# Methodology I Use in Evaluating Extensions of Credit

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## I.INTRODUCTION

The dictionary definition of methodology is "the body of methods used in a particular branch of activity." This paper is a summary of my views on what constitutes the methodology of highly skilled lenders and credit analysts when extending and/or buying credit with specific reference to corporate direct loans, corporate syndicated credits and corporate bonds.[1] This is the standard I use in judging how an extension of credit is structured and how the lender conducts its due diligence and ultimately decides whether or not to extend credit. In those cases where an Agent puts together a loan or bond for sale to others, I assume that the Agent should provide adequate disclosure and that the ultimate investors would conduct appropriate due diligence. My methodology, in short, is my view of what a professional should do to minimize credit risk. I have developed these views based on my many years of experience (see www.kypriosinternational.com for my resume) in corporate lending, corporate bond finance and credit analysis. My experience has been supplemented by continuing education, attending seminars and webinars, and by relevant reading on finance and economics topics.

## II. ACCEPTABLE METHODOLOGY IS GOVERNED BY THE DAUBERT STANDARD [2]

There are three key points to keep in mind:

1.The expert must have the facts and justify his/her opinion based on the facts.

2. The expert must have acceptable and reliable methodology

3. The expert must apply his/her methodology to the facts of the case in arriving at the opinion.

The standard to be used is that the expert must base their opinion on the basis of the preponderance of evidence. Another way to look at this is that the expert's opinion should be based on "a reasonable degree of scientific certainty." There is no requirement that the opinion must be based on the "beyond reasonable doubt" standard used in criminal law.

Methodology need not be just quantitative. It can be qualitative. Some opinions cannot be purely scientific but they should follow generally accepted methodology. This is especially true in areas such as

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[1] Direct loans, syndicated credits and corporate bonds will be defined and discussed in detail later in this paper.

[2] The "Daubert Standard" was established by the Supreme Court (Daubert v. Merrell Dow Pharmaceuticals, Inc.) and provides a systematic framework for a judge to assess the reliability and relevance of expert witness testimony before it is presented to a jury. Responsibility, as a result, is with the trial judge not only to determine the competence of the expert; but furthermore to make sure that reliable and relevant methods were used in rendering an opinion by the expert.

finance which are not rigidly scientific but to a certain extent are based on generally accepted industry customs and practices in effect at the time.

What is specifically required by Daubert is as follows (quoted from "Amendments[3] to Federal Rule of Evidence–Expert Testimony" by William Doerler of White and Williams LLP, October 5, 2023):

"A witness who is qualified as an expert by knowledge, skill, experience, training, or education may testify in the form of an opinion or otherwise if the proponent demonstrates to the court that it is more likely than not that:

(a) the expert's scientific, technical, or other specialized knowledge will help the trier of fact to understand the evidence or to determine a fact in issue;

(b) the testimony is based on sufficient facts or data;

(c) the testimony is the product of reliable principles and methods; and

(d) the expert's opinion reflects a reliable application of the principles and methods to the facts of the case."

This rule applies only to federal rules of evidence but state courts that follow the federal rules are likely to adopt changes in their rules to be consistent with federal rules.

## III.SUMMARY OF MY METHODOLOGY FOR EVALUATING EXTENSIONS OF CREDIT

My methodology is based on my extensive experience over a 50-year period in lending, corporate bond finance and other extensions of credit as spelled out in my resume. This included private placements of debt at Prudential Insurance Company which today would be characterized as direct lending. I was credit trained in direct lending to small and medium-sized companies which consisted of doing all the due diligence because these companies were too small to be followed by analysts and were not rated. After Prudential, I worked in banking where I continued to be engaged in direct lending to various types and sizes of companies, both in the US and overseas.

My bank lending experience also included analysis of syndicated loans and corporate bonds while I was heading both Credit and Lending Departments, both domestic and international at various banks and when I was in charge of Credit and Lending Departments.

I also had extensive experience in extending credits to banks (both domestic and international), which allowed me to understand how various financial institutions all over the world made loans and analyzed credits. Risks in international lending also included country risk assessments.

