freight)—nearly double the next closest category Under CIF the exporter clears the goods for export, pays the costs and freight necessary to get the goods to the destination port, and purchases marine insurance against the customer's risk of loss or damage to the goods

The only other trade terms figuring significantly in this market are FOB (Free on Board)

continued on page 4

130

APPENDIX J

Risk Rating Characteristics of Bankable Credit

RISK RATING CHARACTERISTICS FOR BANKABLE CREDITS

ISSUES	HIGH QUALITY	ABOVE AVERAGE	AVERAGE	BELOW AVERAGE	INCREASED RISK
SALES & EARNINGS (HISTORICAL & EXPECTATIONS)	STABLE/GROWING MARKET	MARKET MAY BE PERIODICALLY SUBJECT TO MINOR WEAKNESS	MARKET MAY SUFFER PERIODIC WEAKNESS OR EXPERIENCE RAPID GROWTH	MARKET MAY REFLECT MORE VOLATILITY OR SIGNIFICANT COMPETITION	MARKET MAY BE VERY MATURE HIGHLY CYCLICAL OR HAVF INTENSE COMPETITION
	STABLE SALES GROWTH & EXPECTATIONS	SALES FOLLOW OR EXCEED MARKET	SALES FOLLOW MARKET	SALES TREND ILLUSTRATES MARKET OR SPECIFIC PROBLEMS OR RISKS	SALES TREND MAY BE VERY SLOW SUBJECT TO DRAMATIC PROBLEMS OR VERY RAPID GROWTH
	SIGNIFICANT EARNING POWER IN RELATION TO ASSETS	CONTROLLED GROWTH & COSTS BUT PERIODIC MARGIN DECLINES	EARNINGS POWER MAYBE AVERAGE BUT SUBJECT TO MARKET WEAKNESS OR CONTINGENT ON GROWTH	EARNING POWER IS LOW IN RELATION TO ASSETS OR VOLATILE	EARNING POWER IN RELATION TO ASSETS IS CHRONICALLY LOW DECLINING OR SUBJECT TO SIGNIFICANT LOSSES
		SIGNIFICANT EARNING POWER IN RELATION TO ASSETS ON AVERAGE			
INTEREST COVERAGE (HISTORICAL & COMPONENT OF BORROWING POWER)	SUBSTANTIAL INTEREST COVERAGE UNDER ALL CONDITIONS OR EXPECTED CONDITIONS	SUBSTANTIAL INTEREST COVERAGE ON AVERAGE THOUGH MAY SHOW MINOR WEAKNESS DUE TO MARGIN DECLINES OR RISING RATES	MORE THAN ADEQUATE INTEREST COVERAGE ON AVERAGE BUT SUBJECT TO PERIODIC WEAKNESS	COVERAGE IS GENERALLY ACCEPTABLE BUT SUBJECT TO PERIODIC PRESSURES THAT MAY LIMIT BORROWING POWER	COVERAGE IS MARGINAL SUBJECT TO PERIODIC WEAKNESS BUT MANAGED OR LIMITS SIGNIFICANT ADDED BORROWING
CASH FLOW TRENDS & DEMANDS (HISTORICAL & EXPECTED DEBT SERVICING CAPACITY)	STRONG & STABLE TREND IN CASH GENERATION	CASH GENERATION MAY FLATTEN OR SHOW MINOR DECLINES BUT GENERALLY IMPROVES	CASH GENERATION ILLUSTRATES SLOW GROWTH MARKET PRESSURES OR IS CONTINGENT ON SALES GROWTH BUT IS CONSUMED BY ASSETS	CASH GENERATION IS VERY SLOW GROWING IN RELATION TO ASSETS OR VOLITILE	CASH GENERATION IS LOW DECLINING OR SIGNIFICANTLY LAGGING ASSET GROWTH
	SIGNIFICANT INTERNAL FINANCING OF ASSET GROWTH	CAPACITY TO SERVICE DEBT IS CONSISTENTLY CLEAR & SIGNIFICANT ON AVERAGE	CAPACITY TO SERVICE DEBT IS ADEQUATE ON AVERAGE	HIGH DIVIDEND PAYOUTS	EXCESSIVE DIVIDENT PAYOUTS
	CASH FLOW ABILITY TO SERVICE TERM DEBT IS STRONG & STABLE & ABLE TO SUPPORT ADDED TERM DEBT	DIVIDENDS & ASSET CONTROL ARE REASONABLE		CAPACITY TO SERVICE EXISTING DEBT IS ACCEPTABLE ON AVERAGE BUT SUBJECT TO PRESSURES CAUSING REFINANCING	LIMITED LONG TERM DEBT & BORROWING POWER DUE TO INABILITY TO SERVICE OVER REASONABLE TERM
WORKING CAPITAL ADEQUACY	CONSISTENT ABILITY TO CLEAR BANK LINES	CONSISTENTLY ABLE TO CLEAR BANK LINES	TYPICALLY ABE TO CLEAR BANK LINES	PERIODIC PROBLEMS OF DIVERSION OF CASH MAY CAUSE WORKING CAPITAL PRESSURES	OBVIOUS WORKING CAPITAL PRESSURE
	EFFICIENT RECEIVABLE & INVENTORY TURNOVERS	UNUSUAL RECEIVABLE OR INVENTORY BUILDING ASSOCIATED WITH MARKET MAY PERIODICALLY INCREASE PROPORTIONATE USAGE	UNUSUAL BUILDING ASSOCIATED WITH MARKET MAY PREVENT CLEARING PERIODICALLY	HEAVY RELIANCE ON SHORT TERM BANK DEBT OR PAYABLES IS COMMON	RELIANCE ON ADEQUATELY SECURED BORROWINGS WITH PERIODIC LIMITS ON BORROWING POWER IMPLICIT IN ACCEPTABLE ASSET PROTECTION
	PAYABLES ON A DISCOUNT BASIS		RAPID GROWTH MAY LOCK IN SHORT TERM BORROWINGS TO BE REFINANCED		
LEVERAGE (HISTORICAL & EXPECTED MARGIN FOR ERROR IN ASSETS	ABSOLUTE LEVEL RELATED TO ASSET TURNOVER	LEVERAGE IS GENERALLY STABLE BUT SUBJECT TO TEMPORARY ASSET BUILDING THAT IS SUBSEQUENTLY CONTROLLED	LEVERAGE IS SLIGHTLY MORE VOLATILE OR MARGINALLY DECLINING DUE TO ASSET BUILDING OR PERIODICALLY WEAK EARNINGS	LEVERAGE MAY BE SUBJECT TO UNCONTROLLED ASSET GROWTH PERIODICALLY	LEVERAGE IS HIGH
	RELIANCE ON BORROWED DEBT IS LOW IN RELATION TO ABILITY TO SERVICE	ASSET COVERAGE IS SIGNIFICANT WITH PERHAPS A LIQUID ASSET BASE	ASSET COVERAGE IS ADEQUATE ON AVERAGE & CONTROLLED AFTER UNUSUAL BUILDING	VOLATILE EARNINGS OR HIGH DIVIDENDS MAY RESTRICT EQUITY GROWTH	SPECIFIC ASSET COVERAGE OF COLLATERAL FOR LOANS IS ACCEPTABLE
	LEVERAGE IS STABLE & PROVIDES SIGNIFICANT ASSET (PERHAPS LIQUID) COVERAGE OF DEBT			ASSET COVERAGE IS DEPENDENT ON LESS LIQUID ASSETS BUT MORE THAN ADEQUATE COLLATERAL EXISTS	REPAYMENT OVER REASONABLE TERM WOULD BE PARTIALLY DEPENDENT UPON ASSET LIQUIDATION

Prepared exclusively for the JLGC by FIRST WASHINGTON ASSOCIATES LTD

28/07/99

132

APPENDIX K

Spread Sheet - JLGC 1996, 1997 & 1998

(JD'S - 000 OMITTED)				
BALANCE SHEET				
	Notes	1996	1997	1998
ASSETS				
Cash in hand & at banks		4	12 9	13 7
Certificates of Deposit at 10%				360
Term deposits at 9%	3	8 494	10 704	10,985 90
Investment in company shares	4	843 5	890 6	816 1
Other current assets	5			
Accrued interest		78 6	78	82 8
Accrued commissions		14 5	31 5	55 8
Prepaid Expenses		3 4	9 7	9 8
Refundable deposits		1 1	1 8	2 5
Total Other Current Assets		97 7	121 2	151 1
Investment in government bonds		1 000	~~1 000~~	988 2
Fixed assets	6	142 6	184 2	163 1
Total Assets		10 582 50	12 913 90	13 478 30
LIABILITIES & SHAREHOLDERS' EQUITY				
Liabilities				
Proposed dividends	8	322 6		
CBJ unpaid dividends	9	150	296 3	296 3
Deferred revenue	10	79 2	74 9	54 9
Other liabilities				
Board of Directors renumeration			25	25
Scientific research & vocational training			4 6	4 5
Universities fees			4 6	4 5
End of service endemnity provision				19 3
Accrued expenses			9 3	9 3
Unpaid call-up capital on investee co			56 2	
Accrued re-insurance fees				5 6
Total other liabilities	7	67 3	99 9	68 3
Loan guarantee provision	12	1 493 20	1 731 30	1 797 40
Total Liabilities		2 112 40	2 202 50	2 221 20
Shareholders Equity				
Authorized capital of 10 Million shares	13			
Subscribed capital of 9 875 000 shares				
Paid in capital		8 065	9 875	10 000
Statutory reserve		117 4	163 9	209 4
Voluntary reserve		117 4	163 9	209 4
Retained Earnings		170 3	508 4	838 2
Total Shareholders Equity		8 470 10	10 711 30	11 257 10
Total Liabilities & Shareholders Equity		10 582 50	12 913 90	13 478 30

INCOME STATEMENT	Notes	1996	1997	1998
Revenues				
Commissions on guranteed loans		70 2	118 4	211
Commissions on guranteed export loans			1 8	12 7
Counsulting fees			3 2	3 9
Total income from operations			123 4	227 6
Amount recovered from loans written off			14 9	15 2
Interest Income		775 90	1 000 80	962 7
Bonds interest		90 8	90 5	90 6
Certificates of deposit Interest				5 2
Dividends		11 3	13 7	10 5
Other Income	11	13 2	20 7	21 5
Total Revenue		**961 6**	**1,264 50**	**1,333 70**
Less Loan guarantee provision	12	177 8	414	241 2
Export Guarantee Provision				4
General & Administrative expense				
Salaries & Wages		123 5	172 2	232 9
Contributions to Social Security		7 8	14 1	17 5
Contributions to Savings Fund		6 3	10 3	
Board of Director's Transportation		20 6	20 7	26
Rent		16 9	20	26 2
Depreciation Expense		30 6	42 4	47 6
Maintenance Expense		0 4	0 7	1 3
Vehicles Expense		6 1	6 4	6 6
Marketing Expenses		28 6	23 5	14 8
Professional Fees		16 8	8 7	11 9
Office duties & training courses		19 1	24 8	27 2
Employees incentives			7 8	11 6
Fees & subscriptions		12 6	0 9	
Stationery & printings		7 7	11 9	8
Post Telephone & electricity		6 1	10 1	12 7
Others		7 3	11 8	14
Total General & Administrative Expense	15	**311**	**375 8**	**458 9**
Provision for decline in value of Investments	4	16 4	9 1	174 5
Net Income b/f taxes & other provisions		456 2	465 5	454 9
Provision for scientific research etc		-4 5	-4 6	-4 5
Provision for universities fees		-4 5	-4 6	-4 5
Board of Directors renumeration		-18 3	-25	-25

135

Net Income		428 7	431 2	420 8
Add Retained earnings previous year		155 4	170 3	508 4
Income available for appropriation		584 1	601 5	929 2
Appropriation				
Statutory reserve		45 6	163 9	209 4
Voluntary reserve		45 6	163 9	209 4
Proposed dividends	8	322 6		
Retained earnings year end		170 3	508 4	838 2
Total		584 1	836 2	1 257 00

APPENDIX L

From Ordinal to Cardinal Measures of Country Risk

FROM ORDINAL TO CARDINAL MEASURES OF COUNTRY RISK

by

Dr Daniel L Bond
Vice President & Chief Economist
Export-Import Bank of the United States

Note This paper was first presented at the Berne Union Workshop on Country Underwriting and Treatment of Sovereign Debt held in Cape Town, South Africa, 13-16 April 1992

138

FROM ORDINAL TO CARDINAL MEASURES OF COUNTRY RISK

I Introduction

In the past, Eximbank's country risk assessments have focused on the relative degree of repayment risk. The final result has been country ratings, where each country was placed in one of 6 categories (A, B, C, D, E, F). If it was decided that a country did not provide "reasonable assurance of repayment" for new transactions, it was placed in the highest risk category (F) and Eximbank support was not made available. Countries with ratings A through E were eligible for support, although various restrictions were often placed on countries placed in category E.

These ratings focused on risks involved in sovereign transactions (i.e., those in which the government of the foreign country provided a full-faith and credit commitment to repay). Non-sovereign transactions in a given country are normally considered to be riskier than sovereign transactions. This was reflected in the Bank's policy of charging standard surcharges over the sovereign fee for non-sovereign transactions. The surcharge for public non-sovereign entities, commercial banks and highly creditworthy private companies was 20%. A 100% surcharge over the sovereign fee was placed on transactions with other creditworthy private companies.

While Eximbank charges risk-related exposure fees on each transaction to help cover losses due to non-payment, until recently no attempt was made to explicitly estimate the potential magnitude of such losses for each transaction. Rather the fee structure was designed so that Eximbank fees would be highly competitive with the fees charged by other export credit agencies.

Eximbank's risk assessment system and the financial implications derived from these ratings is now undergoing fundamental changes.

The Federal Credit Reform Act of 1990 requires that all U.S. government agencies providing cross-border loans, guarantees or insurance follow new budgeting procedures.[1] Under credit reform rules, each transaction is scored in the budget on the basis of the estimated financing and risk subsidies entailed by the transaction. Financing subsidies are calculated as the difference between the interest rate charged on the transaction and the government's cost of borrowing. Risk subsidies are calculated as the difference between the exposure fees charged on a transaction and the expected losses due to non-payment. For each agency, the sum of all subsidies during each fiscal year can be no more than the amount appropriated by Congress.

---

[1] For background on credit reform see Barry P. Bosworth, Andrew S. Carron and Elisabeth H. Rhyne, The Economics of Federal Credit Programs, The Brookings Institution, Washington, D.C., 1987.

139

The following foreign credit agencies are affected by these changes

- Export-Import Bank of the United States
- Commodity Credit Corporation (CCC) Agricultural Export Credit Sales Program
- Overseas Private Investment Corporation (OPIC)
- Agency for International Development (AID)
- Department of Defense Foreign Military Sales (FMS) Program

Starting in FY'93 these agencies will operate under a uniform system of risk assessment which was developed during 1991 by an interagency working group The group was chaired by Office of Management and Budget (OMB) with representation from the above five agencies and the Departments of Treasury and State Officials from the Council of Economic Advisors and the Federal Reserve System also participated

In a formal sense credit reform requires that agencies use common sovereign risk assessments only for budgetary purposes In reality the impact is much more pervasive For example, the Eximbank Board has decided to adopt the interagency ratings and use them as the basis for setting cover policy and exposure fees

The interagency group has so far addressed only the risks associated with medium- and long-term sovereign transactions This type of transaction is the "common denominator" for all U S government foreign loan and guarantee programs OMB recognizes that sovereign and non-sovereign risks are very often different, and that short-term cover is often treated differently than medium- and long-term transactions by both creditors and debtors (For example, the Paris Club usually excludes short-term transactions from reschedulings)

Since only a few individual agencies or programs are involved in non-sovereign and/or short-term transactions, it is likely that the risks of such transactions will be assessed by the individual agency involved within a framework of general guidelines to be approved by OMB Eximbank is considering a system in which highly-creditworthy non-sovereign entities (e g parastatals, major banks, major private firms) would normally be rated as one level riskier than sovereign transactions in the country, and other creditworthy entities (e g , medium-sized private firms and banks) would be rated two levels riskier than sovereign However, in certain circumstances a different relationship between sovereign and non-sovereign ratings might apply

This paper describes how the interagency group decided to assess relative risks for cross-border transactions and assign numerical values reflecting the potential loss on these transactions due to non-payment

140

II Ordinal Measures of Risk

The new interagency country risk assessment process has two distinct parts First, the relative riskiness of transactions in foreign countries is determined (for example, the risk of sovereign transactions in countries A, E, L and X are comparable and are higher or lower than the risk of transactions in countries C, D, Q and Y) Second, the probability of non-payment for each category of comparable country risks is established

The former task--ordinal ranking of country risk--has routinely been carried out by Eximbank and some of the other U S credit agencies for some time However, the latter task--the cardinal measurement of risk--had heretofore not been attempted on a systematic basis

The interagency group has established a risk rating scale which has eleven levels of expected payments performance While there has been no final agreement on the definitions of these eleven levels, Eximbank has proposed the definitions shown in Table 1

Two questions need to be evaluated when assessing repayment risk

- Will the sovereign obligor be able to service its debts to the United States in the future?
- If it is able to service those debts, will it be willing to do so?

The question of a sovereign obligor's willingness to pay is best decided on the basis of its payments/arrears history If a sovereign obligor could have serviced its debts but failed to do so, its future willingness to pay should be questioned

The interagency group felt that the ability of a country to service its foreign debt depends on the following major factors

- The level of the government's foreign indebtedness in comparison to its ability to service this debt
- The ability of the government to gain access to the foreign exchange needed to repay its foreign obligations
- The ability of the government to secure sufficient domestic currency to repay its foreign debts
- Non-financial factors which reduce the ability of a government to repay foreign debts even when there is sufficient domestic funding and foreign exchange to do so

141

Table 1

PROPOSED DEFINITIONS OF SOVEREIGN RISK CATEGORIES

1 Payments problems are unlikely

2 Minor payments irregularities are possible Should these occur, they are likely to be quickly resolved without refinancings or reschedulings

3 Minor payments irregularities are likely Should these occur, they are likely to be quickly resolved without refinancing or reschedulings

Moderate payments problems, including refinancings or reschedulings, are possible Full recovery on all debts is likely over the long term

5 Moderate payments problems, including refinancings or reschedulings, are likely Small losses on some debts are possible over the long term

6 Serious payments problems, including repeated reschedulings and/or prolonged arrears, are likely Small losses on some debts are likely over the long term

Serious payments problems, including repeated reschedulings and/or prolonged arrears, are likely Extended-term debt reschedulings are possible Moderate losses on some debts are likely over the long term

8 Serious payments problems, including repeated reschedulings and/or prolonged arrears, are likely Extended-term debt reschedulings are likely Eventual forgiveness or effective repudiation of some debts is possible Substantial losses on some debts are likely over the long term

9 Serious payments problems, including repeated reschedulings and/or prolonged arrears, appear inevitable Eventual forgiveness or effective repudiation of some debts is likely Severe losses on some debts are likely over the long term

10 Serious payments problems, including repeated reschedulings and/or prolonged arrears, appear inevitable Eventual forgiveness or effective repudiation of most debts is likely Severe losses on most debts are likely over the long term

11 Eventual forgiveness or effective repudiation of most debts appears inevitable Severe losses on most debts appear inevitable

The interagency group developed a risk assessment system which involves the evaluation of the risk of repayment/recovery problems arising out of each of the factors described above, and the assignment of a summary sovereign risk rating To help in this effort, and to provide a degree of consistency across countries, key indicators for each of the factors has been developed, with a measurement scale developed for each indicator

In each case the indicators used refer to conditions expected to prevail over the next five years For this purpose country projections are prepared All the country projections use the same assumptions about future changes in global interest rates, commodity prices, industrialized country imports, etc

The interrelationships among the individual indicators are complex, and no satisfactory system for weighing them to obtain a summary measure has been developed As a result, risk assessment always involves a considerable element of judgement It is the role of country analysts to develop summary ratings and to present arguments in support of their conclusions This is done first at the level of the major factors, and then for the summary rating of sovereign risk

III. Measurement of Repayment Risks

The interagency group explored three major approaches for quantifying the repayment risks associated with cross-border exposure [2] These are

- Actuarial Approach Uses information on each agency's cash flows from past transactions to estimate probability of non-payment

- Secondary Loan Market Approach Uses secondary market discounts for commercially traded bank debts as a surrogate measure of repayment risk

- Market Yield Approach Uses historic market yields on bonds as a measure of the repayment risks which can be associated with groups of bonds classified by level of repayment risk by independent rating agencies

Eximbank attempted to apply the actuarial approach but found that it had major shortcomings Over the past decade, Eximbank has rescheduled rather than written-off loans, leaving many debts still technically outstanding Exclusion of these outstanding transactions would underestimate the risks of non-payments, since they represent the most significant potential losses in the Bank's history However, their inclusion would require considerable guesswork concerning their ultimate collection prospects

---

[2] See Congressional Budget Office report Budgeting for Eximbank A Case Study of Credit Reform, Washington, D C , January 1990, and the General Accounting Office report Loan Guarantees Export Credit Guarantee Programs' Long-Run Costs Are High, Washington, D C , April 1991

The group also decided against relying primarily on information from the secondary loan market The secondary debt market is a relatively narrow and thin market, with relatively f participants and few transactions Because performing loans are rarely traded, moreover, the secondary debt market provides virtually no information on loans which are currently performing well, but can be expected to perform poorly in the future

While it was recognized that there may be some differences between repayment risks for bonds and U S government loans, the group decided that estimates based on market yields offered the most advantages The risk estimates are based on the bond market, which is very large, with many participants and transactions Sovereign bond data is available for some countries where the U S government has exposure, allowing a correlation between rating systems to be established And the approach uses publicly available data, which is frequently updated

IV Market Yield Approach to Estimating Potential Losses

A. The Bond Market

The bond market is the major capital market for long-term institutional debt instruments It encompasses sovereign, corporate, non-sovereign public, and other debt instruments both domestic and foreign Bonds usually pay interest at fixed rates and intervals, and are redeemable at maturity at their full face value They are also tradeable The price at which they are traded depends on more than their face value and interest rate It also depends on buyers' and sellers' perceptions of default, recovery and liquidity risks The return an investor requires when buying a bond is called the yield

From an investor's perspective, the yield is the compound annual return on a debt instrument purchased and held to maturity The yield is usually different from the instrument's stated interest rate because the instrument is usually purchased at a price different from stated face value Mathematically, the yield is the discount rate that makes the present value of stated principal and interest payments equal to its current market price A debt instrument priced at a discount to stated face value has a yield higher than its stated interest rate, and vice-versa When the price of an instrument drops, its yield rises, and vice versa

Bond yields are higher the higher the perception of the above risks Yields for various bonds are routinely published in a number of public sources such as Moody's Bond Record and Standard & Poor's CreditWeek.