### A. It is important to follow the Prudent Man Concept:

I would think and act as if I were a prudent man investing my own money. It is so easy to be sloppy and casual when dealing with other peoples' money. The Prudent Man would look at the situation from every possible angle and try to understand all the possible risks (business and financial) by studying the industry and the business. Extensions of credit usually have no upside potential.[4] When you buy shares in a company you can hope that some of them will perform spectacularly (e.g., Apple). Shareholder investors can be right say 60 or 70% of the time and still have a very good return. When it comes to lending, all you will ever get back is your

[3] These Amendments became effective on December 1, 2023.

[4] Unless these loans or bonds were bought at a discount which was not usually the case in my experience.

principal and interest. But you could lose some or all of your money. I know from experience and from speaking with other lenders in extending credit and/or buying credit that you cannot afford to be "wrong" more than 2% of the time. Bank lenders to corporations make perhaps 2%/annum on each loan after taking into consideration funding and overhead costs. In some cases, this spread could be less. If you make 100 loans and two of them go bad (and in the extreme you lose all your money) you have wiped out all your profits. It really is that simple. The job of the lender is to avoid bad loans. This is the essence of credit analysis. I will repeat that in caps.

THE JOB OF THE LENDER IS TO AVOID BAD LOANS.

I have told people working for me over and over again, it is not your job as a lender to fall in love with a company and hope it will be an amazing success. That is the job of an equity analyst or equity buyer. Lenders must make sure they are secure whether they have collateral or not.

The careful lender or extender of credit must do their own due diligence to the extent possible. A very simple dictionary definition of due diligence is "…a process or effort to collect and analyze information before making a decision." It should be used by investors to assess risk. That is your job as a lender. This is what somebody would and should do if it is their money being invested.

B. Direct Lending entails meeting with the potential borrowers and structuring an acceptable loan package including appropriate Terms and Conditions.

Do you trust the borrower? JP Morgan said that he would never lend money to anyone he did not trust. AP Gianni, who made Bank of America a world class bank, used to go into his branches and shake hands with customers. If someone had calloses on his hands, he figured the person was a hard worker and would lend him money.

Many years ago, I attended a seminar hosted by Citibank on the elements of lending. The bank emphasized four areas:

- What is the purpose of the loan or extension of credit?
- You must understand all the business and industry risks including the seasonality of the business and how the industry/business responds to macroeconomic and geopolitical factors.
- You must be adept at financial analysis (the details of which are beyond the scope of this paper) to be able to identify all the financial risks.
- Finally, you must understand how you expect to be paid. It is preferable if there are two ways: from the cash flow of the business and from the assets of the business (this assumes you have a security interest in the collateral or at least you have a senior position ahead of other lenders).

I would add that when making a direct loan, that you need to have terms and conditions which will mitigate any risks and put you (the lender) in a position of control if and when problems occur. When I was credit trained at Prudential, we were accustomed to having a full set of covenants. Today, unfortunately we live in an era of "covenant lite." I am not a big fan of "covenant lite" because I was trained and always practiced being risk averse whenever I extended credit.

**How does one analyze business and industry risks?**

The lender or analyst must understand every aspect of the business and industry. If one does not understand a business or the related industry, they should not proceed. A good deal of information should be obtained preferably by meeting with the top management of the company. One of the benefits of direct lending is that you know who you are dealing with.

If you are dealing with a manufacturing company, by all means visit the plant and have the company explain step by step what is going on. If you are dealing with retail businesses go visit the stores. Get to know the owners and the management.

One of the problems in studying lending and credit analysis in schools is that it is taught by people who may have never made a loan in their life and rely on the numbers to make an analysis. My father had a store (delicatessen and liquor store) and I grew up in the store. I am naturally interested in what makes a business tick. You have to do this first and worry about the financial analysis later. One of my customers flattered me once by telling me that I was the only lender who really tried to understand the business and did not just go down a laundry list of financial statement questions.

There are a lot of business questions to be asked. Who is your competition? Who are your customers and suppliers? What products (or services) are more profitable than others? What are the opportunities and risks in the business? What about labor relations? How good is management? This list is, of course, not exhaustive. I have found that Michael Porter's Five Forces Model[5] was very helpful in understanding businesses and industries. Porter's analysis deals with understanding and evaluating a company's strategy. Another way to look at strategy is to classify it into one of three buckets: is the company a low-cost producer; or does the company distinguish itself by product differentiation (does it make a better mouse trap); or is the company extremely focused on a particular part of an industry?

These strategic questions along with collecting as much information as possible are very helpful in figuring out what the risks are in a business. Added to this is the importance of getting information (from competitors, suppliers, customers, and banks) about the company.

The company's owners and management must be of unquestioned integrity (to the extent that this can be established).

The bottom line is this—are you comfortable with the business risks and if not, can the problem areas be mitigated by proper terms and conditions?

**How does one analyze financial risks?**

There are two major balance sheet financial risks: liquidity and leverage.

Liquidity refers to whether the company can meet its obligations when they come due. Some common ratios and calculated numbers include:

- the current ratio (Current Assets/Current Liabilities)
- the quick asset ratio (Cash plus receivables/Current Liabilities)
- New Working Capital (Current Assets- Current Liabilities)

Leverage has traditionally referred to the relationship of debt to equity. The higher the relationship of debt/equity the more leveraged and the more financially risky the company is.

Financial analysis has traditionally been done by looking at historical performance. I believe that one should have unqualified audits for the last five years and also the latest interim information compared to the previous year's comparable interim statements. This information is summarized on spread sheets. From the Income Statement, one can see the trend of sales and the profit margins and should

[5] See Appendix One for an explanation of the Five Forces model

be looking for any problems such as decreases or variability in sales, profit margins or profits. I am always leery of a company that may be growing too fast. One of my bosses at Prudential used to say: “We like nice, controlled growth.” It is also helpful to find out what the agings or turnovers of inventory, receivables and payables are. Does the company have too much inventory or too much in receivables? Is the company leaning on the trade (i.e., is slow in paying its suppliers)?

Assuming that we are making a term loan— can the company support the debt and meet its financial obligations on time? To conduct this type of analysis it is best to come up with projections. There can be best case, worst case and average. This type of analysis will help answer the question of whether or not there is too much debt.

Another element in the financial analysis is the adequacy of the financing. For example, a company (say) needs $1 million to buy equipment and another $500,000 to support receivable and receivable increases as a result of growth in sales. I have seen situations where the company could only “handle” (say) $1 million in debt and that is what the lenders gave the company. But this is not appropriate. How will the company finance the additional $500,000? Perhaps the owners could put in more equity or even subordinated debt?

**DuPont System**

Many years ago, I became acquainted with the DuPont System.[6] This was used by the DuPont to pinpoint GAAP metrics which could explain why the company performed as it did, focusing on the return on investment. Here is the complete formula:

(1) Net Income/Sales X (times) = PROFIT MARGIN

(2) Sales/Assets X (times) = ASSET TURNOVER

(3) Assets/Net Worth X (times) = FINANCIAL LEVERAGE

EQUALS—Net Income/Net worth (RETURN ON EQUITY)

By studying this model one can tell where the profits come from. Also, one can look at various years and can understand what has changed in the company. An analysis of this type can be very detailed and sophisticated. We can see that the profit margins are not the only drivers in giving the owners high returns. We can also see that huge amounts of assets can reduce the return on capital invested. Industries with large asset requirements need to have higher margins than industries with smaller asset requirements. Also, financial leverage can magnify the returns to capital unless the company is not profitable in which cases it can magnify the losses on capital. DuPont focused on the details to make an analysis of its company. And it used this analysis to improve its financial performance. Investment analysts can use a similar model to determine what the financial strengths and weaknesses of a company are, to see if any trends are emerging over time and to compare a particular company to competitors. Specific industries have specific characteristics which show up in this model. For example, a retail food establishment might have relatively low profit margins compared to an industrial company. But the industrial company would have much higher asset requirements.