The difference between the yields on two bonds is called the yield spread The yield spread reflects the perception of market participants as to the differences in repayment risk and liquidity between the bonds

The two forms of repayment risk--default (failure to make payments according to schedule) and recovery (making good on missed payments)--are usually lumped together Bonds have varying degrees of repayment risk--from U S Treasury bonds to junk bonds Moody's, Standard & Poor's and a few other companies categorize bonds by their degree of repayment risk Their ratings are

> designed to rank, within a consistent framework, the relative risk of each debt issue and issuer Because it pertains to the future, a credit rating (like all other long-term financial analysis) is necessarily subjective Its reliability stems less from precise methodology than from the balanced opinion of experienced, well-informed, and impartial analysis [3]

The rating agencies normally lump bonds with comparable repayment risks together into a few categories, to which they assign letter designators Definitions of Moody's long-term debt ratings are given in Table 2 Standard and Poor's also uses nine risk levels with comparable definitions

B Estimating Probability of Non-Payment

Investors in the bond market require higher yields for riskier credits By examining historic market yields for bonds classified at various levels of risk it is possible to measure these differences in perceived risk

Table 3 shows the approximate spreads between bonds in various risk categories relative to the yield on bonds rated "Aaa"

Table 3

Average Yield Spreads on Bonds
(spreads over Aaa, in % per Year)

Moody's Rating	S&P	Average
Aa	AA	25%
A	A	45%
Baa	BBB	2 00%
Ba	BB	3 50%
B	B	8 00%
Caa	CCC	NA

[3] Moody's Rating Process, p 3, Moody's Investors Service, 1988

Table 2

Moody's Long-Term Debt Ratings

aa Bonds which are rated Aaa are judged to be of the highest quality Interest payments are protected by a large or by an exceptionally stable margin and principal is secure While the various protective elements are likely to change, such changes as can be visualized are most unlikely to impair the fundamentally strong position of such issues

a Bonds which are rated Aa are judged to be of high quality by all standards They are rated lower than the best bonds because margins of protection may not be as large as in Aaa securities or fluctuation of protective elements may be of greater amplitude or there may be other elements present which make the long-term risk appear somewhat larger than the Aaa securities

Bonds which are rated A possess many favorable investment attributes and are to be considered as upper-medium-grade obligations Factors giving security to principal and interest are considered adequate, but elements may be present which suggest a susceptibility to impairment some time in the future

aa Bonds which are rated Baa are considered as medium-grade obligations (i e , they are neither highly protected nor poorly secured) Interest payments and principal security appear adequate for the present but certain protective elements may be lacking over any great length of time Such bonds lack outstanding investment characteristics and in fact have speculative characteristics as well

a Bonds which are rated Ba are judged to have speculative elements, their future cannot be considered as well-assured Often the protection of interest and principal payments may be very moderate, and thereby not well safe-guarded during both good and bad times over the future Uncertainty of position characterizes bond in this class

Bonds which are rated B generally lack characteristics of the desirable investment Assurance of interest and principal payments or of maintenance of other terms of the contract over any long period of time may be small

aa Bonds which are rated Caa are of poor standing Such issues may be in default or there may be present elements of danger with respect to principal or interest

a Bonds which are rated Ca represent obligations which are speculative in a high degree Such issues are often in default or have other marked shortcomings

Bonds which re rated C are the lowest rated class of bonds, and issues so rated can be regarded as having extremely poor prospects of ever attaining any real investment standing

140

The average yield spreads from the above table can serve as estimates of annual probabilities of non-payment on U S government cross-border transactions This assumes that

- the actions of bond traders are (in the aggregate) a good guide to estimating the level of repayment risks on government cross-border exposure,
- the probability of non-payment on Aaa rated bonds is minimal,
- there is little difference in liquidity risks and other non-payment risks among the various groups of risk-rated bonds, and
- that the yield spread encompasses the market's perception of both the probabilities of default and of subsequent recovery

C Correlating Bond Market and Country Risk Categories

Perhaps the greatest difficulty in using the information derived from the bond market is correlating the risk ratings associated with them to the eleven country risk levels developed by the interagency group There are some similarities between the long-term bond rating guidelines used by Moody's or Standard and Poor's and the definitions given in Table 1 However the bond rating agencies must evaluate a wide ranges of transactions Thus their guidelines are written in such general terms that a precise correlation is impossible

Fortunately, Moody's and Standard & Poor's have rated a small number of sovereign bonds These ratings are shown in Table 4

Table 4

Moody's/Standard & Poor's Sovereign Ratings

Aa/AA	Baa/BBB
Australia	India
Belgium	China
Denmark	Greece
Finland	Israel
Ireland	
New Zealand	
Sweden	Ba/BB
Norway	
Singapore	Hungary
Spain	Mexico
	Venezuela

147

A/A	B/B
Iceland	Brazil
Korea	Argentina
Malaysia	
Portugal	
Thailand	

Using the rating agencies' definitions and the available sovereign bond ratings, a correlation between Moody's, Standard & Poor's, and interagency risk levels was developed This is shown in Table 5

Table 5

Suggested Correlation of Risk Classifications

Moody's	Standard & Poor's	Inter-agency
Aa	AA	1
A	A	2
Average of A & Baa	or A & BBB	3
Baa	BBB	4
Ba	BB	5
133% of Ba	133% of BB	6
B	B	7
150% of B	150% of B	8

Bonds with ratings of Caa and below are considered to be very high risk and are normally not traded As a result there is no regularly published source of information on their yields Therefore the interagency group decided to use information from the secondary loan market to estimate risk premia for its risk levels 8 through 11 The primary use of the risk premia estimates for these high risk categories is in the calculation of the budgetary impact of debt write-offs by the U S government

D. Expected Loss Estimates

he expected loss on a transaction is calculated as the present value of the stream of expected n-payments over the entire life of the transaction The expected loss estimates calculated by the interagency group for each of the 11 level of risk are shown in Table 6

Table 6

Expected Loss Estimates

Risk Level	Expected Loss Long-Term	Medium-Term	Short-Term
1	1 5%	1 0%	0 2%
2	2 5%	1 5%	0 3%
3	5 0%	2 5%	0 8%
4	10 0%	5 0%	1 5%
5	15 0%	10 0%	2 5%
6	20 0%	15 0%	3 5%
7	30 0%	20 0%	5 5%
8	40 0%	30 0%	8 0%
9	55 0%	40 0%	12 5%
10	65 0%	55 0%	17 0%
11	75 0%	65 0%	25 0%

NOTE Long-term is defined as a 10-year repayment period with a 4 5 year disbursement and grace period Medium-term is defined as a 5-year repayment period with a 3 year disbursement and grace period Short-term is defined as a 1-year repayment period with a 6 month grace period

V. Implications of Risk Subsidy Estimates for Eximbank

S ing with the Fiscal Year 1992 budget, Eximbank has both a fixed annual subsidy budget a otal authorization levels The subsidy budget is a fixed sum which can be used to cover both financing subsidies (the difference between the interest rate charged on the transaction and the government's cost of borrowing) and risk subsidies (the difference between the exposure fees charged on a transactions and the expected losses due to non-payment) Since the interest rates charged on most of the Bank's loans are above the government's costs of borrowing, the subsidy budget will be used primarily to cover the risk subsidies estimated for its loan, guarantee and insurance programs

Given the visibility of Eximbank's subsidy budget and the intense competition between government programs for funding, Eximbank is exploring ways to reduce the level of its estimated subsidy budget The most obvious route is through increased exposure fees Since Eximbank currently has relatively low fees on high risk transactions compared to most of its m r competitors (see Figure 1), the Bank has some scope for raising its fees without running the risk of being uncompetitive An increase in fees, particularly for higher risk transactions, is now under consideration by the Bank's Board of Directors

The Bank is also considering using internal exposure guidelines to control the amount of new high risk transactions that it undertakes And program restrictions are being introduced for the higher risk transactions (For example, long-term cover is not provided for transactions rated in category 7, and only short-term cover is provided for transactions rated 8)

I rnational negotiations to reduce the level of risk subsidies provided by official export c it agencies are likely to take place over the next few years If these negotiations are successful, then Eximbank could raise its exposure fees even more without becoming uncompetitive

It is also possible that over time the subsidy estimates themselves will be reduced An in depth study of the experience with bond lending to the ten top borrowing governments over th eriod between 1850 and 1970 indicated that, defaults notwithstanding, " investors made more on bond lending to foreign governments than on safer home governments, despite the revolutions and the Great Depression "[4] During this period investors in foreign government bonds required premia above home government bonds between 150 and 260 basis points ~~perce~~ While the realized returns were well below these ex ante premia, holders of foreign bonds realized an average return of 44 basis points above the returns on home country bonds These results suggest that bond market yield spreads may be considerably higher than necessary to cover payment risks

A number of market analysts have argued that the secondary loan market is overstating the

[4] Peter H Lindert and Peter J Morton, "How Sovereign Debt Has Worked," in Jeffrey D Sachs, ed , Developing Country Debt and the World Economy, The University of C cago Press, 1989 Quote from page 229 The countries were Argentina, Australia, B zil, Canada, Chile, Egypt, Japan, Mexico, Russia and Turkey

150

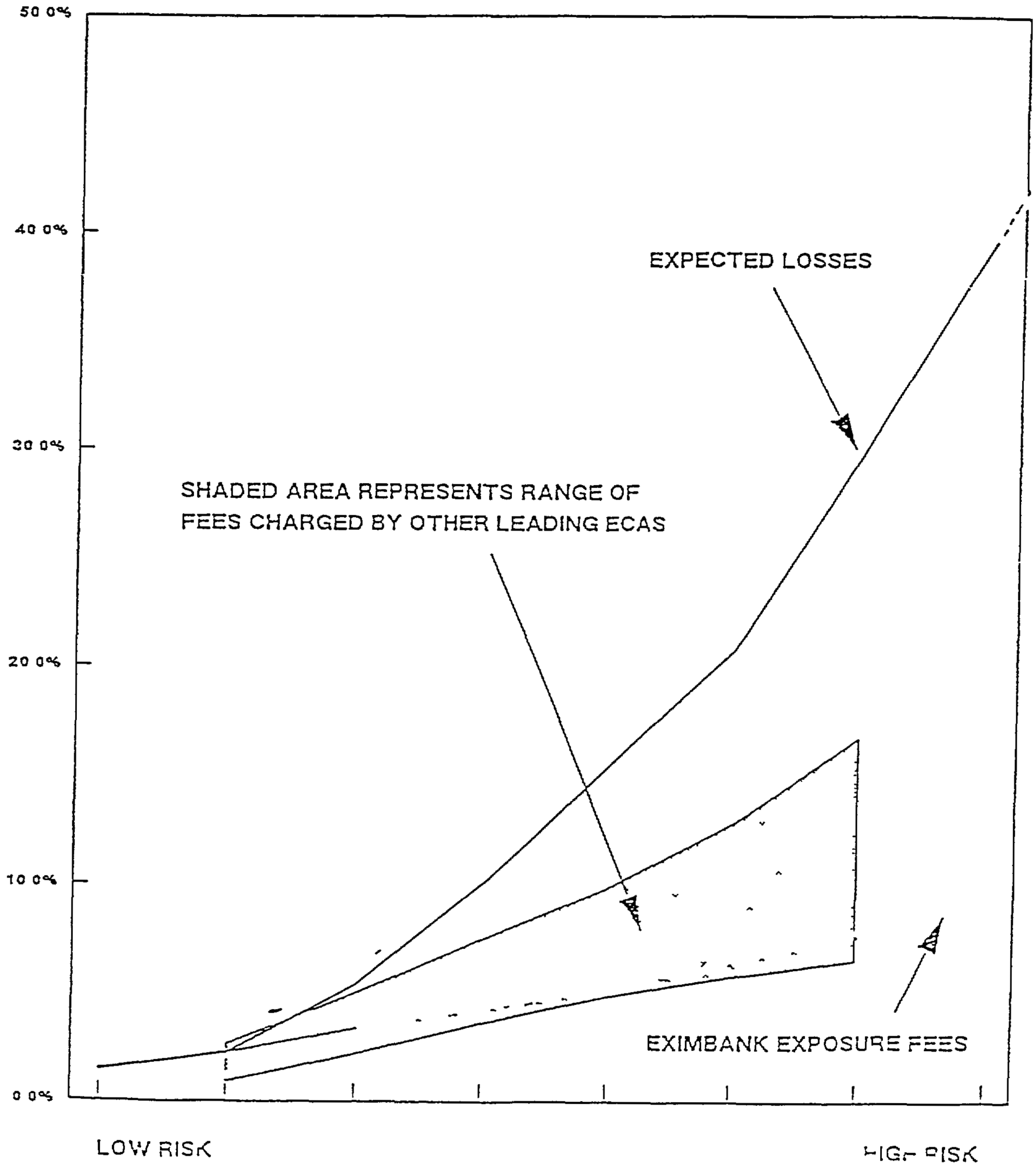
ultimate losses on developing country debt [5] Thus the information drawn from this source may also tend to overstate risk subsidy estimates

While private companies may need an extra margin of protection to prevent bankruptcy, government backed organizations such as Eximbank do not require such a margin of safety Over time, Eximbank will be able to adjust for any overpayments into its subsidy account. Credit reform guidelines call for actuarial evidence to be gathered and used as the basis for future adjustment in the estimates of potential loss

[5] See International Investment & Banking Report, June 1991, page 7

Figure 1.

COMPARISON OF EXPECTED LOSSES & EXPOSURE FEES



APPENDIX M

International Country Risk Guide

INTERNATIONAL COUNTRY RISK GUIDE

Published by
International Reports
A division of IBC USA (Publications) Inc
114 East 32nd Street, Suite 602
New York, New York 10016-5506
Tel 212/685-6900
Fax 212/685-8566
Tlx 233139 RPTUR

Ludgate House, 107 Fleet Street
London EC4A 2AB, England
Tel 071-583 1025
Fax 071-583 5958
Tlx 8953912

ISBN 0-9627235-3-3

TABLE OF CONTENTS

INTRODUCTION

INTERNATIONAL COUNTRY RISK GUIDE has been analyzing economic, political, and financial risk around the globe for over ten years The patterns of political, economic and financial developments in countries and regions are so complex that even the best-informed executive often has to rely on the general, most visible trends as reported in the daily press That, however, can be grossly misleading, as the factors that determine major changes of direction in a country's progress are frequently small and seemingly insignificant

But, by virtue of *INTERNATIONAL COUNTRY RISK GUIDE*'s wide network of correspondents, and its daily, unbiased examination of events large and small, the *GUIDE* is uniquely placed to predict major changes even when t overwhelming popular opinion points in quite differe directions

Whether your international involvement is worldwide or just one region or country, every month *INTERNATIONAL COUNTRY RISK GUIDE* alerts you to developments in the political, economic, and financial arenas that can have significant effects on your business and investments When there are changes brewing that can make a difference in your bottom line you'll read about them first in *INTERNATIONAL COUNTRY RISK GUIDE*

Every monthly issue of *INTERNATIONAL COUNTRY RISK GUIDE* includes

In-depth country analyses Up to a dozen full-length country profiles, identifying where significant changes are occurring in governmental regulation, interest and exchange rates, and investment opportunities, with business forecasts for the coming year that highlight trends and their implications for your investments

Timely country updates *INTERNATIONAL COUNTRY RISK GUIDE* keeps close tabs on more than 130 countries throughout the year If something important happens -- or is about to happen -- you'll get a concise, sophisticated assessment of the implications for business and finance

An unrivalled risk model A detailed, country-by-country breakdown of the comparative risks of operating in, or lending to, any of 130 countries and a composite rating for each one You ll see at a glance where the dangers lie and how countries compare with -- and contrast to -- each other

Statistical tables Extensive tables give you information on such key indicators as foreign trade balances and inflation rates, delays exporters are experiencing in receiving hard currency payments, the changing differential between official and parallel exchange rates and much more

Access to country experts As a subscriber you can call on our editorial staff at any time for updated reports on any of the countries we cover

INTERNATIONAL COUNTRY RISK GUIDE calculates comparative ratings of risks and opportunities, on a country-by-country basis, using a three dimensional evaluation system that identifies and weighs the composite risk as well as the disaggregated political, financial, and economic risks of operating in, investing in, or lending to a particular country

This information can help determine actual and potential advantages or difficulties of working within foreign borders

Every issue of *INTERNATIONAL COUNTRY RISK GUIDE* includes a statistical section comprising a tabulated country-by-country breakdown of the political, financial and economic risk ratings and indicators which the *GUIDE* identifies and evaluates The main risk ratings that are covered are

- Composite Risk (an integration of political, financial and economic risk,) is presented for the countries covered in the *GUIDE* by rank in Table 1 and on a country-by-country basis in Tables 2A and 2B
- Disaggregated political, financial and economic risks are presented on a country-by[illegible]try basis in Tables 3A, 4A and 5A Tables [illegible], 4B and 5B show a breakdown, respectively, of the political, financial and economic indicators which contribute to the overall ratings

INTERNATIONAL COUNTRY RISK GUIDE's composit[illegible] risk rating is calculated as a weighted average based on 50% political risk, 25% financial risk, and 25% economic risk Each of these three risks is compiled from scores based on number of factors relevant to that type of risk Th[illegible] components of each risk rating are

Political Risks Thirteen political indicators have bee[illegible] identified for each country

Economic expectations vs reality	12 points
Economic planning failures	12 points

156

Political leadership	12 points
External conflict	10 points
Corruption in government	6 points
Military in politics	6 points
Organized religion in politics	6 points
Law and order tradition	6 points
Racial and nationality tensions	6 points
Political terrorism	6 points
Civil war	6 points
Political party development	6 points
Quality of the bureaucracy	6 points
	100 points