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[6] For a full explanation, see “Managerial Finance”, seventh edition, 1981, Dryden Press by J. Fred Weston and Eugene F. Bringham, pages 152 to 156. Also, the DuPont System was mentioned on page 80 of “Corporate Finance, fifh edition 2020, Pearson Global Edition by Jonathan Berk and Peter DeMarzo. They refer to this as “The DuPont Identity”.

**Once the business and then financial analysis is completed, an appropriate loan package must be negotiated.** Traditionally, a full set of covenants would be negotiated and these would be submitted along with an Outline of Loan Terms to the committee that would consider the loan. Once the loan was approved, the Outline of Loan Terms would be given to the law firm which would come up with appropriate loan documentation. One key point—it is not the job of the lawyers to come up with the business-related covenants. It is their job to come up with the legal aspects of the Loan Agreement. The lender cannot delegate negotiations of covenants to the lawyers.

**Direct loans were originally a banking product.** Since the Great Financial Crisis (GFC) of 2008, the role of banks has been diminished in lending because of Dodd Frank Act[7]. Basel 3[8] was another reaction to the GFC and affects larger banks all over the world. The result of Dodd Frank and Basel 3 is to divert lending to alternative non-bank lenders. For example, some major private equity companies (such as KKR, Blackstone, Carlyle Group, TPG and Bain Capital) have organized huge direct lending operations which are not only competing with banks, but often taking lending business away from the banks.

Direct lending is no longer the province of commercial banking entities. Often these so-called alternative finance companies are quicker in their decisions and more flexible in their financing arrangements than banks. But alternative lenders are also subject to less scrutiny and regulation than the banks. To what extent the rapid growth of direct lending outside of the banking system is systemically risky is yet to be determined. In our present higher interest rate environment, the results of sloppy lending (if it occurs) will be exposed.

## C. Impersonal extensions of credit[9]

These days, most extensions of credit are not to people or companies you know intimately. They are bought credits rather than direct credits. We are concerned in this discussion with syndicated loans to corporation and corporate bonds. It is very important to understand from the outset that from a legal point of view, corporate bonds afford the ultimate investor more protection than syndicated loans. This is because syndicated loans are not considered as securities under the law while corporate bonds are. Under the US Securities Acts, it is the full responsibility of the Agent to provide full disclosure which is not misleading. Syndicated loans do not afford this legal protection to investors. You cannot assume that the Agent in a syndicated loan is required to provide full disclosure which is not misleading. For reasons spelled out below, I believe that syndicated loans are most often safer investments than

[7]Dodd-Frank attempted to prevent the excessive risk-taking that led to the financial crisis in 2008. It increases capital requirements on banks and requires banks to have more capital for riskier-type loans.

[8] Basel 3 was designed by the Basel Committee on Banking and Supervision in Switzerland to increase capital requirements on banks to reduce bank risk. This was also an attempt to prevent excessive risk taking and to reduce bank leverage.

[9] By "impersonal extensions of credit" I mean loans made by financial institutions which have been purchased from others. The investor is a buyer of credit as opposed to being a direct lender. This includes syndicated loans and it also includes corporate bonds. The methodology involved in most cases is the same for impersonal extensions of credit as for direct loans. To avoid duplication, I have not repeated much of what has been written under direct loans. Key points to remember are structuring of the loan or corporate bond financing, due diligence and disclosure. In direct loans, these are all the responsibility of the lender. In indirect extensions of credit, I maintain that the participants in the credit or bond financing need to be satisfied with the structure of the financing and need to do some of their own due diligence to the extent possible. With respect to disclosure, the ultimate participants need to ask questions to make sure that the Agent is giving them meaningful disclosure.

corporate bonds from a business point of view. But from a legal point of view "you are on your own" as the saying goes.

Syndicated lending[10] has become a big business for major banks. The same issues discussed under direct lending are of paramount importance also in syndicated lending. But there is one difference: in syndicated lending it is the Agent Bank that does the structuring and due diligence. They put together a loan package, do an Information Memorandum and then syndicate the loan to investors. In the early days, the loans were participated out to other banks. But in more recent years, these have been syndicated to a variety of investors including insurance companies, pension funds and hedge funds and mutual funds.