Financial risks Five indicators of financial risk have been identified for each country

Loan default or unfavorable loan restructuring	10 points
Delayed payment of suppliers' credits	10 points
Repudiation of contracts by governments	10 points
Losses from exchange controls	10 points
Expropriation of private investments	10 points
	50 points

Economic Risks Six economic indicators have been identified for each country

Inflation	10 points
Debt service as a percent of exports of goods and services	10 points
International liquidity ratios	5 points
Foreign trade collection experience	5 points
Current account balance as a percent of goods and services	15 points
Parallel foreign exchange rate market indicators	5 points
	50 points

As already indicated, the composite risk rating is calculated as a weighted average of the ratings for each type of risk In calculating the composite political financial and economic risk rating, the following formula is used

CPFER (country X) = 0 5 (PR+FR+ER)

CPFER = Composite political, financial and economic rating
PR = total political indicators
FR = total financial indicators
ER = total economic indicators

The highest overall rating (100 points) indicates the lowest risk, and the lowest score (0 points) indicates the highest risk

For more general purposes, the degrees of risk [illegible]ied by the individual risk value of particular countries [illegible] be estimated using the following fairly broad categories

Very high risk	0 0 to 49 5 points
Moderately high risk	50 0 to 59 5 points
Moderate risk	60 0 to 69 5 points
Low risk	70 0 to 84 5 points
Very low risk	85 0 to 100 0 points

It should be emphasized that *INTERNATIONAL COUNTRY RISK GUIDE* does not use surveys of opinion in calculating risk ratings Relevant country information is collected from widespread private contacts and published sources and is analyzed by consultants, correspondents, and the editors, to evaluate the comparative political, financial and economic risks among countries The comparative assessments are then translated into ratings by assigning point totals for the disaggregated indicators of political, financial and economic risk that have been identified for each country The point totals for political, financial and economic risk, on a country-by-country basis, are then aggregated into composite risk ratings using the *INTERNATIONAL COUNTRY RISK GUIDE* weighting system discussed above If subscribers differ with the *GUIDE*'s assessment of the value that should be assigned to an individual indicator of political, financial or economic risk for a particular country, an alternative value for that indicator can easily be substituted and the risk rating recalculated following the mechanics of the *INTERNATIONAL COUNTRY RISK GUIDE* weighting system

The next three sections of the *International Country Risk Guide Handbook* describe the analytical basis for each of the individual political financial and economic indicators used in developing the risk ratings Section I explains *INTERNATIONAL COUNTRY RISK GUIDE*'s political risk assessment indicators Section II discusses the indicators of financial risk. Section III defines the economic risk indicators as well as the economic scoring system that is used to translate economic indicators into point totals, which are then summed to allow comparison among countries

POLITICAL RISK

The political risk rating evaluates the possibility of changes in government attitude or policy that could adversely affect foreign business operations, loans or investments in a given country

It should be stressed that political risk is not necessarily the same as political instability A country may have a high probability of a change in government, and yet the political climate for foreign business may be largely unaffected even with the emergence of a new regime A strong bureaucracy, for example, may be able to keep a country's policy toward foreign businesses virtually unchanged In other cases, however, if a change in government is likely, the political risk may become greater because the country lacks political party development, a law and order tradition, or other government institutions that tend to maintain government policies On the other hand, even if the regime does not change, the government may react to criticism, threats and other pressures by adopting policies adverse to foreign lenders and investors

For each country evaluated in *INTERNATIONAL COUNTRY RISK GUIDE*, the overall political risk rating is determined by evaluating thirteen separate political risk indicators and assigning risk points based on the maximum point total For each indicator, a higher score means lower political risk

Following are detailed explanations of how each political indicator is assessed and the maximum point total possible for each

158

ECONOMIC EXPECTATIONS vs REALITY (12 points)

Many unfavorable changes in governments and government policies arise because expectations of higher living standards are not realized Lower ratings for this indicator signify larger gaps between popular aspirations for higher standards of living and the ability or willingness of the government to deliver improvements in income and welfare The risks may be greater in a very poor country where the government cannot improve economic conditions significantly because of limited economic resources, corruption, or inefficiency This situation, however, is not limited to poor countries In some relatively high income countries, as a result of exaggerated or unrealistic government promises, expectations may also rise more rapidly than living standards

In addition, risk may increase significantly if income growth slows or declines after rapid increases — as in some OPEC countries when oil prices declined in the 1980 s — so that the gap between expectations and reality may widen dangerously On the other hand, the risk rating may be higher in relatively poor countries, where expectations may be low because of restrained government promises or because of a lesser tendency to copy the lifestyles of higher income countries

Thus, the rating for this factor may be relatively high in some low income countries and low in some high income countries, depending on the discrepancy between economic aspirations vs reality Lower rating points are given to countries where there is the greatest gap between economic expectations and reality

ECONOMIC PLANNING FAILURES (12 points)

Failures in economic planning increase risk to foreigners of doing business in a particular country, by creating uncertainties Operating strategy and cash flow may be affected, and the likelihood of a change in government or government policy toward foreign lenders and investors may be increased Planning failures may result from adopting an economic strategy that is not suitable to the country Even an appropriate development plan can fail if the strategy cannot be implemented Planning failures typically cause a variety of problems such as a squeeze on income and employment, a shortage of foreign exchange, and an increase in inflation These adverse economic conditions put the government under political pressure and may result in a change in regime or the imposition of unfavorable or ill advised economic policies, both of which will have a negative effect on foreign business Debacles in economic planning imply the greatest risk the lowest point totals, while successful economic planning carries low risk and receives higher risk ratings

POLITICAL LEADERSHIP (12 points)

This indicator addresses the question of the long-term viability of the current government, based on the degree of stability of the regime and its leader, the probability of the effective survival of the government, and the continuation of its policies if the current leader dies or is replaced A lower rating for political leadership indicates a higher probability of change in government because the leader is widely unpopular, incompetent or has a weak personality A strong leader who maintains power by not sharing it with anyone might also receive a low rating if there is no successor strong enough to lead the government if the office should become vacant In

159

general, the greater the potential long-term instability of the regime, the lower the risk rating for political leadership

EXTERNAL CONFLICT (10 points)

External conflict encompasses invasion, border threats, geopolitical disputes, foreign-supported insurgency and full-scale warfare External conflicts can adversely affect foreign business in many ways, ranging from restrictions on operations, to trade and investment sanctions, to distortions in the allocation of economic resources, to violent change in the structure of society Therefore, a high probability of external conflict risk is reflected in lower risk ratings

CORRUPTION IN GOVERNMENT (6 points)

Foreign lenders and investors may find it difficult to conduct business effectively in countries where there is widespread financial corruption, in the form of demands for special payments and bribes connected with import and export licenses, exchange controls, tax assessments, police protection, or loans If corruption becomes increasingly widespread, it may lead to government instability or overthrow, as corruption results in unrealistic and inefficient controls on the state economy and encourages the development of the black market In general, higher ratings signify few ethical problems in conducting business The highest rating indicates that it is unusual to receive demands from government officials for special payments An intermediate rating suggests that these demands are fairly frequent, but usually at a lower level of government The lowest ratings are given to countries in which high government officials are likely to demand special payments and where illegal payments are generally expected throughout lower levels of government

MILITARY IN POLITICS (6 points)

The participation of the military in politics can have a number of implications for government In some countries, the possibility of a government takeover by military groups lacking in political economic and financial sophistication may be seen as a high risk for foreign business A military takeover or threat of a takeover may also represent a high risk if it is an indication that the government is unable to function effectively and that the country therefore has an uneasy environment for foreign businesses A military regime may reduce business risks in the short run, but looking further ahead, there may be no assurances that they will effect major improvements in the basic weakness of the country s political and economic structures In some cases, military participation in government may be a symptom rather than a cause of underlying difficulties Therefore, lower risk ratings indicate a greater degree of military participation in politics and a higher level of political risk

ORGANIZED RELIGION IN POLITICS (6 points)

In some countries, such as Iran, religious groups may believe that they have a right to control government policies even though they lack the training, experience or personnel to manage the government effectively In other countries, religious groups may exert an important influence on policy without seeking direct control of government The political risk of organized religion in politics is that religious groups may promote economic and social policies such as land reform, subsidies and minimum wages that may have detrimental effects, at least in the short run, on income, employment and resource allocation Lower point totals suggest that organized

160

religion may exert a greater degree of control over government or government policies

LAW AND ORDER TRADITION (6 points)

A country with an established law and order tradition has sound political institutions, a strong court system, and provisions for an orderly succession of power This indicator reflects the degree to which the citizens of a country are willing to accept the established institutions to make and implement laws and adjudicate disputes A high risk point total means that there is a strong law and order tradition while a low risk point total means that there is a tradition of depending on physical force or illegal means to settle claims In countries with poorly developed law and order traditions, governments may be less likely to accept the obligations of the previous regime

RACIAL AND NATIONALITY TENSIONS (6 points)

This factor measures the degree of tension within a country attributable to racial, nationality and language divisions Lower ratings are given to countries where racial and nationality tensions are high because opposing groups are intolerant and unwilling to compromise Higher ratings are given to countries where tensions are minimal, even though such differences may still exist.

POLITICAL TERRORISM (6 Points)

This indicator measures the extent to which dissidence is expressed through political terrorism, such as armed attacks,

guerilla activity, or attempted assassinations In countries with a low propensity for terrorism, opposition can be expressed by parliamentary means, or through some other institution such as a direct appeal to the ruler, as in Saudi Arabia Political terrorism carries a high risk for foreign investors because of the threats of property loss and danger to personnel Terrorism is also a negative political factor because failure of the government to contain or defuse it can lead to the downfall of the regime Such changes in government can increase business risks, due to uncertainties with respect to the policies of the new government Therefore, countries with a high incidence of political terrorism receive the lowest risk point totals

CIVIL WAR (6 points)

This indicator measures the probability that [illegible] opposition to a government or to its policies will turn [illegible] a violent internal political conflict The opposition may comprise a territory, a large minority group, or an economic class The confrontation is considered a civil war when opposition ignites into armed conflict The implications of a civil war for foreign businesses are similar to those of political terrorism, but are usually more severe with respect to the risk of an abrupt change in government or government policy A high probability of civil war receives the lowest rating because it represents the highest level of risk to foreign lenders and investors

POLITICAL PARTY DEVELOPMENT (6 points)

The operating environment for foreign businesses tends to be more stable for countries in which there is broad-based political participation in the determination of changes in governments and in the formulation of government policies

161

POLITICAL RISK

In some countries governments may change frequently, but significant policy revisions toward foreign investors are relatively rare events Government policies are more likely to be maintained where the political party mechanism functions well On the other hand, where political parties are closely identified with particular leaders but there is no mechanism for succession, the ruling party may collapse if the leader dies or leaves office Therefore, countries in which there is greater political party development receive higher rating points, because they are less likely to undergo drastic changes in government or in government policies toward foreign investors

QUALITY OF THE BUREAUCRACY (6 points)

The institutional strength and quality of the bureaucracy is another shock absorber that tends to minimize revisions of policy when governments change Therefore, high risk points are given to countries where the bureaucracy has the strength and expertise to govern without drastic changes in policy or interruptions in government services In these low risk countries, the bureaucracy tends to have some autonomy from political pressure and to have an established mechanism for recruitment and training Countries which lack the cushioning effect of a strong bureaucracy receive low risk rating points because a change in government tends to be traumatic in terms of policy formulation and day-to-day administrative functions

FINANCIAL RISK

The financial risk rating evaluates the risks to foreign lenders and investors of an official action that would have a negative effect on cash flow or asset disposition The financial risks to foreigners include failure to honor loan repayment or contractual agreements, delayed payment of suppliers credits, actual or potential losses from exchange controls, and expropriation of foreign investment

Actions taken by governments and monetary authorities that put foreigners at financial risk may be related to political or economic considerations For each country evaluated in *INTERNATIONAL COUNTRY RISK GUIDE*, the overall financial risk rating is determined by assessing five separate risk indicators A higher score signifies lower financial risk The criteria for defining the five financial risk indicators are as follows

LOAN DEFAULT OR UNFAVORABLE LOAN RESTRUCTURING (10 points)

This indicator measures the likelihood that a country experiencing debt service difficulties will not honor its obligations to foreign lenders according to the terms of the original loan agreements The ultimate risk is repudiation of debt The more common risk is that the original loan agreement will have to be renegotiated or restructured to amend the grace period or maturity schedule of the amortization payments, or to provide more time to clear up interest arrears In many cases, loan restructuring negotiations between borrowers and lenders are

162

contingent on the provision of new financing, which increases the risk exposure of the lender Unilateral repudiation of debt by a country receives a zero rating because it represents the greatest risk. Low point totals indicate a high probability that a country will initiate actions that will necessitate restructuring of its external debt The highest point totals are assigned to countries without debt servicing difficulties

DELAYED PAYMENTS OF SUPPLIERS' CREDITS (10 points)

A country may delay payments of suppliers credits to foreign exporters for many reasons, including foreign exchange shortages, bureaucratic ineptitude or because officials expect to be bribed to facilitate payment There may also be delays by central banks in converting local currencies into hard currencies Exchange delays of six months or more receive the lowest rating because they put the foreign exporters at the greatest risk of not getting paid High point totals are given to countries in which there is a short period between the time invoices are presented by the foreign exporter and payment is made in the requested currency

REPUDIATION OF CONTRACTS BY GOVERNMENTS (10 points)

This indicator addresses the possibility that foreign businesses, contractors and consultants face the risk of a modification in a contract taking the form of repudiation, postponement, or scaling down A country may initiate contract modification with a foreign business because of an income drop, budget cutbacks, indigenization pressure, a change in government, or a change in government economic

and social priorities Low point totals signify a greate likelihood that a country will modify or repudiate a contrac with a foreign business

LOSSES FROM EXCHANGE CONTROLS (10 points)

A government and its monetary authorities can us many techniques of imposing exchange controls, includin regulating overseas transfers of profits, dividends, royalties an loan repayments by nonresidents, limiting the activities o foreign banks, and quantitative and qualitative restrictions o imports, licensing, surcharges, and multiple currency practices A country may institute foreign exchange controls to conserv foreign exchange, cope with temporary shortages of liquidity reduce imports or stem capital outflows The potential losse from these exchange controls represent a risk to foreign lender and investors Lower ratings are given to countr[illegible] here there is a greater likelihood that foreign investors face [illegible] risk of financial loss due to the imposition and operation o exchange controls by the authorities

EXPROPRIATION OF PRIVATE INVESTMENT (10 Points)

The risk of expropriation of private foreign investment encompasses outright confiscation and forced nationalization The risk of expropriation may vary by type of business or b the investor's country of domicile However, for simplification of country comparisons, the *INTERNATIONAL COUNTR RISK GUIDE* expropriation risk indicator does not make thes distinctions The lowest risk ratings are given to countrie where expropriation of private foreign investment is a likel event

163

ECONOMIC RISK

Adverse changes in economic conditions in a country can put foreign lenders and investors at risk by affecting cash flow A deterioration in a country's economic risk indicators may also contribute to an increase in political or financial risks A soaring inflation rate may ignite social unrest, and could lead to the overthrow of the government An extremely high debt service ratio may force a country to threaten to default on its payments of external debt or to demand a debt restructuring arrangement that is unfavorable to foreign lenders

While the risk points for the political and financial indicators are assigned judgmentally, the economic risk points are based primarily on quantitative information *INTERNATIONAL COUNTRY RISK GUIDE* collects data for economic indicators (estimating in cases where actual data is unavailable) and makes projections using statistics from the International Monetary Fund, other published information, and consultations with correspondents and other private contacts To allow comparison between countries, each separate economic indicator is translated into a rating, using a weighting scale that assigns point scores to ranges of values for the indicator The rating points for the indicator depend on the particular range in which it falls Thus, an inflation rate of 4% would fall in the 4-5% range and, according to the scoring guide, gets 8 5 rating points out of a possible maximum of 10 points Higher rates of inflation would receive lower points

The total economic risk rating for each country is formed by taking the sum of the rating points for the six

economic indicators In order not to penalize a country's risk rating when an indicator is not available, a special methodology is used in which the point total of the available indicators is raised proportionately by the ratio of the maximum possible weight point total of the missing indicators to the maximum possible weight of the reported indicators For example, in Bahrain, where there is no available debt service ratio, the

Calculating the Adjusted Economic Risk Rating

Economic Indicator	Risk Points for Reported Indicators	Max Possible Risk Points for Avail Indicators	Adjustment Factors
Inflation	10 0	10	
Foreign Debt Service	NA		
International Liquidity	2 5	5	
Foreign Collection Record	2 5	5	
Current Account Balance	11 5	15	
Parallel Market Indicator	5 0	5	
Subtotal	31 5	40	
Missing Debt Service Indicator	—	10	
Adjustment Ratio for Missing Indicator	—	—	10/40= 25
Adjustment Factor for Missing Indicator	7 875	—	(25*31 5)= 7 875
TOTAL	39 375	50	

scoring points for the other five available indicators add up to a point total of 31 5 The adjustment ratio for the missing debt service indicator is 10/40, the ratio of the maximum possible point total of the missing indicator (10 points) to the maximum

166

possible point total of the reported indicators (40 points) Multiplying this ratio (10/40 or 25) times the scoring point total of the reported indicators (31 5) yields an adjustment factor of 7 875 This point adjustment factor of 7 875 is added to the 31 5 scoring point total of the reported indicators to produce an economic risk rating for Bahrain of 39 5 points, expressed in rounded terms

Following are detailed definitions of the six economic risk indicators The maximum point total for each of the indicators is shown in parentheses The scoring guide for converting the values of individual indicators into economic point totals appears with each definition given

INFLATION (10 points)

Indicators of inflation are shown in Table B of Appendix I in each issue of *INTERNATIONAL COUNTRY RISK GUIDE* The inflation rates for the current and previous year that appear in the last two columns of Table B are used as inputs into the economic risk ratings

The inflation indicators that are used in the *INTERNATIONAL COUNTRY RISK GUIDE* economic rating system require some interpretation Official consumer price indexes may not fully reflect the rate of inflation In many countries there are weaknesses in the consumer price index due to manipulation, inclusion of narrowly chosen or inappropriate components, or improper weighting (especially of subsidized goods) In some countries, distortions exist because the prices of goods in the index do not correctly reflect their scarcity in the economy Official prices may be totally unrealistic because of widespread price controls and black markets In cases where there are major distortions in the price index, *INTERNATIONAL COUNTRY RISK GUIDE* may estimate inflation

higher than officially-reported rates Since the structure ar quality of consumer price indexes differs considerably fro country to country, the *INTERNATIONAL COUNTRY RIS GUIDE* inflation indicator estimates cost-price inflation in a economy based on consumer prices and wholesale prices i equally weighted proportions Higher rates of inflation carr greater economic risk and are translated into lower points

INFLATION RANGE	POINTS
0 to 1%	10 0
2	9 5
3	9 0
4 to 5	8 5
6 to 7	8 0
8 to 9	7 5
10 to 11	7 0
12 to 13	6 5
14 to 15	6 0
16 to 18	5 5
19 to 21	5 0
22 to 24	4 5
15 to 30	4 0
31 to 40	3 5
41 to 50	3 0
51 to 65	2 5
66 to 80	2 0
81 to 95	1 5
96 to 110	1 0
111 to 130	0 5
Over 130	0 0

105

FOREIGN DEBT SERVICE AS A PERCENT OF EXPORTS OF GOODS AND SERVICES (10 points)

This indicator appears in the second column in Table A of Appendix I each month and in the issues of *INTERNATIONAL COUNTRY RISK GUIDE* that report Estimated Foreign Debt Service Ratios in Table B of Appendix II Estimates of debt service payments are divided by exports of goods and services to allow for comparison among countries Exports are broadly defined to include merchandise exports, income from foreign loans and investments tourism, fees, royalties, and emigrant remittances For the Less Developed Countries, debt service is defined as interest and amortization on total external debt, including short- and long-term, public and private debt *INTERNATIONAL COUNTRY RISK GUIDE* estimates of debt service payments are based on data published by the World Bank, the International Monetary Fund (IMF), the Bank for International Settlements (BIS) and the Organization for Economic Cooperation and Development (OECD), as well as from central bank reports, a wide range of published sources, and estimates provided by *INTERNATIONAL COUNTRY RISK GUIDE* consultants and correspondents

Debt service payments for previous years are estimates of actual repayments of principal (amortization) and interest on total external debt Estimated debt service payments in current or future years are projections of payments due on outstanding debt, with adjustments wherever possible for the effects of loan rescheduling or refinancing agreements with foreign banks and governments For the industrial countries, debt service is estimated as a percentage of loans by major international banks as reported by the IMF Countries with the highest ratios of debt service payments to exports of goods and services receive the lowest risk points because they present the greatest risk of debt repudiation or loan restructuring

DEBT SERVICE AS A PERCENT OF EXPORTS OF GOODS AND SERVICES

RANGE	POINTS
0 to 4%	10 0
5 to 8	9 5
9 to 12	9 0
13 to 16	8 5
17 to 20	8 0
21 to 24	7 5
25 to 28	7 0
29 to 32	6 5
33 to 36	6 0
37 to 40	5 5
41 to 44	5 0
45 to 48	4 5
49 to 52	4 0
53 to 56	3 5
57 to 60	3 0
61 to 65	2 5
66 to 70	2 0
71 to 75	1 5
76 to 80	1 0
81 to 85	0 5
Over 85	0 0

INTERNATIONAL LIQUIDITY RATIOS (5 points)

This indicator appears in Table D of Appendix I in every issue of *INTERNATIONAL COUNTRY RISK GUIDE* The liquidity ratio indicator for the current month is calculated as a three-month moving average of the number of months for which imports can be financed with current reserves In

186

calculating reserves, gold is valued at market prices and adjustments are made for a country's IMF position as well as for the external liabilities of the central bank Thus, liquidity is defined as total official holdings of foreign exchange, SDRs, the reserve position in the IMF, and gold valued at market prices, with negative adjustments for the use of IMF credit and for the external liabilities and foreign borrowing of the monetary authorities Reserve positions become comparable between countries by expressing liquidity in terms of the number of months for which imports can be financed

However, the international liquidity indicator often requires careful interpretation This indicator may overstate a country's liquidity in cases where part of the official reserves have been pledged as collateral for a loan, or where import levels are artificially low due to controls In cases where a country has readily accessible lines of credit, this indicator tends to understate liquidity The number of months for which imports can be financed by adjusted reserves determines the liquidity risk: five months or more of coverage can be considered as "good", 2 1/2 to 5 months' coverage is satisfactory," and less than 2 1/2 months coverage is "unsatisfactory " Thus, low rating points are given to countries with smaller international liquidity ratios

RANGE	POINTS
0 0 to 0 5	0 0
0 6 to 1 0	0 5
1 1 to 2 0	1 0
2 1 to 3 0	1 5
3 1 to 4 0	2 0
4 1 to 5 0	2 5
5 1 to 6 0	3 0
6 1 to 9 0	3 5
9 1 to 12 0	4 0
12 1 to 15 0	4 5
Over 15	5 0

FOREIGN TRADE COLLECTION EXPERIENCE
(5 points)

This indicator is shown in Table A in Appendix II, which appears monthly in *INTERNATIONAL COUNTRY RISK GUIDE* These evaluations, based on the surveys of Export Credit and Collection Data published in *INTERNATIONAL REPORTS*, assign point totals that are determined by the number of months for which payments for imports are delayed, as well as for the months of delay before the central bank converts local currency payments into hard currency Rating points from these two evaluations are combined into one indicator The lowest risk points are given to the countries which have the longest period of delay in paying hard currency for imports The total indicator is the sum of the po[illegible] for exchange delay and collection experience

EXCHANGE DELAY	POINTS
6 months or more	0 0
5 months	0 5
4 months	0 5
3 months	1 0
2 months	1 5
1 month	2 0
0 months	2 5

COLLECTION EXPERIENCE	POINTS
Poor	0 0
Poor to fair	0 5
Fair	1 0
Fair to good	1 5
Good	2 0
Excellent	2 5

CURRENT ACCOUNT BALANCE AS A PERCENT OF EXPORTS OF GOODS AND SERVICES (15 points)

This indicator appears in Table C of Appendix I of every issue of *INTERNATIONAL COUNTRY RISK GUIDE* The trade account of each country is reported in the tables as supplementary information, but is not explicitly included in the calculation of the current account risk rating In order to make the current account balance comparable among countries, the surplus or deficit is divided by the value of exports of goods, services, and private transfer payments

The current account is the sum of the country's trade balance payments and receipts for services including tourism and shipping, investment income, interest payments for debt service, and transfer payments for emigrant remittances and foreign aid

A country's current account balance has an important influence on its liquidity position and debt service capacity The negative impact on the economy of a rapid deterioration in the current account balance can also lead to an increase in the political and financial risk of doing business in a country Therefore, the current account ratio carries the heaviest theoretical weight for a single indicator — 15 points — in the calculation of the economic risk rating The lowest rating points are given to countries in which the current account deficit represents a high proportion of goods and services exports Countries with current account surpluses receive high ratings signifying low risk

CURRENT ACCOUNT AS PERCENT OF EXPORTS OF GOODS AND SERVICES

RANGE	POINTS
More than 25%	15 0
20 1 to 25 0%	14 5
15 1 to 20 0	14 0
10 1 to 15 0	13 5
5 1 to 10 0	13 0
0 0 to 5 0	12 5
-0 1 to -5 0	12 0
-5 1 to -10 0	11 5
-10 1 to -15 0	11 0
-15 1 to -20 0	10 5
-20 0 to -25 0	10 0
-25 1 to -30 0	9 5
-30 1 to -35 0	9 0
-35 1 to -40 0	8 5
-40 1 to -45 0	8 0
-45 1 to -50 0	7 5
-50 1 to -55 0	7 0
-55 1 to -60 0	6 5
-60 1 to -65 0	6 0
-65 1 to -70 0	5 5
-70 1 to -75 0	5 0
-75 1 to -80 0	4 5
-80 1 to -85 0	4 0
-85 1 to -90 0	3 5
-90 1 to -95 0	3 0
-95 1 to -100 0	2 5
-100 1 to -105 0	2 0
-105 1 to -110 0	1 5
-110 1 to -115 0	1 0
-115 1 to -120 0	0 5
Below -120	0 0

168

PARALLEL FOREIGN EXCHANGE RATE MARKET INDICATORS (5 points)

This indicator is reported in Table E of Appendix I in each issue of *INTERNATIONAL COUNTRY RISK GUIDE* It shows the percentage difference between officially approved or official exchange rates and rates on the parallel market, expressed in currency units per US dollar For example, if the official rate is 100/US$ and the parallel market rate is 120/US$, the percentage difference between the two rates would be 20%

The risk rating is based on the three-month moving average of the percentage difference between the parallel foreign exchange market rate and the official rate This difference represents the extent to which the official market rate may be overvalued

If the official market rate is totally free without any restrictions on the currency trading, the parallel market and official rates will tend to be equal, but in most countries, the foreign exchange market is not allowed to operate without restrictions

An increase in the discrepancy between the parallel market rate and the official rate may be an indicator of serious inflation, an intractable debt service problem, a deteriorating liquidity situation or a doubtful political climate If the parallel market differential for a currency rises but there are no particular economic difficulties, it may indicate a consensus that there will be an unfavorable political change Higher parallel market differentials receive fewer risk points

RANGE	POINTS
Less than 1 0	5 0
1 1 to 2 5	4 5
2 6 to 5 0	4 0
5 1 to 10 0	3 5
10 1 to 15 0	3 0
15 1 to 20 0	2 5
20 1 to 30 0	2 0
30 1 to 40 0	1 5
40 1 to 60 0	1 0
60 1 to 80 0	0 5
Over 80	0 0

APPENDIX N

International Financing Techniques - How To Improve Export Finance

How To Improve Export Financing

UPDATED TO OCTOBER 1991

Introduction

Export financing presents particularly complex problems for the financial manager since it requires involvement in a wide range of areas from overall corporate credit policy and marketing techniques to different national borrowing conditions and export payment guarantee programs Sales abroad require firms to deal with issues of exchange risks uncertainties about the financial strength and reliability of foreign customers as well as the added costs of special financing In addition many countries still have strict exchange controls on remittances of convertible currencies

This report concentrates on the issues that companies should consider in structuring their total export financing mix It also provides some strategic advice on how to finance exports at the lowest cost and with the greatest simplicity In an ideal world an exporter would receive payment before shipping goods This can rarely be accomplished however Indeed exporters increasingly extend credit and even countertrade terms as a competitive sales tool

Many governments as part of their efforts to promote exports offer programs that reduce the risks of selling abroad Various export insurance schemes have been established and are outlined in detail in the country reports of *Financing Foreign Operations (FFO)* In essence these programs give the exporter the option of securing financing and investment insurance through government agencies Financing for export sales is often offered with easier terms and at reduced rates Insurance is generally available for political risks (e g nationalization expropriation and controls on remittances) the risks of bankruptcy of the buyer and for foreign exchange losses The details of each program are given in Sec 12 0 of each FFO country report

The Currency of Sales

The process of export financing begins before the sale is made In negotiating the sale and determining its conditions the corporate executive must consider how the sale will be financed and at what cost One of the first tasks is to decide in which currency the buyer will be charged Exchange rate fluctuations can either eliminate any profit and turn the export sale into a losing transaction or conversely result in a windfall for the exporter Some government export credit insurance agencies and private insurers offer exchange risk cover but this is relatively expensive and availability does not match demand

Exporters must cover exchange risks from the date of sale or shipment to the date of payment It s common for exporters to negotiate a time draft with a bank in foreign currency under which the bank will buy the paper at the rate of exchange prevailing at the maturity of the draft, i e at the rate quoted in the forward exchange market If the forward rate commands a discount the additional costs should be factored into the export price If however the exporter is holding the draft until maturity its value can be protected by hedging i e the currency may be sold on the forward market for delivery at maturity of the draft thereby covering the risk during the time lag

Inflation must also be considered when negotiating a contract especially for trade with buyers in volatile markets In many cases the purchase price is fixed but a cost escalation factor is included in the contract In other cases material or labor costs or both may be indexed against an inflation scale such as the consumer price index

Countertrade

To overcome the problems of foreign exchange and inflation governments in export markets where these problems have become a major obstacle to trade have promoted alternative forms of payment for imports most commonly countertrade Most forms of countertrade involve the use of currency but the value of the goods used in payment for imports is set in advance thus avoiding the problems of exchange rate fluctuations and inflationary cost escalations Countertrade accounts for about 25% of world trade and is a separate payment system to that of commercial trade financing although it also involves some of the same procedures such as letters of credit etc

The concept of countertrade dates back to the time when money had not yet been invented when goods and services were exchanged wholly through barter A currency that cannot be exchanged for another currency is nonconvertible and generally of little or no value outside its country of circulation

In the process of updating this chapter of FFO some financial conditions may have changed For the most current interest and foreign exchange rates please refer to the FFO Updater sheets which are sent once a month to subscribers

On the other hand goods as long as they are sought after are convertible and can be exchanged internationally for some thing else

Because of the problems of currency inconvertibility the East Europeans turned heavily to countertrade in the 1970s and '80s their manufactured goods were not readily salable on Western markets and countertrade was one means of obtaining sought after Western products and technologies In the 1980s money was scarce and countertrade was essentially the only possibility for East Europeans to trade with Western partners In fact, the Soviet-sponsored Comecon trade system started in 1949 and its use throughout Eastern Europe was nothing more than a series of bilateral trade agreements with most transac tions based on wide ranging countertrade arrangements be- veen two partners

Countertrade also expands during periods of difficulty with global or regional liquidity Accordingly since the Third World debt crisis of the early 1980s countertrade has become an increasingly common trade arrangement with LDCs During the past decade Western companies discovered that coun tertrade could be a positive marketing tool Many companies changed from a negative attitude toward countertrade to one of seeking ways to use countertrade not only to develop markets but also to help their partners in Eastern Europe and LDCs establish new industries improve their products and packag ing and generally to expand their exports Many companies now consider countertrade a permanent part of their financing options when exporting to the Third World It continues to be the most important export-financing technique for trade with Eastern Europe and the USSR

It is estimated that over 90 countries now require counter- trade or offset in some form and that countertrade in all its forms accounts for some 9 5% of world trade

Still most companies and government officials do not like countertrade It is considered an inefficient way to finance international trade since it demands lengthy negotiations and a long term commitment due to the difficulties of calculating the risks and costs involved Moreover it is estimated that only one out of 20 negotiations results in a firm deal

Most firms concede however that countertrade will always have a role in keeping open export markets when credit condi tions are tight Many exporters regard countertrade as a means of staying in a market that has temporarily lost its buying power The more dynamic MNCs see it as a means of market entry ahead of the field

Countertrade has traditionally been the province of big sophisticated companies The vast majority of these arrange ments are carried out by firms with more than $1 billion in sales and with established export markets

The large Japanese trading houses (the *soga shosha*) have used countertrade successfully in this way but they also expect to make a profit on the whole import export package Because of their size and structure the *soga shosha* and the largest Western MNCs are able to arrange deals on the scale of government to government packages which gives them con siderable bargaining power and enhances their risk cutting potential They sometimes handle countertrade business for outside companies

Smaller companies lack the ability to engage in countertrade for themselves and independent trading companies are generally less interested in dealing with small contracts They are sometimes willing however to link smaller companies in clearing deals or to procure from smaller companies when a countertrade arrangement calls for specialized imports or ad ditional quantities within a short period Even so deals need to be at least in the $1-2 million range to be worthwhile As countertrade instruments become increasingly sophisticated and more profit oriented there is more likelihood of the invol vement of smaller firms at some stage of the game

The three largest countertrade brokers are Vienna based Centro Internationale Handelsbank (jointly owned by Italian Polish Austrian and UK banks) Philipp Brothers (US) and MG Services a subsidiary of Germany s Metallgesellschaft.

Due to the volume of countertrade in the region Eastern Europe has provided the model for countertrade practices Under the Eastern European system clearing accounts are set up to support bilateral government to government trade agree ments that stipulate the volume and type of goods and types of payment to be settled via the clearing account for a given number of years (typically two or five years) The accounting unit is usually the US dollar About 50 countries have set up bilateral trade agreements of this kind In addition members of regional organizations such as Lafta CACM and Caricom have set up multilateral agreements among themselves These clear ing accounts can be tapped by third parties (see below)

Forms of Countertrade

One difficulty that economists as well as businesspeople have with countertrade involves definitions Countertrade itself is a generic term encompassing at least four major subgroup ings of this financing technique The definitions given here are as precise as an imprecise science allows so that the novice as well as the finance expert will know which variation is being discussed These definitions were developed by Business In ternational and have now found general acceptance

Many of the forms of countertrade discussed here originated with practices developed for use in dealing with the reasonably sophisticated economies of Eastern Europe Because of their widespread use in Eastern Europe they quickly spread to the Third World where Eastern European ties have traditionally been strong and similar financing problems exist

As it developed countertrade in Eastern Europe became highly institutionalized with special organizations devoted to its encouragement and operation This has not been the case in Third World countries where economies are far less regulated than were those of Eastern Europe Nevertheless the same reasons supporting countertrade in Eastern Europe evolved in Third World countries which in turn encouraged Western companies to apply the same solutions to similar financing problems

Countertrade takes on five clearly definable forms barter compensation counterpurchase advance purchase and buy back Other less conventional but significant variants are offset clearing agreements and switch transactions The five basic types of countertrade occur in many different forms and some transactions incorporate elements of two or more of the basic varieties

Barter, or swap is the oldest form of trade predominant in pre money economies It involves direct exchange of goods between trading partners and must be carried out simultaneously if risks are to be held to a minimum. No money is involved and the value of the goods in each direction must be equal No third party is involved By contrast compensation counterpurchase or product buy back commitments can be transferred to third parties (e g a professional trading house or an end-user) for fulfillment.

Barter suffers from the problem that finding goods of equal value makes the scheme cumbersome Variations in the quality of merchandise disagreements over the value of the goods and services and the relative inflexibility of this sort of transaction limit its use Nevertheless barter is used extensively when money transactions for one reason or another simply will not work This was the case in the early 1980s in Eastern Europe and Latin America when countries were unable to meet their financial obligations and were in effect bankrupt Basically barter is an inconvenient and inefficient way of trading which is why it was superseded by money in the first place

Compensation has become—inaccurately—a generic term for countertrade Correctly used however compensation applies to a specific form of countertrade similar to barter except that goods are priced in monetary terms not in kind Like barter the risk is considerable since there are no guarantees that once the first party to the transaction ships goods the second party will fulfill their half of the deal with the reciprocal shipment Under compensation the obligations of the trading partners are covered by a single contract No money changes hands in the transaction but the monetary value of the delivery is set and subsequent deliveries are also valued and credited against the debt for the original delivery Compensation is in fact little more than a form of barter with delayed payment The transaction can be covered by insurance or bank guarantees from the countertrade goods supplier but these protective devices add expense to the deal Although compensation deals are somewhat more flexible than barter they are just as inconvenient and inefficient and are also seldom used

Counterpurchase was the traditional form of countertrade widely practiced by all East European and Latin American countries in the 1970s and early 1980s Its use however declined in the late 80s and early 90s due mainly to two factors (1) The political changes that took place within the East European countries made the arrangement unworkable on the EE side and (2) economic collapse of several EE countries meant that any arrangement involving credit were unacceptable to the Western partner This form of countertrade is not likely to return in dealing with EE It was inefficient and cumbersome to administer although of all of the variations on countertrade counterpurchase offered maximum flexibility for all parties concerned It can work only where a strong central government is available to direct exports Counterpurchase continues to be popular outside Eastern Europe

In a typical counterpurchase deal a Western exporter in Country A agrees to sell products or services worth a given amount to a buyer in Country B under the terms of a contract (Contract 1) In a separate independent document (Contract 2) the Western exporter agrees to purchase goods or services from a seller in Country B at a given amount, usually a percentage of a Western firm's sales contract within a specified period of time The value of the counterpurchase can amount to more than 100% of the Western sale Contract 2 usually specifies penalties of one form or another should the Western firm not fulfill its obligation to purchase countertrade goods In addition Contract 2 is usually transferable allowing the Western company the possibility of transferring' its obligation to purchase Country B goods to a trading house or other party A framework contract (Contract 3) ties the two deals together

The major difference between counterpurchase and compensation transactions is that the former usually entail two separate but linked contracts—one for the sale of the products and a second under which the exporter agrees to purchase products from the importing country Exporters enjoy the major advantage of getting full payment for their deliveries at once or under credit arrangements while their own purchases have to be paid for only when suitable products have been found and a contract has been signed

Advance purchase as a form of countertrade is similar to compensation with the primary difference being the time frame within which the deal is fulfilled Advance purchase offers the advantage that the Western firm need not seek out the countertrade goods nor are there questions of fulfillment on the part of the EE or other partner Advance purchase puts the burden of the transaction squarely on the other partner both in terms of settling price and ensuring that quality and delivery specifications are met

The procedure reverses the typical countertrade arrangement The importer first supplies the counterpurchase goods The concept was developed whereby EE buyers would ship goods either to their Western suppliers or to third parties with the proceeds being held in escrow in a bank account in the West to be released to Western suppliers when the shipment of their goods were received in EE If the export is not scheduled to take place for some time the importer may ask for a guarantee from the Western exporter s bankers The exporter then sells the goods and makes delivery Once the export is delivered the escrow account is withdrawn and the bank guarantee if there is one is recalled The interest paid on the escrow account is converted into extra goods to be supplied to the purchaser

Advance purchase deals theoretically offset one another with each side supplying goods of equal value In practice deals rarely balance equally By arrangement any small amount remaining to the credit of one partner may be held over for a future deal or even paid in hard currency Unlike conventional counterpurchase or buy back deals which can take several years to complete advance purchase transactions are usually concluded within several months The great appeal of advance purchase arrangements for exporters is that they are fully protected from nonshipment because they receive the

173

goods before making their own delivery The goods are in hand and can be checked for quality and quantity avoiding payment delays

Product buy-back deals (sometimes referred to as ***short covering***) have been widely used to finance Western turnkey projects in Eastern Europe In a typical buy back transaction the MNC seller of plant components and equipment agrees to accept output from the plant as payment