What is the job of the institution which participates in a syndicated credit? It is to make sure that the due diligence that the institution would have done on its own (for direct loans) has been done by the Agent Bank. But this presents a problem. The Agent Bank to a very great extent is not the lender: it lays off the risk to others. The Agent Bank is now acting more like an investment bank which is underwriting a bond issue. It is very difficult for a buyer of a portion of the syndicated loan to do its own due diligence because it will not be dealing directly with the borrower and because it has to rely on the Agent to come out with full disclosure which is not misleading. The ultimate investor also has to rely on the Agent to properly structure the loan package.

Syndicated loans are usually rated by rating agencies which gives the buyer some degree of comfort. The buyer of a syndicated loan is relying on the due diligence and adequate disclosure not only of the Agent bank but also of the rating agency. Rating agencies, it is known, are paid by the borrower. Because of this conflict of interest, rating agencies may not be completely impartial. It is known, for example, that ratings can be slow to downgrade a company.

Nevertheless, the syndicated loan market has worked fairly well over time. There is good reason for that. Interest rates have been historically low for years. In the last few years, covering the Covid era, interest rates have jumped dramatically. Because of significantly higher interest rates resulting from the fact that syndicated loans are usually floating rate instruments, leveraged loans (those with a good deal of debt) are at risk. This brings us to a discussion of Leveraged Finance.

**Leveraged finance (consisting of syndicated loans and high yield bonds)**

We live in an age where many companies are highly leveraged (i.e., have a good deal of debt). A good rule of thumb is this: if a company is very highly leveraged, that should be the only thing that should be negative about the company. Leveraged loans and high yield bonds are riskier today than in the past because of significantly higher interest rates.

Many syndicated loans today arise from leveraged buyouts which are traditionally financed by both leveraged loans and high yield bonds (junk bonds). The key differences between leveraged loans and junk bonds are as follows:

a) Leverage loans have a senior position and usually are secured loans. Junk bonds have a junior position.

[10] See Addendum III for an overview of syndicated loans.

b) Leverage loans have floating rates (that is, when rates go up, there is an increase in the rate of the existing loan; when rates go down, there is a decrease in the rate of the existing loan). Junk bonds are generally fixed rate over the term of the bond.

c) Leverage loans are paid off over time under an agreed-to amortization schedule. For example, a five-year loan might have an amortization schedule of 20%/year. Junk bonds usually are all payable at maturity.

A major difference used to be that leveraged loans had a full set of covenants (see discussion on Addendum Two). Leveraged loans also were not tradable. Gradually over time, leveraged loans became tradable.[11] They are almost always credit rated and were sold not only to banks but to other institutional investments. In other words, they became similar in many ways to bonds.

The question then arises–shouldn't syndicated loans be classified as securities as is the case with bonds? For the time being, the answer is no as noted by Ballard Spahr (ballardspahr.com/insights/alerts-and-articles/2023/08/second-circuit-affirms-syndicated-loans-are-not-securities). This is, to say the least, a controversial court ruling. A case can be made (and has been made to me in conversations with others) that syndicated loans should in fact be considered as securities.

Here is what Ballard Spahr wrote:

> *"The United States Court of Appeals for the Second Circuit upheld on August 24, 2023, a decision from the District Court to dismiss a securities fraud case brought by a Chapter 11 bankruptcy trustee, on the grounds that a $1.8 billion syndicated loan was not a security. The decision addresses a long-standing question of whether syndicated loan notes are subject to the anti-fraud sections of the federal securities laws and by implication, all of the rules and regulations that come with underwriting securities. A contrary outcome would have been a major event for the syndicated loan market, as such loans would otherwise then need to comply with extensive disclosure obligations and failures to disclose would cause strict liability for underwriters. The decision affirms the established understanding in the market that loan participations are not securities."*