Buy-back has the advantage that supplier credits often with government guarantees can be used to finance the equipment sale to the buyer While many guarantee organizations (such as Hermes in Germany the ECGD in the UK Coface in France Kontrollbank in Austria Eximbank in the US and others) may not look kindly toward or flatly refuse to finance deals in which ultimate payment is in countertrade goods most buy ack arrangements escape this scrutiny (or the countertrade aspect is overlooked) since the countertrade is separate and the time frame of the deal extends over a considerable period Because of the capital goods nature of the investment financing over a longer period is often available

The biggest drawback to buy back is that a manufacturer of production equipment often gets involved in supply of resultant goods thus being placed indirectly in competition with the other (Western) buyers of that same production equipment With the changeover to market economies in EE the danger of this form of cut price competition is no longer so worrisome but many equipment producers still prefer not to be associated with a finished product that competes with that of their other customers The problems are greatest with branded goods or products that can be fairly easily identified as to source and manufacture Products whose identity or origin is difficult to determine (e g bulk chemicals) are easiest for a Western firm to handle on a buy back basis

There are three types of buy back deals

(1) Payment in resultant products relating to the supplier s industry Under this arrangement exporters receive products directly from the factory or project they have built or supplied these products are the kind the supplier company generally produces or in which it normally deals An example of a buy back scheme is the well publicized Soviet gas pipeline to Western Europe in which pipe compressors controls and other equipment provided by Western companies are to be paid for with gas delivered to Western Europe through the pipe ne over a predetermined period of years

(2) Payment in resultant products unrelated to the supplier s industry Many companies are unwilling to take back such products because they simply do not know how to market them even though these goods are made with their own equipment

(3) Buy back of resultant and other products To avoid such problems with resultant products some Western companies may contract for mixed payment An exporter agreeing to a total buy back obligation might for example be able to take one third in resultant products and two thirds in any other products made in the importer s country

A typical mixed buy back package would be one in which a Western company supplies equipment and know how for the production of finished manufactured goods such as textiles wooden boards furniture and household appliances In turn it buys back resultant products for sale through a trading company along with nonresultant products such as machine tools or raw materials which it can use in its own production processes or sell

In some cases buy back may consist totally of nonresultant products (technically this would then be a counterpurchase) if the resultant products are not marketable in the supplier s home country In PepsiCo s well-publicized Soviet venture the firm agreed to license several bottling plants in the USSR and to deliver Pepsi concentrate to these plants Since the subsequent output would be redundant in PepsiCo s Western markets and would compete with cola made by PepsiCo s own bottlers the company agreed to an offset involving credits against the purchase of Stolichnaya vodka for import to the US

Offset arrangements are considered separately from the more usual forms of countertrade because of the difficulty in defining such deals Offset is practiced more than any other form of countertrade by governments of Western industrial countries as well as EE and developing countries Under the designation industrial participation in Australia industrial benefit'' in Canada and offset in most countries this form of countertrade covers a wide range of transactions and may take many variations Under an offset agreement a Western company usually selling military aviation or major investment projects is required by the government of the purchasing country to buy a percentage of the value of its sale from the purchasing country A supplier of military aircraft for example will be required to purchase a certain amount of goods over a period of time in effect to help finance the deal McDonnell Douglas of the US claims to be the world s largest countertrader based on its sales of civilian and military aircraft

Offset may be direct or indirect In direct offset sellers are obliged as a condition of the original sale to license or transfer their technology to subcontract manufacture or assembly or even to invest in the local economy and then are often required to help export or buy back some of the resultant products In indirect offset a government or the purchase (often one and the same) obliges a foreign supplier to purchase nonrelated goods or services in that country up to an agreed upon percentage of the original sale

Clearing agreements although excluded from the strict definition of countertrade can be used by Western companies to increase their exports to a partner country that is in surplus (see Switch transactions below) Clearing agreements are payment agreements that may but need not operate parallel to bilateral trade agreements Many bilateral trade agreements are settled in convertible currencies and do not include a clearing agreement

Under bilateral trade agreements the two signatories stipulate in a framework agreement in advance the type of goods that are to be exchanged over a period usually of two to five years Follow up agreements determine the annual quantities with prices fixed on a quarterly semiannual or annual basis

Countries struggling with deficit problems have occasionally used clearing agreements as a device to make the debtor

How a Typical Switch Transaction Works

Switch is based on the assumption of a trade imbalance between two countries one of which will be the purchaser of the Western goods In principle switch transactions can be carried out using any clearing agreement that is not in balance This trading method requires agreement of all parties however or it will not work.

For the sake of example assume an imbalance in the trade agreement between Czechoslovakia and Argentina Czechoslovakia will have delivered as agreed but Argentina has been unable to supply the agreed currency amount Trade officials or a buyer in Czechoslovakia suggest to a US based MNC that they do not have the convertible currency available to pay for its products or services but they would pay in clearing currency drawn against Argentina s account

The US firm agrees and delivers $90 000 worth of products to a customer in Czechoslovakia quoting a price of $100 000 and agreeing to accept payment in clearing units drawn against Argentina The reason for the differential between the value of goods delivered and the invoiced price will cover the costs of using a specialized switch trader to implement the deal

The switch trader finds an importer in Mexico willing to pay $95 000 for $100 000 clearing units worth of say Argentinian fruit juice concentrate The importer in Mexico opens an irrevocable letter of credit in favor of the switch trader payable on receipt of the shipping documents from Argentina

The switch trader informs the clearing account bank in Czechoslovakia of the name of the seller in Argentina and the goods involved The bank then issues a letter of credit to its correspondent bank in Argentina giving the name of the Argentinian seller a product description and the name of the buyer in Mexico in whose favor the shipping documents must be made out

The exporter in Argentina ships the juice concentrate giving the shipping documents to its bank which forwards them to Czechoslovakia The exporter is paid $100 000 worth of local currency by the bank that administers the clearing agreement While the shipping documents state that the juice concentrate was delivered to Czechoslovakia he actual shipment is made directly to the purchaser in Mexico

The clearing account bank in Czechoslovakia forwards the shipping documents to the switch trader who presents them to the importer or its bank in Mexico Those documents release the $95 000 under the irrevocable letter of credit in favor of the switch trader opened at the start of the whole transaction by the importer in Mexico

The switch trader pays the US firm the agreed upon $90 000 retaining a $5 000 fee for its services covering its costs and profits

Pitfalls of Switch Transactions

Clearly switch transactions involve highly complicated procedures and are best left to experts in the field Pitfalls abound

Limitations may exist on product or country of origin Risk is involved in signing an agreement providing for payment in clearing units before it is absolutely clear for what purposes the clearing funds may be used and whether a third party is allowed to buy products in the country concerned Third parties may be shut out of dealings with countries where government control or influence over foreign trade is weak In such situations government authorities may not want third parties to benefit from a bilateral clearing agreement Further it is important to establish what products are available and if they will still be available when the transaction is actually undertaken Switch traders are invaluable here they can advise whether a deal is unrealistic or would involve too much risk

The very least a company should do before entering into a final commitment to accept clearing funds is to sign preliminary contracts with potential sources of those clearing funds and with potential end users of the goods that can be bought with those funds Such preliminary contracts can offer some protection against unexpected problems which may include

- sudden introduction of government controls on clearing settlements
- unexpected suspension of bilateral clearing agreements
- rejection of a third party as beneficiary to the transaction and
- refusal to allow use of clearing funds to finance a commercial contract involving a nonclearing party

---

country sell more goods to the creditor Some LDCs in fact do not want to settle their clearing agreement imbalances They consider the deliveries under the trade agreements a form of cheap long term credit and will use the agreements to obtain machinery and equipment on the most favorable terms

Negotiations and settlement of clearing imbalances may be managed unofficially between a third party and one of the two clearing partners by means of switch transactions (detailed below) Officially the principle of bilateralism in the clearing agreement has to be maintained This requires that the debtor s deliveries of goods and services officially be billed to the creditor country and charged to the creditor s clearing account no matter what the final destination of the goods and services

Western companies can make use of these agreements by engaging in switch transactions This involves finding out where imbalances exist in clearing agreements and agreeing to supply goods to the surplus clearing partner in return for payment in clearing currency Goods purchased with the clearing currency are then transformed into convertible currency thereby paying the Western company for its export (see the box above)

Switch transactions are easily the most complicated form of countertrade currently in use because it involves more partners more countries and more goods Switch is dominated by specialists who have the skills to bring a deal to a conclusion and can cope with the multiplicity of risks involved Timing is a vital element in switch deals It is advisable therefore to use the services of a specialized broker or trader most of whom are located in Vienna Zurich or Paris or one of the several firms active in the US and the UK before a sales contract is closed

Basically switch is a means of achieving exports (sales) that would not have been possible directly for convertible hard currency Through mediation of a switch specialist the Western suppliers get paid in cash for their export to the creditor country less the costs of the transaction As EE countries move toward convertibility of their currencies switch might be expected to diminish as a form of countertrade In fact despite the intricacies of switch deals these appear to be on the increase since still more commodities are supplied against credits which then must be liquidated

Switch transactions are used mainly to finance Western sales of consumer goods semimanufactured goods and agricultural and raw materials to creditor countries as these items are normally sold on short payment terms It is impractical to accept payment in clearing units for the sale of investment goods since these have delivery times of many months and a switch trader cannot possibly know what the discount rates for clearing units will be in eight or 10 months when the proceeds from the Western products shipped to the buyer are due

The most salient feature of switch deals i the distinction between *aller* and *retour* transactions They are sometimes referred to as export and import transactions respective

175

ly *Aller* and *retour* refer to the flow of commodities to or from clearing areas In an *aller* switch a switch trader sells for example Western goods via a EE country to a developing country which in turn pays in clearing currency to the EE intermediary In a *retour* switch the flow is reversed Goods from a developing country are sold via an EE country to a Western switch house and clearing payment is made by the EE country to the developing country The trick—and hence the specialist companies operating in switch transactions—is to find a third party willing to take goods from the developing country and pay convertible currency for them or for reasons of other trade imbalances accept the soft currency against the hard

Few companies can or should undertake this kind of trans action alone because of the risks involved in dealing with range products and unfamiliar clearing currencies (see the box on p 5 for some possible pitfalls) Instead they will turn to the specialist switch houses that know how to use clearing funds and how to find end-users for the goods purchased from these funds Needless to say these services are not cheap but they may enable a Western firm to achieve an export or market penetration where this otherwise would not be possible

Payment Terms

In the free market trade financing system once the currency of the sale has been decided the next step is to decide what payment mechanism the importer will follow There are three basic arrangements

Cash in advance With cash in advance the importer pays either before the shipment or upon arrival of the goods before taking legal possession While cash terms are less common today than in the past cash against documents is still a wide spread practice

An obvious advantage of cash in advance is that exporters oid tying up their own funds It can also give importers a marketing edge If political conditions are unsettled in the importer s country or if the importer s credit rating is less than adequate the exporter may be offered a cash payment to make a sale attractive by the importer If for example a credit insurance agency removes a country from its list of eligible markets the exporter may insist on cash in advance Or if the importer s country stipulates that the importer deposit the countervalue in local currency with the currency risk borne by the exporter the exporter usually requests cash payment Cash in advance is also demanded in cases where goods are custom made and the exporter needs prepayment to finance their manufacture

Open account Sales on open account if uninsured are made with no definite maturities set by the exporter This method permits great flexibility and involves lower costs and bank charges than other systems of trade financing

Under an open account arrangement the exporter grants a discount from the invoice value if payment is made within a specified number of days The credit risk is often insured by government agencies or private insurance companies If the credit is insured the insurance carrier normally places a limit on the amount and the credit period

Prime considerations for a sale on open account are the credit standing of the importer the relationship between the importer and exporter and prior collection experience Offers by competitors frequently play a role The payment record and payment rules of the importing country are key factors The absence or existence of only minor foreign exchange restric tions and little likelihood of other forms of government inter

How Documentary Collection Works

Under a documentary collection exporters use remitting banks as their agents to collect payments from overseas buyers The procedure involves the following steps

(1) Exporter ship their goods to buyers

(2) After the goods have been shipped exporters submit the following documents to their banks

(a) any shipping documents including the bill of lading that convey title to the goods

(b) a draft (also known as a bill of exchange) which demands payment from the buyer There are two types of drafts sight and time The sight draft demands payment on presentation while the time draft demands payment at a future date or after the bill-of lading date

(c) instructions to the bank to handle the transaction as either a documents against payment (D/P) collection or a documents against acceptance (D/A) collection

(3) The exporter's bank the remitting bank, sends the documents draft and instructions to one of its branches or to a corresponding bank in the importer's country known as the collecting or presenting bank

(4) Collecting or presenting banks tells importers that the documents have arrived and that they can obtain them if they comply with the payment terms either D/P or D/A collections

Documents against payment (D/P) collection

When importers operate under D/P collections they must pay sight drafts before banks will release the documents Once collecting/present ing banks have received payment they will transmit the funds to remitting banks to pay exporters

D/P collection allows exporters through their banks to retain control over the goods until importers have paid

There are two main exceptions to the above procedure

(1) Legal requirements in the importing country such as foreign exchange permits may make the importer ask for possession of the documents before payment The exporter should therefore be aware of practices in the importer's country

(2) Air shipments are often made under documentary bill collections As direct consignee of the nonnegotiable airway bill importers can take possession of the goods before meeting their payment obligation

Documents against acceptance (D/A) terms

When the exporter has extended credit terms to the importer the collection is made on a documents against acceptance basis

(1) The exporter draws a time draft on the importer the importer must accept it to get the documents

(2) The importer/drawee writes accepted across its face and dates and signs it By accepting the draft the importer recognizes its legal obligation to pay the face amount at maturity e g 30 60 or 90 days after the date of acceptance The accepted draft is known as a trade acceptance

(3) Once the draft has been accepted the bank releases the docu ments to the importer

(4) As per the exporter's instructions the bank will either hold the trade acceptance or return it to the exporter

(5) At maturity the bank presents the trade acceptance to the importer for payment

(6) The collecting/presenting bank is paid by the importer This bank hen transfers the funds to the remitting bank for payment to the exporter

vention are desirable Exporters must be cautious however and ready to adjust to changing conditions

A major drawback to the open-account method is the lack of real evidence of indebtedness which makes legal action in the event of problems difficult even if it is based on a dishonored unpaid acceptance Another problem arises from the lack of a definite maturity date importers may simply delay payments Although exporters can heap interest charges on unduly delayed payments the charges are not always easy to determine and can be difficult or impossible to collect If rates based on their domestic costs are requested by exporters there will usually be no resistance but if exporters want to charge the locally prevailing rate in an inflationary country importers may be uncooperative

Documentary collections is one means of avoiding payment problems and allowing the exporter to control the goods until the importer has formally paid or promised to pay Through greater bank involvement the exporter can retain possession of the goods until the importer has actually paid or is legally bound to pay While the degree of bank responsibility is not as high as it would be with a collection mechanism—such as a confirmed irrevocable letter of credit—the documentary collection still provides more assurance than an open account

There are four main advantages to using documentary collections

(1) An enforceable debt instrument The exporter s right to payment is protected under the negotiable instruments law of the importer s country If the importer defaults or delays payment at maturity the exporter will be in a stronger position in a court of law with a trade acceptance than with an open account transaction which is corroborated only by unpaid commercial invoices

(2) Low cost/competitive terms Documentary collections are cheaper than letters of credit and do not require exporters to tie up their local bank credit lines

(3) Faster payment Payment may be quicker for exporters when a bank presents a collection on their behalf importers tend to drag their heels under open account

(4) Financing option Exporters can sell trade acceptances to obtain financing

Although documentary collection offers the exporter some protection in the transaction the limitations and risks of selling overseas are only partially overcome Payment for exports is by no means guaranteed The following problems are still encountered in documentary collections

(1) The importer may not accept the shipment After inspecting the documents presented by the collecting bank the importer may reject them and refuse to pay or to accept the draft Often the reason cited is documentary discrepancies—i e the documents submitted by the exporter fail to comply with certain terms of the sales contract Common reasons for rejecting documents include late shipment of goods a price increase without the importer s consent and incorrect packaging and marking of the goods The importer may also use documentary discrepancies as an excuse to refuse shipment for other reasons The upshot of a shipment rejection is that the exporter is exposed If the exporter cannot negotiate acceptance with the importer the goods must be warehoused by the exporter until another buyer can be located Otherwise the exporter must absorb the expense of shipping the goods back

(2) Documents may be released to the importer before payment or acceptance of the draft Ideally under documentary collection importers obtain shipping documents only after they meet their payment obligation This does not necessarily work out in practice however At times the presenting/collecting bank may be required to release the bill of lading to the importer so that the importer can obtain government permits for foreign exchange or arrange for customs clearance Sometimes the importer as direct consignee in air shipment can claim goods upon arrival without a nonnegotiable airway bill To compound the problem it is difficult to consign the goods to the bank since banks are usually ill equipped to handle incoming air shipments

(3) The importer may default on the trade acceptance maturity The heart of the matter is whether the importer will be willing and able to pay the trade acceptance at maturity If the importer has not assessed the situation properly the exporter could be left out in the cold The only thing the trade acceptance gives the importer is an enforceable debt obligation This is fine if the exporter does not mind going to court for what will probably be a protracted suit but it does not guarantee payment, even at the end of a long legal wrangle

(4) Sovereign action of the importing country may delay or block payment Even if the importer is eagerly waiting to pay with fistfuls of currency the transfer of funds from the importing country may be impeded The importer's government might decide to block payments for economic or political reasons or in the worst case because of civil disturbance or war

(5) Payment may be delayed because foreign exchange is unavailable in the importing country If the draft is denominated in a currency other than that of the importer s country local currency for the required foreign currency must be exchanged by the importer But sometimes the required currency is not available Importers may have to wait their turn for funds before they can pay exporters Depending on conditions in the importing country the waiting period can be long

(6) Exchange rate fluctuations may reduce the value of the collected funds When the payment is denominated in a currency other than that of the exporter there is always the risk of exchange rate fluctuations

(7) The importing country may have documentary requirements that delay the transaction The importing country may require import licenses preimport approval for foreign exchange preshipment inspection (with the possibility of a subsequent price revision) by an independent specialized agency (see The letter of credit below) and a host of other time consuming procedures that create jobs for bureaucrats but seem useless to the exporter If exporters fail to comply with documentary requirements their goods could be delayed in clearing customs or even confiscated

(8) Banking services may be inefficient and may delay payment despite the good intentions of the importer The biggest hurdle faced by exporters to Asia is often the mechanic of clearing the documents Poor document handling mishan

How the L/C Mechanism Works

A letter of credit has two distinct stages issuance and advising and presentation and payment

Issuance and advising

The issuance of a letter of credit and advising the exporter of its issuance has four steps

(1) The importer and exporter conclude a sales contract to provide payment by a letter of credit.

(2) The importer instructs its bank—the issuing bank—to issue a letter of credit in favor of the exporter The sales contract may call for either a *sight letter of credit* or a *time letter of credit* A sight letter of credit orders payment to be made upon presentation of a sight draft Under a sight draft the bank pays or negotiates payment to give the exporter immediate funds and the required documents A time letter of credit orders payment to be made at some specified time after the esentation of a time draft Under a time draft the bank holds the draft until maturity and pays or the bank may accept it immediately The accepted time draft called a bankers acceptance (BA) represents the obligation of the bank to pay the face amount at maturity

(3) The issuing bank sends the credit to a bank in the exporter's country—the advising bank—which may also be asked to confirm the credit

(4) The advising/confirming bank notifies the exporter that the credit has been issued

Presentation and payment

Once the exporter has been advised that a letter of credit has been issued in its favor and it is certain that it can satisfy its terms and conditions it initiates the following process leading to payment

(1) The exporter prepares the goods for shipment and assembles the shipping documents

(2) It presents the documents to the bank where the credit is available or to a bank that is willing to negotiate the credit

(3) The bank reviews the documents to make sure that they comply with the terms and conditions of the letter of credit

(4) The bank sends the documents to the issuing bank

(5) The issuing bank examines the documents and if they comply with the terms and conditions of the credit reimbursement is made when the BA matures

(6) The issuing bank turns the verified documents over to the importer pon presentation of the amount due or upon terms agreed to by the porter and the issuing bank

---

dled wire transfers and inadequate balance reporting can severely impede documentary collections In the Philippines and India for example banks routinely postpone collections and funds transfers by one or two weeks

The letter of credit A letter of credit (L/C) is an instrument or document issued by a bank guaranteeing a customer s drafts up to a stated amount for a specific period It substitutes the bank s credit for the buyer s and eliminates the seller s risk To establish proof of payment before they ship their goods and to minimize delay of payment for the goods many exporters require L/Cs

Payment is conditional on the exporter s compliance with the terms specified in the L/C The exporter is required to present documents necessary for transport and for commercial and official purposes These documents include bills of lading commercial invoices insurance certificates and consular invoices

If exporters comply with documentary requirements of the L/C they will usually receive prompt payment and protection from the risk that importers will refuse shipments Importers also benefit They are assured that they will not have to pay unless exporters meet the conditions stipulated in the L/C

The increasing tendency for importing countries (especially those following IMF-imposed structural-adjustment programs) to demand preshipment inspection by an independent agency has led to complications for exporters This is particularly common in Latin America Africa and Asia Inspection agencies may demand alterations to the price or other changes and this means that exporters must issue new documents if they are to be paid Exporters should check whether this is a requirement in the market to which they are selling and if so they should allow an extra two weeks to one month on delivery dates to cover inspection time Importers should be advised to set the letter of credit expiry date at 30 days after shipment instead of the standard 21 days to allow time to correct documents if this is demanded by the inspection agency

A letter of credit may be issued in either revocable or irrevocable form The form must be clearly designated and must comply with uniform commercial practices

Revocable credits The opening bank may cancel or alter a revocable credit at any time Thus the exporter assumes the risk that credit may be revoked for any reason until the advising bank receives the appropriate documents Because of this risk revocable credits are rarely used except between parents and subsidiaries or as a method of obtaining currency under foreign exchange regulations

Irrevocable credits An irrevocable letter of credit can be amended or canceled only with the express permission of all parties—the exporter the importer and the bank(s) Under irrevocable credit the exporter has a bank pay on behalf of the importer once the exporter has fulfilled the documentary requirements of the letter of credit Irrevocable letters of credit are attractive to both the exporter and the importer because of the high degree of bank involvement and commitment

An irrevocable letter of credit issued by the importer s bank known as the issuing bank may be advised to the exporter by a bank in the importer s country known as the advising bank without any undertaking on the part of that bank The issuing bank will pay the exporter and the advised letter of credit relieves the exporter of bearing the importer s financial risk

There may be situations however in which an issuing bank cannot pay Political conditions in the importing country for example—such as government action to block funds—might prevent an issuing bank from paying the credit In such a case the exporter would still be subject to financial risk

If exporters do not want the burden of these risks they may require that the irrevocable letter of credit be confirmed by a bank in their country or a third country The confirming bank thus adds its commitment to the original credit Exporters are then protected against the financial risk of the importing country From the exporter s point of view this is the most favorable type of credit as long as the confirming bank is trustworthy

Letters of credit have several strong selling points They protect the exporter against the commercial risk of the importer When the letter of credit is confirmed it shields the exporter from foreign exchange transfer risk and other political

178

risk Under a sight letter of credit, the exporter is assured payment upon shipment if the proper documents are presented while under a time letter of credit the bank offers either payment at maturity or immediate funds (if the bankers acceptance is discounted) Still another strength of letters of credit is that they facilitate preexport financing

Although letters of credit greatly minimize risk they have their shortcomings Letters of credit are expensive since they involve bank commissions and fees as well as non interest bearing accounts in some countries They are also time-consuming since exporters and importers must ensure the accuracy of specifications in export documentation (especially regarding payment/collection instructions) And letters of credit do not guarantee prompt payment In fact importers often seize upon even minor technical mistakes in the document such as a misplaced apostrophe to delay payment For these reasons some exporters are trying to minimize their use of letters of credit.

Consignment The consignment method is primarily used for exports between a parent company and its foreign affiliates It may also be used for deliveries to foreign distributors but consignments to unrelated foreign firms carry obvious risks and banks are reluctant to finance them (It is not unusual for a commercial bank to step in and act as a consignee—a costly but less risky practice) Under a consignment agreement no payment is due to the consignor until the goods are sold to a third party by the consignee The goods remain the legal possession of the consignor changing hands only when the sale is made

Consignment shipments have been increasingly made for goods that are to be exhibited at trade fairs or held in free zones and free ports abroad The goods may then serve as collateral for financing It is important to check regulations conditions and storage facilities however before agreeing to consign goods to a bonded warehouse

Documentation

The following documents must accompany export transactions

The bill of lading is a document issued by a common carrier indicating that it received the goods described on a designated date and will transport them to a specified destination The basic function of a bill of lading is to define the responsibilities of the carrier and to convey title to the proper party The bill serves as both a receipt of shipment and a receipt of continued ownership until the importer meets the stipulated requirements of payment or credit acceptance The main types of bills of lading are straight bills and to order bills In the case of a straight bill the importer may be able to take possession of the goods prior to payment Bills of lading drawn to order are negotiable They may be given to a bank for collateral or may be retained by the shipper until the importer meets the payment terms or posts a bond In Latin America however some of the usual conditions concerning bills of lading do not apply in all countries

Bills of lading are also used as evidence of the outward appearance of the goods when loaded for insurance purposes Once shipowners accept an item and issue a clean bill of lading ' they are liable for any damage to the shipment en route Since the burden of proof usually falls on the shipper to show that the goods were not damaged prior to acceptance by the shipowner the description of the items and the proper consignment and preparation of the bill of lading are important to ensure both the security of the shipment and the legal liability of the shipper and the shipowner prior to delivery

At the port of destination the merchandise is turned over to the holder of the properly endorsed bill of lading There may be more than one signed (and hence original) copy any original copy presented gives title to the goods

An insured certificate is evidence that the goods shipped have been insured It must include a complete description of the goods that corresponds to descriptions appearing on other shipping documents Insurance can be taken out by the buyer or the seller and should cover the total invoice value of the goods

A commercial invoice is the bill for goods shipped abroad It is a nonnegotiable instrument listing the goods the prices of the goods any related charges or fees shipment terms marks and numbers of packages enclosed date names and addresses of buyer and seller name of shipping vessel and port of destination Sometimes there are other specific items to be recorded depending upon the foreign country and government concerned All these descriptions should again correspond to those contained in other accompanying documents prepared fo the transaction

A consular invoice is required by some countries whereby their consuls certify the shipment of the goods Such certification must be presented to customs officials for clearance of the merchandise It may also be needed for the assessment of import duties The value quantity and nature of the goods should be listed with meticulous care to prevent delays

A certificate of origin is a document in which the exporter verifies the place of origin of the goods shipped A country may require this in order to comply with tariff laws giving preference to certain goods from certain countries

A surveyors's certificate is issued by a reputable company and describes the exact mixture or quality of the merchandise shipped It is based on random samples and is used in shipment of grain chemicals etc

The certificate of manufacture states that the goods have been completed and are being held ready for shipment It is needed if an exporter has stipulated that payment under a letter of credit must be made against presentation of a certificate of manufacture rather than a bill of lading or other document

Methods of Export Credit Financing

Determining which financing method is the most suitable for a given transaction depends on many factors the most important of which are availability cost (interest rate and commissions) instrument of financing used and the company s need for protection against commercial and political risks

Sources vary greatly depending upon the importing country and the type of buyer Various financing alternatives may not be available in some markets or they may be readily available at one time but not at another Relative costs are always changing

The effective cost of financing consists essentially of the interest rate charged by the source of credit, additional charges and commissions (e g for acceptances) and the cost of insurance If exporters use their own funds they must also include the opportunity cost, i e the return they would get if they kept the funds on deposit or invested them in another way

Bank lending This may take many forms Exporters may simply use part of their general domestic loans and/or over drafts to finance foreign sales or the bank may earmark a certain part of the bank line for export financing Alternatively bank may extend a general revolving credit against a certain ercentage of export invoices deposited with the bank Such techniques are used almost solely for financing short term sales

In such cases exporters may not need to provide any particular collateral to the bank because the bank is lending to exporters against their credit worthiness The credit works just like any revolving credit The liability increases as each invoice or draft is deposited and decreases as each invoice or draft is paid

Bank financing for medium term exports is more complicated By definition a medium term export must be financed by a medium-term credit very few firms have the financial resources to finance these sales themselves The financing is done either with or without recourse to the exporter Most exporters prefer the latter because they can transfer responsibility for payment to the bank But in some instances depending on the credit standing of the buyer or its country the exporter can only finance the sale on a with recourse basis Payments are effected by promissory notes or acceptances usually in the form of series of installments maturing every ree or six months over the total period of the credit

The two essential principles of medium term financing are as follows

(1) Financing must not exceed the useful life of exported products

(2) Repayment must be effected in installment payments with the last payment due at the end of the agreed term A grace period before payment starts is frequently allowed in order to cover an initial period (e g during which equipment is installed) Medium term financing is basically limited to capital goods

There are two basic types of export financing buyer credits and supplier credits If the lender is dealing directly with the buyer the loan is a buyer credit If the lender is arranging to purchase a promissory note or acceptance from a supplier however the loan is a supplier credit

Because of the special nature of medium term credits countries have developed various mechanisms to make banks more interested in financing medium and long term paper These mainly consist of export credit agency loans and guarantees (see *FFO* country reports for details) Recent budget constraints however have forced agencies to be more restrictive in their credit and guarantee policies (see Public Sources of Export Finance and Export Insurance" below)

Sales of capital goods to LDCs are usually made on an international tender basis especially if the sale is to a government entity One of the most important factors in determining the winner of one of these tenders is the financing package

Buyers ask exporters to provide these financing offers for transactions that the exporters may or may not win The exporters in turn ask their bankers and government export assistance agencies to furnish a competitive financing arrangement If the bank were to issue a commitment to fund the transaction at particular terms and conditions it would charge a commitment fee in compensation for the risk it would be undertaking and the alternative business it would lose Since the exporter is not assured of winning the contract it is possible that no one would pay the fee Consequently the banks indicate what financing they would be willing to provide at that moment Because this is not a commitment on their part they can withdraw it Using this method the buyer can ascertain what the market will bear Furthermore if there are no disruptions in the market the financing indicated is usually supplied

The public and quasi public financing institutions have developed a wide range of special programs for medium and long term financing which are outlined in the individual *FFO* country reports The important point is not which programs exist but rather that these financing institutions are constantly developing new schemes to assist exporters and that they offer a variety of adaptable policies Where exporters face sales situations that do not fit existing programs they should contact their national institution to see if one of the existing programs can be altered or if new ones can be developed

Buyer credit arranged by a supplier Under a buyer credit a financial institution in the exporting country extends credit to

Arranging a Buyer Credit

A buyer credit usually involves three arrangements among the concerned parties

(1) A commercial contract between the exporter and the importer that specifies the actual sale of goods is often arranged

(2) A letter of intent from the bank to the exporter sets terms and conditions under which the exporter is committed to provide financing to the importer The bank and the importer will then establish a parallel credit agreement in a commercial contract

(3) An agreement is made between the exporter and the export credit insurer under which the insurer is obligated to cover the proposed transaction The policy is typically assigned to the bank

The importer is usually required to make a down payment before or upon delivery of about 10-20% of the invoice value Upon delivery of the goods the bank either purchases the promissory notes signed by the importer from the exporter on a nonrecourse basis or grants a direct loan to the importer enabling it to pay cash to the exporter supported by the assigned insurance policy

Sometimes the bank does not regard the insurance policy obtained by the exporter as sufficient coverage For example the policy might not cover the risk of nonacceptance of goods by the importer Furthermore the insurance policy might not provide for payment of the interest that would accrue between the maturity dates of unpaid export bills and the dates on which claims are paid by the insurance companies The banks may seek recourse or indemnification from the exporter if the importer defaults and the exporter is not covered under the insurance policy

Using Factoring To Maintain Bank Loans How One Exporter Did It

A small Eastern US based maker of automotive spare parts has been exporting for over 20 years Most of its customers are located in South and Central America In the past the firm insured its receivables and its commercial bank made secured loans based on an assignment of the insurance policy

The rapid deterioration of many Latin American economies pushed the company s normally manageable level of bad debts beyond reasonable limits The exporter also found that the insurance carrier would not honor many of its claims because the exporter was unable to keep up-to-date credit files and to adhere to all terms of the policy To make matters worse the bank was ready to call it quits

The firm turned to factoring as a solution The factor did all of the credit and collection work guaranteed the receivables 100% without recourse and agreed to handle the export on a collection basis The company assigned the credit balances due from the factor to the bank Because the bank could now collect from the factor a US company it agreed to continue financing the exporter The factor charged a commission of 1 5% while the bank charged an interest rate of 1% over prime

the importer to finance capital equipment purchases The credit is normally provided by a bank or banks not involved in the underlying commercial transaction To minimize its exposure to a given buyer or to avoid lending limits imposed by the bank s management to control country exposure a bank may request insurance coverage under an export incentive program (see *FFO* country reports)

Buyer credits are commonly used when a limited amount of local financing is available especially in developing countries The exporter assumes minimal risk since the buyer credit means that a credit sale is converted into a risk free cash transaction For this reason buyer credits are often limited to the bank s priority customers Single banks can provide buyer credits of $1 5 million whereas bank syndicates usually arrange credits of over $20 million

Factoring Factoring an established method for financing domestic US sales has gained wide application in international export financing No longer simply a tactic for obtaining credit for highly leveraged domestic companies export factoring has come to play an active role in trade financing

Factoring has two separate and distinct functions for the exporter service and finance For a nominal fee factors will perform specific bank office functions for an exporter They will cover credit and political risk 100% without recourse assume all collection responsibilities and keep the books on accounts receivable In addition some factors will finance the exporter But the two functions are separable In fact a significant percentage of US firms using export factoring do not borrow from the factoring company

Service aspects of factoring The service function of export factoring is divided into four parts

(1) Credit investigation Prior to shipment the exporter must submit information on the importer for credit approval by the factor The information must include the importer s name and address the terms of sale the amount of the order an estimate of the importer s credit exposure and the shipping date With this background the factor can then launch a credit investigation on behalf of the exporter If the factor has a subsidiary or an affiliate in the importer s country the local company will do the credit check

(2) Collection from the importer Under factoring arrangements exporters have in effect sold their receivables to the factor The factor is obligated to pay the exporter under predetermined terms and conditions The importer is advised with the shipment, to pay to the factor s local subsidiary It is solely the factor s obligation to collect since it now owns the receivable

(3) Bookkeeping Since the factor has bought the receivable and pays the exporter directly it is mandatory that the factor keep accurate accounting records The types of records vary but generally include the following (1) a monthly statement or current account (2) a monthly aging of accounts receivable broken down by importer (3) a credit availability report (4) a dispute notice (5) a monthly client risk and dispute report (6) a cash report covering the invoices paid the amount received and any deductions taken (7) a credit approval form and (8) a notice of credit termination if the factor feels it is necessary to reduce or terminate a previously approved credit limit

(4) Payment to the exporter There are several different methods by which the factor can pay the exporter Under a collection-basis system the exporter is paid when one of these events occurs (1) receipt of funds from the importer (2) insolvency of the importer (3) a political event as defined by the conditions of the agreement or (4) guaranteed bad-debt payout

In the case of an average collection basis payment is made on a fixed due date based on the importer s past payment experience For a maturity-basis payment funds are remitted to the exporter on a fixed date once a month for all invoices maturing during that month The payment date is based on the weighted average maturity date of the receivables with a preset number of collection days added on Under this system past due interest may be charged to the exporter for any receivable past due and open on the factor s books at the end of the month

Collection on a maturity basis is especially useful to larger more active exporters In effect it provides them with off balance sheet financing In the case where the factor added 10 collection days the exporter s foreign receivables will always show actual payment to be 10 days past maturity regardless of the actual collection time The maturity basis system also permits a firm borrowing from a factor or another lending institution on a revolving line of credit to get funds more quickly since the receivables turnover is faster

Financing aspects of factoring If an exporter requires a loan in conjunction with a factoring program the service aspects of factoring do not change (1) The exporter (2) can still choose a factoring agreement under a collection average collection (3) or maturity basis and tailor the loan to any of these systems The loan itself can be arranged through the factoring company handling the service function a commercial bank or another factoring or commercial finance company

Exporters may elect to have factors discount their foreign receivables Factoring houses structure their loans somewhat differently than do commercial banks Rather than establish a set credit line they advance up to a specific percentage of the exporter s receivables so that if exporters anticipate rapid

181

The Mechanics of Limited-Recourse Financing

In limited recourse financing the exporter sells the importer's promissory notes or accepted drafts (bills of exchange) to a commercial bank or specialized trade finance house The instruments are usually *avalized* or irrevocably guaranteed by a government agency or prime bank in the importer's country Purchase of these instruments is on a fixed rate discount basis with recourse to the exporter in case of its own nonperformance or fraud

Documentation for limited recourse financing is simpler for the importer and the guaranteeing bank than documentation for direct credits A direct credit requires a full loan agreement whereas limited recourse financing is based on promissory notes The exporter bears a greater burden however to ensure the legality and enforceability of the notes and to guarantee that local regulatory requirements such as import licenses or foreign exchange authorization have been met

Limited recourse financing is most appropriate for transactions with short interval between the credit commitment and the availability of the promissory notes for discount Some note purchase arrangements however may be tailored to transactions with longer lead times and delivery periods An exporter should normally contact its bank or forfait house prior to finalizing the financing arrangements with the importer This will assure the acceptability of the transaction s structure and documents as well as the importer guarantee and credit risk

growth they need not worry about asking for increases The rate of the advance is determined by exporters' needs as well as by their financial profile Although the receivables are guaranteed by the factor there can still be dilution of the col . eral Fraud or major disputes over the shipped merchandise can arise that can exceed the amounts lent to exporters

Limited recourse financing (note purchase and forfaiting) is especially useful to the exporter when direct bank financing to the importer is too cumbersome yet the exporter wants to be competitive by offering fixed rate financing Moreover when supplier credit and insurance programs from export credit agencies are unavailable limited recourse financing can take their place

Forfaiting is a technique that was largely developed by European institutions for the financing of exports to East bloc countries and LDCs and has gained in popularity in the US especially for LDC markets as an alternative to government backed export insurance cover

In a typical forfait deal the importer pays the exporter with bills of exchange or promissory notes guaranteed by a le ding bank in the importer s country The exporter then discounts the bills to a forfait house which analyzes funding costs and the political and transfer risks associated with the country The house either holds the paper as an investment or trades it on the secondary market Whoever holds the paper receives payments from the importer as they fall due

Forfaiting offers an advantage over government backed trade insurance in that it provides 100% cover and is not restricted as to the type of goods or market It is usually more expensive than using trade insurance and is most competitive with government backed insurance when commercial interest rates fall below the OECD consensus rates as they have in the early 1990s But forfait rates move higher under conditions of interest rate volatility and for longer term deals

For example to finance a 12 month deal in an uncertain interest rate environment the forfaiter may commit to a margin over Libor to be fixed at the time the notes are presented for discount, rather than locking in a fixed rate at the time of financing In this case the exporter will pay a higher commitment fee to compensate the forfait house for allocating funds for paper that will not be available for one year

Forfaiting is attractive to investors because the yields are higher than those of other comparable investments since forfaited claims are sold without recourse The disadvantage of investing in forfait paper is that the market rules are not as clearly delineated as those of the securities market Institutional investors are the typical buyers of forfait paper on the secondary market and they usually deal with prime forfait houses because of their fiduciary responsibilities

Bankers acceptances are often cheaper than other forms of bank borrowing and a growing number of exporters are turning to them for short term funds to finance trade A bankers acceptance (BA) is a time draft (i e a negotiable order to pay a stated sum of money at a specified future date that is drawn on a bank and accepted by it) When the bank accepts' the draft it is obligated to pay the face value at maturity A properly documented draft carries an acceptance stamp that is signed and dated by an authorized bank officer