Again, the judicial ruling that syndicated loans are not securities is very controversial. A case has been made to me and others (in private conversations) that syndicated loans really are securities but that such a decision might be bad for business to put it bluntly. Were syndicated loans to become officially "securities" this means that the Agents would have to comply with the Securities Laws of the US. This would mean that the Agent needs to be sure that it presents all material facts to the investors and any such facts cannot be misleading. Failure to do so would expose the Agent to the fraud provisions of the Securities Act of 1933 and the Securities and Exchange Act of 1934. Furthermore, the Agent might also be libel in certain cases even if it has not intentionally disregarded these securities standards. Declaring syndicated loans as securities would be very bad for business and it is no accident that the Agent Banks and others pushed to avoid syndicated loans to be adjudicated to be securities.

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[11] The Loan Syndications and Trading Association (LSTA) has been the leading force in helping to develop a functioning secondary market for trading syndicated loans.

Where does this leave the purchaser of syndicated loans? The message is very clear: you the investor are a sophisticated investor and it is up to you to do your own intensive due diligence because syndicated loans are not afforded the protection of the Securities Acts.

Some comments made on syndicated loans could also apply to corporate bonds including junk bonds. In both cases it is the Agent which is responsible for structuring the financing, doing due diligence and then making disclosures to investors. Because corporate bonds are considered to be securities, there is a higher bar for both due diligence and disclosure. (This is pointed out here to note that the burden of due diligence and disclosure is more heavily borne on the ultimate investor in the case of syndicated loans.) Lenders in syndicated loans need to understand this and if they do not, they are in my opinion not doing their job of due diligence. This is not to say that the ultimate investor should not do appropriate due diligence when buying bonds. This is to state that you will have greater legal recourse with bonds than with syndicated loans). [12]

## D. Some Difficulties with Accounting Standards (GAAP)

1.Generally Accepted Accounting Principles (GAAP) have become more and more detailed over the years. When I was starting out as a lender and an analyst in the late 1960s, there were less than ten FASB rules or standards. Today there are more than 150. This has resulted in a good deal of explanation and footnotes in financial reports, making them in some cases almost impossible to understand. One of the problems is that many of these standards affect the so-called bottom line- NET INCOME.

2. Many companies and even financial analysts do not think that Net Income is a meaningful figure. It is cash flow that is meaningful. Over time, EBITDA[13] has become a key proxy for cash flow of business. This is not a GAAP number and cannot be attested to by the external auditors. EBITDA is easily derived from the Income Statement whose components are attested to by the auditors. Despite this, EBITDA is considered a non-GAAP measurement.

Companies, however, figure that even EBITDA is not a good proxy for cash flow from the business. They believe that certain non-recurring items should be excluded as expenses. The result is adjusted EBITDA which is certainly not a GAAP figure and which depends on what the company deems as non-recurring expenses. There are no agreed-to standards for calculating adjusted EBITDA.

The modern definition of leverage in use today is Debt/EBITDA. Now it is Debt/Adjusted EBITDA which is troublesome because there is not one agreed-to way of calculating the adjustments.

3. There is a better way to calculate the cash flow from the business. It is included in the financial statements. In addition to the Income Statement and Balance Sheet, there is also the Statement of Cash Flows. If you want to understand a company's financial results, you need to spend time analyzing the Statement of Cash Flows. This point was driven home to me many years ago. As mentioned, my father owned a delicatessen and liquor store. One day his accountant came into the store and announced that the store had made a certain amount of profit and he explained how that was calculated. After the accountant left, my father told me that his accountant did not understand his business. But my father understood that net income had to be calculated for income tax purposes. My father was not sure at all if the accountant's figures made any business sense and did not really care. He

[12] For a case study on appropriate due diligence, please see Addendum Three

[13] EBITDA stands for Earnings Before Taxes, Interest, Depreciation and Amortization.

told me: “If at the end of the day, there is more money in the cash register than at the beginning of the day, I figure I am doing all right.” In this crude way, my father explained what is common knowledge today among institutional investors and company CEOs– CASH IS KING.