Unlike lines of credit acceptance financing is usually tied to specific trade transactions Funds from the liquidation of the trade transaction may be used to repay the accepting bank There are two types of BAs *documentary acceptances* which are created under time letters of credit and *clean acceptances* which are created under a separate credit agreement BAs range in size from $100 000 to $5 million or more

Private Sources of Export Financing

There are a variety of private sources of financing to which exporters can turn Such financing is widely available for sales of products and services to markets throughout the world Obtaining finance however ultimately depends on the specifics of the deal some products and services and some world markets are by nature riskier than others and therefore banks and finance companies are less willing (and often opposed) to offer assistance The various options for private sources of export financing are outlined below

Commercial banks The leading private source for export financing is the commercial banks Of the three categories of commercial banks money center banks are most useful for large exporters because they have sophisticated knowledge of virtually all the financing tools and techniques needed by major multinational companies Unfortunately they are virtually closed to smaller exporters which have traditionally turned to the regional banks for financing assistance Regional banks as a rule have far less knowledge of and a weaker commitment to export financing than the money center banks but there are some particularly good ones that can be very helpful to exporters Foreign bank branches are particularly useful for financing exports to their home countries or to countries with which their governments have a historical relationship (e g former colonies)

Money center banks are full service institutions that offer

183

a wide array of trade facilities Often described as the super markets of financial services they can meet almost all of an exporter s trade financing needs Indeed many large exporters prefer to work with banks that are able to serve all their needs The export related products offered by major money center banks fall into three broad categories L/Cs bankers acceptances (BAs) and buyer s lines of credit (see Methods of Export Credit Financing above) Banks vary widely in their willingness and ability to offer these products Some have eagerly expanded their trade financing operations but others have phased out this area of banking

Most money center banks offer financing in conjunction with various US and foreign export credit programs For example banks can help the exporter secure direct loans from the Eximbank for the buyer They also provide supplier credits under Eximbank guarantees (See European Government Sources and North American Government Sources *FFO* reports)

Exporters can take advantage of commercial banks' experience in the field of export finance The bank's specialists are often knowledgeable about official credit programs and will do the detailed work required to structure the loan package from providing the necessary information on the application forms to working out payment terms The entire process can be conducted by the bank s experts with minimum involvement on the part of the exporter

In addition many money center banks offer nontraditional services including some that are not strictly related to banking For example some banks have formed export trading companies which can be particularly useful for exporters faced with countertrade requirements Some banks are active in international leasing which can benefit exporters of heavy capital goods An increasing number of banks provide factoring and forfaiting services

Banks can also provide services that can help exporters with the many other problems they face such as managing foreign exchange exposure It may not always be possible—or wise—to bill in the exporter s home currency but many exporters particularly inexperienced ones do not know how to handle foreign currency billings Banks can hedge exposure when exporters bill in foreign currency and they can advise them on which currencies to use for billing purposes

Some banks can be particularly useful in expediting export collections Those with many overseas branches or correspondent banks can save exporters time and money Some major money center banks have established broad based advisory services to facilitate international trade Export related services can include computerized global market intelligence current details on the regulatory environment in a particular country expertise in diverse areas such as warehouse management and identification of various credit and insurance facilities

Investment banks The primary way investment banks can be helpful to exporters is by providing information on projects they are handling In one instance an investment banker advised a potential supplier that a country required low cost financing to maintain an image of creditworthiness The country was willing to have the cost of the preferential financing

How a Trade Finance Company Works

A long term deal Company A is selling to Colombia and the Colombian buyer requires financing over an eight year period Financing is unavailable from public or commercial credit sources in the exporter's country Once the contract has been signed by the Colombians and Company A however the trade finance house negotiates a separate contract with the buyer As the exporter ships its goods it submits the shipping documents to the trade finance house which then remits payment The importer pays the trade finance company over eight years

A short term deal Company B is negotiating with a buyer in Australia The prospective buyer agrees to purchase on terms of six months but Company B wants to be paid on the date of shipment A trade finance company provides the missing link by providing the financing sought by the buyer

The finance company after evaluating the deal and finding it sound tells the buyer it will provide the credit which would enable him to pay Company B immediately Company B s obligation is to perform in accordance with the terms of the contract The finance company president describes its firm s position in the transaction this way That confirmation of payment has been likened in the past to a letter of credit but it is not a letter of credit And in most instances it is revocable Should the buyer default before delivery we would withdraw from paying him or from paying the supplier

buried in the sales price Investment bank often develop high level contacts around the world in the course of their dealings

Export finance companies can be useful in arranging non recourse financing for exporters who do not have their own FCIA or other insurance policies who are dealing with buyers who do not want to give letters of credit or who have been turned down by commercial banks Export finance companies which expanded their business tremendously during the 1970s however were hard hit by the international debt crisis of the early 1980s As a result government-backed insurance premiums for deals arranged by export finance companies have been raised deductibles increased and discretionary limits cut back

Factoring houses are particularly useful to small and medium sized exporters although companies of all sizes make use of their services Companies ranging from subsidiaries of Fortune 100 corporations to small highly specialized export management firms with annual total sales of only $1 million take advantage of this method of doing business abroad Factoring houses not only provide nonrecourse financing but also perform all credit investigations guarantee the credit and political risk assume collection responsibilities and finance accounts receivable (see Factoring above)

Public Sources of Export Financing

Commercial banks and government export assistance agencies often finance long term big ticket items and major infrastructural projects such as jet aircraft telecommunications networks and electrical power projects in LDCs Competition for these projects is fierce There are bidders from at least two different countries on most contracts and each is required to provide funding as part of the bid

The competitive race for export orders particularly for capital equipment which requires long term payment arrange

183

ments) and the efforts of governments in industrialized countries to capture a larger share of this market for their nationals have enhanced the role of public financing sources The number of public financing institutions and their scope of operations have been developed and exporters must directly or often indirectly through their foreign customers keep up to date with these institutions' changing policies and procedures Nearly every industrialized nation has established its own export credit institution (sometimes several) for trade financing and its own official development assistance (ODA) agency or agencies for soft loans and grants to LDCs (see *FFO* country reports for details)

Several international agencies such as the World Bank group actively finance exports through their funding of LDC economic development programs and projects (see World Bank ' report for details) Cofinancing of larger development schemes between international and national development agencies has become increasingly common opening up new tendering prospects for exporters These agencies have often sought out additional funding from private commercial banks Africa has received massive new funding from international sources since the drought disasters of the mid 1980s and its emphasis on aid spending has shifted from project to program aid which extends the range of products and exporters eligible for finance More recently large sums of aid have been pledged to Eastern Europe and the Soviet Union Most of the largest sums from international agencies like the IMF and the EBRD have been earmarked for infrastructural development projects Other money has been reserved for emergency food supplies especially for the Soviet Union

In North America and Europe governments have many programs that assist firms in foreign trade and investment The largest share of available funds is allocated for political risk insurance for investments made by the private sector Other programs provide direct loans and guarantees of trade loans For more information see North American Government Sources and European Government Sources *FFO* reports

Export Insurance

Although the majority of exports—especially short term transactions—continue to be shipped uninsured fluctuating exchange rates and increased political and economic problems in many countries have made coverage increasingly necessary (see *FFO* country reports for details) For certain markets proof of insurance is vital to obtaining finance at reasonable rates or even at all Export financing for countries that have been put off cover by the major credit insurance agencies is often unavailable or available only at very high interest rates and short maturities This combination of events has pushed some formerly strong export markets into the countertrade category

Insurance policies are readily accepted by the financing institution as collateral for the export credit and the exporter to whom it is issued must assign the policy to the financier Insurance while often indispensable in making a sale is not an ironclad guarantee against risk. In many cases financing costs are lower when the export receivables are insured An insurance policy or guarantee issued by a government export credit insurance agency makes the financing nonrecourse i e risks and losses are covered by the insurance It is not unusual however for the insurer to require additional security in the form of a guarantee by a foreign local bank or a certification from the buyer's central bank that foreign exchange is available for payment of interest and principal

Exporters taking out insurance must make themselves thoroughly familiar with the conditions and the fine print of the policy to determine which losses will be covered Although risks and indemnification are always precisely defined in the policy irrevocable guarantees against every risk are not necessarily provided The guarantee granted directly to the financial institution (whether a commercial bank or a private financier) that finances the export comes very close to complete protection This enables the financier to finance without recourse to the exporter

Indemnification is not normally paid immediately after a claim is made but only after a certain period of time has elapsed e g six months Exporters therefore have to expect a waiting period and often a considerable amount of red tape before they receive payment

Even when home country export credit insurance is available and secured the exporter should also strongly consider seeking a guarantee (or requiring the importer to do so) from the national bank of the importing country that guarantees either the payment or the availability of convertible currency to complete the transaction This is fairly common practice when US and European firms sell to a high risk country or in any case in which insurance coverage is not available Sales to East European and Latin American countries frequently depend on such guarantees Export credit insurance or special financing for very large sales to some countries may not be available without such guarantees

184

APPENDIX O

Krentzman, Harvey C, " Successful Management Strategies for Small Business", Prentice hall, Inc , Englewood Cliffs, New Jersey, U S A - "Tools of Financial Management"

SUCCESSFUL MANAGEMENT STRATEGIES

For Small Business

Harvey C Krentzman

A SPECTRUM BOOK

PRENTICE HALL, INC , Englewood Cliffs, New Jersey 07632

186

chapter 4

Financial Management

Many owner-managers of small companies try to expand and earn increasing profits on a very thin investment To succeed, you need to develop skills in financial management And as you improve your financial skills, you must also invest the necessary time in financial planning and control of your business In a small company, financial information is probably more vital than it is in a larger one, yet it takes less time to generate

Your financial skills should include understanding of the balance sheet, the profit-and-loss statement, cash flow projection, break-even analysis, and source and application of funds—all of which are discussed in the following pages Lack of adequate working capital is usually the greatest weakness of the small company In many cases a husband-and-wife team runs the business, it is especially important that both of them understand financial management

TOOLS OF FINANCIAL MANAGEMENT

Most small business owners are not accountants, but they must understand the tools of financial management to be able to measure the return on their investment Owner-managers do not need to know the precise meanings of the items in the balance sheet and

189

profit-and-loss statement, but they must be able to interpret these records accurately

The owner manager can develop an understanding of the tools of financial management with the aid of his or her accountant, lawyer, banker, or perhaps the credit manager of a major supplier Responsibilities to self and others make it imperative that he or she be acquainted wth the function and purpose of the balance sheet and income statement

The immediate cause of many business failures is inability to pay debts as they come due, but underlying causes may be weak nesses in sales or operations, inadequate working capital, losses from pilferage, or other reasons Using the tools of financial management, either alone or with outside assistance, the owner-manager may be able to detect beforehand those problems that could bring on bank ruptcy

Although good records are essential to good financial manage ment, they alone are not enough because their full use requires interpretation and analysis The owner-manager's financial decisions concerning return on invested funds, approaches to banks, securing greater supplier credit, and raising additional equity capital can be more successful if he or she takes the time to develop understanding and use of the balance sheet and profit-and loss statement

Balance Sheets and Derived Ratios

The balance sheet shows the financial condition of a company at the end of business on a specific day It is called a balance sheet because total assets balance with, or are equal to, total liabilities plus net worth (see figure 4 for a concise balance sheet) Balance sheets are compiled monthly, quarterly, semiannually, and/or yearly depending upon the needs of a business Unaudited balance sheets developed between regular compilation dates can also be a valuable management tool

Assets are listed in order of their convertibility into cash Those considered convertible with one year are called current assets and are totaled in the first part of the asset column—"above the line" in banking and credit terminology Current liabilities, those due within one year, are listed similarly, at the top of the liabilities Subtracting total liabilities from total assets gives net worth or ownership equity Subtracting current liabilities from current assets gives working capital or net current assets Quick assets are those that, as the name

188

implies, can be almost immediately converted into cash Too much should not be tied up in fixed assets when compared with current assets and/or net worth

Assets Accounts

Some of the asset accounts may be described as follows

CASH—Total cash *in bank* (Every business, however small, needs a *cash journal* of some sort, not just the balance as shown in a company's checkbook) plus petty cash in the office Frequently, because of outstanding checks, a business has more funds available in the bank than its checkbook shows These funds should not be used, however

NOTES AND ACCOUNTS RECEIVABLE—Amounts due the company, usually from customers, within a period of one year or less on notes and open accounts known to be collectable Notes and accounts receivable may also be due from the owner-manager or stockholders

INVENTORY—The stocks of materials, supplies, and finished goods of retailers, wholesalers, and manufacturers The manufacturer has raw materials, work-in-process, finished goods, and sometimes consigned goods. Finished goods are merchandise ready for sale, they are often warehoused and used as a basis for borrowing

All inventories should be valued according to an accepted method, the one generally used is "cost or market, whichever is lower" Whenever taking physical inventories, the owner-manager must be careful to obtain accurate counts and descriptions of all items Pricing, extensions, and footings should be accurate To avoid errors, each of the sheets used in taking the inventory should be numbered

In considering a loan to a small business, banks are likely to place particular emphasis on the fixed assets and their liquidating value shown on the balance sheet

PROPERTY—Land and buildings The value indicated should be the cost of acquisition If land value has appreciated, the bank should give separate consideration to value of land and buildings Any buildings owned will be shown on the balance sheet at cost less depreciation, computed at the appropriate rate

EQUIPMENT—This asset should be valued at cost less an allowance for depreciation and/or obsolescence

189

MACHINERY–This item should be handled on the same basis as equipment

Mortgages on any of the preceding should be indicated, so that a complete picture of each item is available

Liability and Net Worth Accounts

Liability and net worth accounts may be described as follows

NOTES PAYABLE–Amount of notes signed for borrowing purposes, may include notes owed to banks, supplier companies, or individuals

ACCOUNTS PAYABLE–Total amounts owed to trade creditors for merchandise, materials, and supplies If dating terms are given, they would also be included

ACCRUED LIABILITIES–Unrecorded expenses incurred at the close of the fiscal or calendar year are current liabilities Such items as wages, salaries, taxes, and interest accrued are often omitted from balance sheets, either through oversight or intentionally Failure to *include them* results in an understatement of liabilities and an overstatement of both working capital and net worth Dividends declared by the board of directors, payable on a given date, similarly represent a liability of the corporation and should be shown among current liabilities with the date of payment.

TAXES PAYABLE–Local, state, and federal taxes, they should be estimated and included among current liabilities

FUNDED DEBT–Serial bonds, notes on mortgage installments, mortgages, and other funded debts due and payable within one year are current liabilities Segregation of these amounts is needed for determining the current ratio and working capital position of the company

DEFERRED INCOME–This item represents monies received but not yet earned Ordinarily, that portion of the income that has been earned is included in the profit-and-loss statement, and the unearned portion is shown as an item of deferred income in the liability section of the balance sheet. Failure to set up the unearned portion as a liability results in an overstatement of liabilities

CONTINGENT LIABILITIES–Disclosure of contingent liabilities is essential to determine the prospective financial condition and current position of a company Failure to disclose them in the balance sheet or profit-and-loss statement prohibits due consideration in a credit or investment analysis

Assets	Dec 31 Prior year	Dec 31 Last year	Change
Cash	$ 140	$ 605	+$ 465
Accounts receivable (net)	$ 44,690	$ 34,890	–$ 9,800
Inventory	$ 70 700	$109 770	+$39,070
TOTAL CURRENT ASSETS	$115,530	$145,265	
Property and machinery (net of depreciation)	$ 23,810	$ 55 715	+$31,905
TOTAL	$139,340	$200,980	+61,640
Liabilities and Net Worth			
Short term notes		$ 20,000	+$20 000
Accounts payable	$ 68,340	$ 86 720	+$18,380
Taxes payable (state local & federal)	$ 11 720	$ 14,880	+$ 3 160
TOTAL CURRENT LIABILITIES	$ 80 060	$121,600	
NET WORTH	$ 59,280	$ 79,380	+20 100
TOTAL	$139,340	$200,980	+$61,640

FIGURE 4—BALANCE SHEET FOR THE WHEELER COMPANY

NET WORTH—Net worth is the total assets of the business less the total liabilities In a corporation, it includes both capital stock and surplus

CAPITAL STOCK is the total value of shares issued to the owner of the business If the company is unincorporated, there will be no capital stock account. Instead, capital accounts will appear under the name(s) of the owner(s), showing how much equity the owners have in the business

Generally speaking, *surplus* is of two major kinds, earned and capital Earned surplus arises out of undistributed earnings and is defined as the balance of net profits, income and gains of a corporation from the date of incorporation after deducting losses and after deducting distributions to stockholders and transfers to capital stock accounts when made out of such surplus An unincorporated business does not have a surplus account

In addition, the balance sheet can show *intangible assets* Under this classification are included such items as patents, trademarks, copyrights, franchises, goodwill, and other intangibles Such intangibles are shown in the balance sheet usually at arbitrary values established by management For most analysis purposes, intangibles are deducted from net worth Valuation of intangibles can be distorted by failure to provide adequate reserves for amortization and by overstatement or understatement of the periodic amortization charges

Another item that should be considered is *deferred charges* This caption includes such things as unamortized debt discounts and expenses, experiment costs, discounts and commissions on capital stock, and other deferred expenses Ordinarily, these items are written off to current operations or amortized over a period of years Failure to charge the consumed or expired portion of deferred items to operations results in an overstatement of both assets and net worth

Owner-managers should not look upon the preparation of the balance sheet as a burden, nor should they fail to use it as a source for management guidance To stay in business, they must have a reasonable knowledge of the tools of financial management. After looking at a balance-sheet statement, they should be able to assess the general state of a company's health By inspecting a number of statements for consecutive accounting periods, owner-managers should be able to see the general financial trend of the company They should study financial management, either through books (see the references at the end of the book) or as a student in one of the many courses on finance periodically offered by universities, colleges, trade associations, and business organizations

Financial Ratios

The owner manager needs some way of comparing the performance of his or her company with another or with industry averages Ratios are the tool for this There are three kinds Balance sheet ratios show

192

the relationships among various balance sheet items Operating ratios show the relationships of expense accounts to income The third kind shows the relationship between an item on the profit-and-loss statement and one on the balance sheet

As a practical illustration of the use of selected financial ratios, consider the Wheeler Company (figure 5) The owner-manager's comparison of last year's ratios with the year before indicates areas of financial improvement or weakening An analysis of Wheeler's performance reveals the following

CURRENT RATIO—The company's current ratio weakened from 1 44 to 1 19 because of large increases of property and machinery This lower ratio reduced its ability to generate cash

QUICK RATIO—Wheeler's increased inventory weakened its ability to raise cash, the quick ratio dropped from 56 to 29—almost 50 percent.

ACCOUNTS RECEIVABLE TURNOVER—The increase from 10 7 to 16 9 indicates that receivables "turned" to sales a greater number of times This is a good sign Management should try to determine the factors responsible for the improvement

ACCOUNTS RECEIVABLE OUTSTANDING (AVERAGE DAYS)—The reduction from 33 6 days to 21 3 indicates an improvement in customer payments—perhaps the result of management's increased credit and collection activities Quicker collection of accounts will tie up less capital as the company continues to grow

INVENTORY TURNOVER—Wheeler Company's increase in inventory from \$70,700 to \$109,770 caused a slowdown in its turnover ratio The ratio of the number of times Wheeler's inventory turned over fell from 5 7 in the prior year to 4 7 in the last year This ratio is vital for small business owner managers, who must make most effective use of the limited capital available to them In general, the higher the inventory turnover, the more successful the manager's performance

OPERATING PROFIT PERCENTAGE—The reduction in operating profit from 9 4 percent to 6 4 percent is a matter for serious management analysis

NET PROFIT PERCENTAGE—The increase in Wheeler's interest payments and in "other deductions" caused the net profit percentage to decrease from 6 2 percent to 4 2 percent This drop requires immediate management action

RETURN ON INVESTMENT—The ratio of net profit to net worth shows exactly what the business earned on the equity capital

193

		Dec 31 Prior year		Dec 31 Last year	
Current ratio (Times)	Cash accounts receivable Inventory / Accounts payable & taxes payable	$115 530 / $ 80 060	= 1 44	$145 265 / $121 600	= 1 19
Quick ratio (Times)	Cash & accounts receivable / Accounts payable & taxes payable	$ 44,830 / $ 80 060	= 56	$ 35 495 / $121 600	= 29
Accounts receivable Turnover (Times)	Sales / Accounts receivable	$480,115 / $ 44 690	= 10 7	$589 480 / $ 34 890	= 16.9
Average days accounts Receivable and outstanding	Days in year / Accounts receivable turnover	360 / 10 7	= 33 6	360 / 16 9	= 21 3
Inventory turnover (Times)	Cost of goods / Inventory	$400 985 / $ 70 700	= 5 7	$515 300 / $109 770	= 4 7
Operating profit (Percentage)	Operating profit / Sales	$ 45 080 / $480 115	= 9 4	$ 37 790 / $589 480	= 6 4
Net profit (Percentage)	Net profit / Sales	$ 30,000 / $480 115	= 6 2	$ 24 670 / $589 480	= 4 2
Return on Investment (Percentage)	Net profit / Net worth	$ 30 000 / $ 59 280	= 50 6	$ 24 670 / $ 79 380	= 31
Debt to net worth (Percentage)	Accounts payable taxes payable / Net worth	$ 80 060 / $ 59 280	= 1 35	$121 600 / $ 79 380	= 1 53

FIGURE 5—SELECTED FINANCIAL RATIOS
FROM THE WHEELER COMPANY S BALANCE SHEET

invested Of course, in many cases, the owner must develop an "*adjusted* net profit to net worth ratio " He or she must take into consideration personal salary drawings that may be greater than nominal and must consider any abnormal personal expenses However, net worth, as stated, may actually reflect a very conservative inventory policy Borderline items classed as expenses, instead of capitalized, will also cause book net worth to appear low The effects on "true return on investment" can be considerable The owner-manager may think all is going well with the "invested" funds but, in fact, they may be doing poorly when all factors are taken into proper account

DEBT TO NET WORTH—The total debt of the Wheeler Company increased from $80,060 to $121,600, raising the debt to net worth ratio from 1 35 to 1 53 This increase is a signal to management to restrain its purchases of inventory, property, and machinery

In addition to the analysis of the balance-sheet ratios developed, the owner-manager will find it valuable to compare the company's ratios with those of others in the same industry Sources for such ratios include Dun & Bradstreet, Robert Morris Associates (The National Association of Bank Loan Officers), trade associations, trade publications, universities, and public accounting firms

Profit and-Loss (Operating) Statement

The owner-manager must have some gauge to measure the degree of success or failure of the business and must know the net result of subtracting expenses from earnings The profit-and-loss statement is the gauge used to determine profitability Unlike the balance sheet, which shows the condition of a company *at a given moment,* it measures the profit or loss of a business over a period of time—a month, quarter, or year, for example

The use of monthly operating figures derived from the monthly trial balance is a necessity, *regardless* of the size of the company The owner-manager need not take a physical inventory each month in order to have a profit and loss statement The accountant can develop the statement by using various methods to arrive at the cost of goods sold The monthly profit-and loss statement should be in the hands of the manager by the end of the second week of the following month if it is to be of value in determining areas of strength and weakness in the business To accomplish this, the book

195

keeper and other members of the company must stay up to-date on all accounting and control matters Suppliers usually send in invoices on time, receiving records must be sent to the bookkeeper on time, and so forth

The monthly profit-and-loss statement and balance sheet are also useful for verification of the accuracy and completeness of the daily and weekly financial and operating information that the owner manager relies on in making day-to-day decisions

Amount of Detail Needed

The detail needed for the accounts on the profit-and-loss statement will vary with the type and size of business Enough detail should be included to enable owner managers to determine *where* they are earning gross profit and *how* they are spending money For example, a retailer of home furnishings and appliances might set up two gross profit accounts because the two product lines would show wide variation in gross profits Yet, it might be best to keep the expense records together (in one account) because of the common use of the company's showroom, warehouse, and delivery trucks Similarly, many manufacturers handle products "for resale only" in addition to their normal manufacturing operations In such situations, it might be advisable to keep a separate accounting of the gross profits earned from the two different activities.

Wheeler's Yearly P&L Statement

The Wheeler Company is a typical job-lot manufacturer, a description of the principal items in its profit-and-loss statement (see figure 6) follows

1 NET SALES—Represents gross dollar sales minus merchandise returns and allowances Some accountants also deduct cash discounts granted to customers, saying that these actually reduce the net selling price, others credit the discount to "other expenses" "Trade" and "quantity" discounts are concessions off price and should be deducted from gross sales Out-freight is also a deduction if goods are sold f o b destination In setting up profit-and loss statements in percentages, net sales are shown as 100 percent

2 COST-OF-GOODS SOLD—Consists of direct materials consumed in the period, direct labor, and shop overhead Shop overhead

73

includes indirect labor, machinery repairs, light, heat, power, insurance, factory supplies, rent, depreciation, and plant supervisory salaries. All items except direct materials consumed can be accurately and completely accumulated. The materials-consumed figure is determined by adding purchases and incoming freight to the beginning inventory and then subtracting the ending inventory.

The accuracy of this account depends upon the care used in measuring the beginning and ending inventories. This account affects the valuation of the gross profit for the period and hence the entire profit-and-loss statement.

The owner manager's participation in taking inventory is essential. He or she must understand the condition, quantities, and inventory value in order to interpret the profit-and-loss statement. He or she must make certain that each inventory count is taken in a consistent fashion—from raw materials through work-in-process to finished goods. Otherwise, the materials-used figure won't be accurate. If the inventory is consistent, the owner-manager will then be in a position to judge material usage and how it relates to the product mixture of sales and to the method of estimating and pricing business.

For retailers and wholesalers, the cost of-goods figure includes the beginning inventory plus purchases and freight-in during the period covered, *minus* the ending inventory. Retailers and wholesalers need even greater accuracy than manufacturers when they take inventory because a larger proportion of their capital is tied up. It is very difficult not to be overstocked on at least some slow-moving items.

3. GROSS PROFIT—Determined by deducting cost of goods from net sales. This is an important figure, particularly when competition forces prices down. Increases and decreases in prices can have a great effect both on gross profit dollars and on gross profit percentage. A slight reduction in price may require a substantial increase in volume if the same amount of gross profit dollars is to be realized.

4. OTHER OPERATING EXPENSES—Includes selling, administrative, and general expenses. Additional classifications may be established depending upon the size of the business, the nature of the industry, and the wishes of the owner-manager.

Selling overhead includes sales agents' salaries or commissions, sales executives' wages, sales office salaries, travel expenses, trade

199

		Dec 31 Prior year	Percent	Dec 31 Last year	Percent
1	NET SALES	$480 115	100	$589 480	100
2	COST OF GOODS SOLD (Direct materials direct labor, and shop overhead)	$400 985		$515 300	
3	GROSS PROFIT	$ 79 130	16 5	$ 74 180	12 8
4	OTHER OPERATING EXPENSES (Sales overhead, administration overhead & general overhead)	$ 34 050	7 1	$ 36 390	6 2
5	OPERATING PROFIT	$ 45 080	9 4	$ 37 790	6 6
6	INTEREST AND OTHER DEDUCTIONS	$ 1 030		$ 1 600	
7	PROFIT BEFORE TAXES	$ 44 050	9 2	$ 36 190	6 2
8	TAXES	$ 14 050		$ 11 520	
9	NET PROFIT	$ 30 000	6 2	$ 24 670	4 2
10	DIVIDENDS	$ 10 000		$ 4 000	
11	RETAINED IN THE BUSINESS	$ 20 000		$ 20 670	

FIGURE 6–COMPARISON OF 12 MONTHS PROFIT AND LOSS

show expenses, entertainment, sales promotion, and advertising The ratio of selling overhead to net sales should be reviewed and controlled often

Administrative overhead includes administrative or office salaries and wages, light, heat, communications, and cost of legal and accounting services General expenses include unusual expenses not classified elsewhere

5 OPERATING PROFIT—Measures the difference between gross profit on sales and operating expenses Operating profit measures the effectiveness of management operations for a period of time Owner-managers should always watch the ratio of operating profit to sales because it reflects the overall effectiveness of their decisions

6 INTEREST AND OTHER DEDUCTIONS—Includes interest, doubtful accounts, and discounts granted (if not already deducted from sales) Also included are unusual costs such as losses on the sale of fixtures or machinery

7 PROFIT BEFORE TAXES—Represents the profit achieved by a company when interest expense and other deductions have been deducted from the operating profit

8 TAXES—Includes federal, state, and local taxes due or paid by the company out of its earnings Special conditions allow the elimination or reduction of taxes for certain periods—for example, previous losses or special depreciation allowances Capital gains taxes are given special consideration

9 NET PROFIT (after taxes)—Represents earnings available during the period for distribution or retention

10 DIVIDENDS—Indicates amount of earnings, if any, distributed to stockholders, if the business is a corporation

11 RETAINED IN BUSINESS—Stands for net amount that remains from earnings, transferred to earned surplus on the balance sheet It also reflects, in addition to the depreciations taken, the additional inflow of funds from operations during the period under consideration

The Monthly P&L—A Working Tool

The monthly profit and loss statement, prepared accurately and on time, is perhaps the owner manager's most valuable working tool Using the statement to compare performance with the previous month and with the same month a year ago provides the owner manager with some real guidelines to follow in managing the business A condensed monthly report (see figure 7 for sample form) will highlight changes, the owner manager can then go into the accounting records for specifics to use as the basis for further analysis and action This method not only saves time, it also helps the owner manager to keep posted on all phases of the enterprise in a systematic manner

Analysis of percentage changes will indicate areas needing attention, it will help the owner manager recall transactions and events occurring in the previous month that are factors in the changes The profit and-loss statement presents the net effects of such transactions These might include a sale yielding high or low profits, the sale of old inventory, the payment of bonuses to various employees, the purchase of raw materials at low cost, a new approach in advertising, or an extended period of overtime work in several departments

Time Needed

Owner-managers need to decide how much time they can afford to spend on accounting and control information They should discipline themselves and their staff or accountants to set up the system and develop the figures on time each month, and, even more important, they should *use* the data to improve their performance as managers The ever-present tendency among owner-managers is not to run the business, but to let matters go along until a problem develops Then there is little time to analyze, action is demanded, and a hasty decision often leads to the wrong action

Cash Flow Projections

Every manager of a small business faces the problem of meeting the payroll or of pressing trade payables Usually, he or she will take a piece of paper and list all possible sources of funds in trying to find a way out of the problem But why should the manager wait until the last minute to learn of these pressing cash needs? Wouldn't he or she be better off to have a clear understanding of them in advance?

Using a simple cash flow or cash budgeting technique, a bookkeeper, once trained in a system, can provide monthly data on

	This Month	Percent To Sales	Same Month Last Year	Percent To Sales
GROSS SALES				
Discounts and Allowances				
1 NET SALES				
2 COST OF GOODS SOLD				
Direct Material Used				
Direct Labor				
Shop Overhead				
3 GROSS PROFIT				
4 OTHER OPERATING EXPENSES				
Sales Expenses				
Administrative Expenses				
General Expenses				
5 OPERATING PROFIT				
6 INTEREST AND DEDUCTIONS				
7 PROFIT BEFORE TAXES				

COMMENTS ______________________________

FIGURE 7—FORM FOR MONTHLY PROFIT AND LOSS STATEMENT

expected cash requirements and cash resources With such a program, and using his or her experience and ability to forecast coming business, the owner manager can establish cash flow projections for six months or more Any cash budget is based upon certain assumptions about the following sales volume, cash sales, payment patterns of accounts receivable, owner's personal withdrawals, and the other elements involved in a cash flow These assumptions must be realistic, and the owner manager must understand their relation to overall cash flow Then he or she may need to force certain transactions, or perhaps let up on others during certain periods When major, unexpected events occur, their effect on cash should be quickly determined

Typical assumptions might be as follows

1 Sales in a given month will result in 40 percent cash and 60 percent on open book credit
2 Forty percent of the 60 percent on open book credit will be collected in cash the following month, and the remaining 20 percent will come in a month later
3 The gross profit margin on sales is 30 percent, and the purchase for inventory will be 50 percent of the following month's anticipated shipments
4 All inventory purchases are paid in cash during the month in which they are made, and the discounts of from 1 to 2 percent should be taken depending on the prime rate at the particular time period
5 A minimum cash balance should be equal to two weeks' payroll, and borrowing must be planned on the basis of three months' requirements, at which time a forecast of payback must be established.
6 Additional expenses associated with operations and paid during each month are as follows

Salaries and wages	$4,700
Rent	1,500
General expenses	1,200

Cash Forecast Form

If the owner and his bookkeeper realize the use and application of a cash flow, they can make certain they have the data necessary to make better decisions concerning cash Figure 8 shows a typical cash forecast form, using it, the bookkeeper can keep the owner-manager informed of the daily and weekly progress of cash receipts And with this information, the manager can advise the bookkeeper on the company's cash disbursement It is particularly important that the bookkeeper know trade payable priorities during periods of tight cash Another very useful tool is the statement of sources and application of funds Its basic purpose is to show where cash came from and where it was used It is a counterpart to the cash budget Both

202

are on a cash basis The cash budget forecasts the future, the statement of sources and application of funds records the past.

The owner-manager can also use cash flow statements to backstop loan requests The first questions a loan officer will ask are, "Why do you need the money?" and "How did you determine the amount you need?" Here the information from the cash flow statement provides the answer The loan officer will then ask, "What did you do with the money your company had?" The sources and applications statement answers this question

Semiannually and annually, or during periods of special needs, the accountant should prepare a statement of the company's sources and applications of funds From the results, the owner-manager will determine the effective use of equity capital invested and of bank borrowings

termining the Break-Even Point

Some owner-managers of small companies may find formal break-even point analysis of little value If there is frequent change in product mix, profit mix, and volume of business, a formal approach has little value Small businesses rarely have a constant sales unit or product mixture Sales generally consist of many different job lots, product lines, or types of services And they almost always reflect different production or operating costs The shop or warehouse will probably be processing many different types of orders at any one time In addition, the work force in the office or shop will vary only slightly, if at all, from week to week. Except for seasonal rushes, when additional full-time and part-time people are needed, normal increases in workload are absorbed by overtime and (perhaps) by people working harder

The unique set of conditions in small companies is quite different from that in large production shops, where long runs of similar items are common In general, in smaller businesses the amount of variable production, selling, and administrative expenses is small in relation to fixed expenses This will be true except during a period of major expansion or when a large amount of work has to be subcontracted because of the overload of work or because of the special skills required

In a small manufacturing business, determination of a break-even point calls for reviewing the previous month's and year's operating experience to determine the ratios of direct labor to sales and direct materials to sales These ratios will reflect the experienced averages based upon the existing product mix and level of selling prices in the trade It is then necessary to determine the shop, sales, administrative, and general overhead

For example, in the Washburn Manufacturing Company the operating facts for the previous year are as follows

Direct labor = 20 percent of net sales

Direct material = 40 percent of net sales

Shop, sales, general, and administrative overhead = $156,000 ($3,000 on the average per week, or $13,000 per month)

Peak capacity of the shop with current labor machinery and space arrangements–based upon one shift with some overtime and a few part-time helpers–equal $50,000 per month, or about $600,000 per year

The maximum monthly profit that could be expected is based on the assumption that the work produced and shipped had a direct labor and material content of no more than 60 percent of sales The resulting contribution to overhead would have been 40 percent of $50,000 maximum shipments, or $20,000 The resulting profit would have been $20,000 minus the expected overhead of $13,000, or $7,000

A review such as this shows the owner-manager the need for keeping the shop busy Throughout a 12-month period this may be difficult because there will be periods of low sales, especially in a seasonal business Sometimes it is possible to get business at lower prices during these slack periods But what will be the effect of lower prices on the regular-price business? Owner-managers must control the amount of low-price business they can put into the shop They must have some way to measure the amount of low-price business they can do and still make a profit And they may determine this by analyzing yearly business projections

In the Washburn Manufacturing Company example, the ratio of labor and materials to selling price is 60 percent If lower selling prices increase this ratio to 70 percent, for example, the volume of business necessary to cover $13,000 of monthly overhead must also increase

204

	January		February		March		April	
	Est	Act	Est	Act	Est	Act	Est	Act
Cash balance beginning of month								
RECEIPTS								
Accounts receivable collections								
Bank loan proceeds								
TOTAL CASH AVAILABLE								
DISBURSEMENTS								
Trade payables								
Payroll—hourly								
Payroll—salary								
General expenses								
Selling expenses								
Capital additions								
Income taxes local state federal								
Bank loan repayment								
Total disbursements								
CASH BALANCE END OF MONTH								
Less minimum balances								
ESTIMATED AMOUNT OF CASH AVAILABLE								

FIGURE 8—CASH FORECAST FORM

81

Owner-managers must understand that profit is not generated until overhead is earned They must try to sell their products or services at the highest price possible If they cannot maintain their price levels in the face of competition, the company's break even point will increase as they decrease their average selling price

The monthly profit-and-loss statement can be used to test decisions on pricing, sales, and expense control against expectations By doing this for a period of time, the owner manager will be able to judge how to price to achieve a given volume and profit In certain situations when demand is seasonal, the owner manager can use low price business to balance overhead and keep losses to a minimum while keeping the organization intact for the more profitable periods of the year This approach is sound only if the manager has done a sufficient amount of analysis to know the level of sales to expect over the entire 12 month period Predetermined estimates of sales, costs, and possible profits are often very helpful

GETTING SHORT TERM AND LONG-TERM MONEY

Owner-managers must, at all times, know their current and prospective cash position Their ability to develop sources of funds to take advantage of business opportunities or to get through tight business periods will help them to make more effective business decisions Using the cash budget, managers can distinguish between temporary, short-term needs and permanent, long term requirements and can also determine how much aid they may need

Sources of Short Term Funds

Sources for short-term money needs are either operations or institutions The company should keep a sufficient cash balance to

1 Take advantage of trade discounts,
2 Maintain a good credit rating in the trade,
3 Retain sufficient funds for business opportunities,
4 Be prepared for emergencies, and
5 Anticipate seasonal needs

APPENDIX P

Ratio Analysis - Definitions

RATIO ANALYSIS

Four types of ratio s

Most programs look at least four ratio s liquidity ratio coverage ratio leverage ratio and operating ratio

Liquidity Ratio Liquidity is the measure of the quality and adequacy of current assets to meet current liabilities The two most use liquidity ratio s in a credit scoring model are current ratio' (current assets/current liabilities) and sales/receivable ratio (total sales/accounts receivable) Liquidity ratio s which could be added in the future would be quick ratio (cash & cash equivalents plus accounts receivables/current liabilities) and a net sales ratio (net sales/accounts receivable)

Coverage Ratio This is a measure of the firms ability to service debt The single coverage ratio in the model is EBIT (Net Earnings before payment of loan interest expense and tax expense divided by the amount of loan interest paid) Some analysts now use EBITDA (Net earnings before interest, taxes depreciation & amortization)

Leverage Ratio This ratio analyzes the effect of debt (leverage) on the net worth of the company Highly leveraged firms are more vulnerable to business downturns than those with lower debt to net worth positions However the measure of this vulnerability can vary depending upon the requirements of the industry The two ratio s in this model are Debt/Net Worth (total liabilities divided by equity of capital stock and retained earnings) and Fixed Assets/Net Worth (total non current assets divided by equity or capital stock and retained earnings)

Operating Ratio These ratios are designed to assist in the evaluation of management performance Two ratios used in the model are Earnings Before Taxes/Net Worth (net earnings after expenses and interest divided by equity of capital stock and retained earnings) and Earnings Before Taxes/Assets (net earnings after expenses and interest divided by total assets)

Depending upon the type of industry being s analyzed numerous other ratios might be considered such as Earnings/Current Inventory Expenses/Sales and ratios for expense classifications to direct salary and wage expense etc

A frequently referred to ratio is the

Quick Ratio – Cash/Current Liabilities This demonstrated a firms ability to meet it s most current needs like payroll heat light electricity and telephone etc

Ratio s like financial statements themselves are guides not to be taken wholly or in part by them selves The ratio s derived from the statements need to be compared to statements of other firms in similar businesses When this comparison is made one can then get a sense of the relative position of this company in relationship to its peers

Ratio Analysis and Credit Scoring have become a fine but not absolute science Particularly when used in large numbers of similar credits They have become the basis for determining alleged certainty when certainty doesn t exist