4. Financial statements conservatively value a business by insisting that assets in general are to be recorded at the lower of cost or market. Assume that a company bought a building (say) 30 years ago and that it has been fully depreciated. The building value on the balance sheet is zero. But (say) that the building has a market value of approximately $2 million. In that case, the balance sheet is of limited value to investors and creditors. The financial statements would thus understate the company’s market net worth by $2 million.

5. These accounting considerations must be understood by lenders and investors.

6. One very important point: traditionally a company had been considered “insolvent” when its net worth is negative. We all know now that is not the case at all. Insolvency is when a company cannot pay its bills. Once again, CASH IS KING.

## IV. SUMMARY AND CONCLUSIONS ON METHODOLOGY

This paper is not meant to be a full explanation of how to make direct corporate loans and how to analyze syndicated credits and bonds. It is meant to show that my methodology is in line with industry customs and practices.

There are of course exceptions to the foregoing customs and practices outlined above. For example:

- If you make a loan fully secured by cash in a reliable bank, the analysis and due diligence will be different and less complicated. Just make sure, you really do have the security in all cases if things go badly.
- Also, if you make a short-term loan secured by a company’s receivables and inventory, the analysis and due diligence will be different and less complicatd. Just make sure you really have perfected the security under appropriate state law.
- In this paper, I am discussing the structuring and analysis of non-financial corporate loans. Highly specialized extensions of credit (e.g., securitizations, lending to financial institutions including banks) are analyzed using somewhat different technical methodology and are not covered in this paper.

Here are some don’ts regarding extensions of credit to corporations:

- Do not do “name lending” (lending based on someone’s reputation) without proper analysis.
- Do not compromise on required financial information. Make sure to have all appropriate and necessary financial information. This means audited financial statements from a reliable accounting firm.
- Do not rely on projections without very carefully understanding and agreeing on the assumptions used in creating the projections.
- Be very careful of volatile industries.
- Do not make loans just because you think it will lead to other business unless this loan is credit worthy.
- Do not leverage a risky business. In leverage lending, I have one rule as previously mentioned: if a company is very leveraged that should be the only thing “wrong” with the company.

- Do not make a loan if you do not understand and agree to the purpose of the loan.
- Do not make the loan if you (or your associates) do not understand the industry and the business.
- Don't be afraid to say no.
- Don't make loans just on the basis of credit ratings.
- Do not allow other creditors to take away key assets in a company after you have made the loan. This is simply a matter of having proper legal documentation and needs to be discussed with the attorneys representing you or the Agent Bank.[14]
- Do not assume that just because a reputable accounting firm has audited the company that there are no problems or no possibility of fraud or accounting tricks. Subtle fraud is difficult to detect and once again it is better to lend to those you trust. This of course is more difficult when dealing with bonds or syndicated loans which are put together by Agent banks. Nevertheless, accounting manipulation very often can be detected by a careful analysis. [15]

Once again, this paper is not intended to be comprehensive.

Remember: your job as a lender is to make sure you make very, very few mistakes. Just assume it is your money! As I have tried to make clear in this paper, I am risk averse and I am proud of it.

## V. INFORMATION SOURCES

**Books**

The following books represent a good sampling of various subjects including corporate extensions of credit and related topics such as economics, commercial and investment banking. I keep these for reference as needed.

"Ten Day MBA" by Steven Silbiger, Harper Collins, Second Edition, 2013

"Financial Shenanigans" by Schilit, Perler and Engelhart, Fourth Edition, McGraw Hill, 2018

"The Executive Course-What Every Manager Needs to Know about the Essentials of Business" (by Stanford Professors at the Stanford Graduate School of Business), edited by Gayton Germane, Addiston Wesley Publishing Company, 1986

"The Bank Credit Analysis Handbook" by Jonathan Galen and Philippe Delhaire, John Wiley , 2013

"Guide to Financial Management-Understand and Improve the Bottom Line" by John Tennent, Economist Books, 2018

"Guide to Financial Markets-why they exist and how they work" by Marc Levinson , Economist Books, Seventh Edition, 2018

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[14] A year before the bankruptcy of J Crew (the retailer), the private equity owner of the company had intellectual property assets (trademark and its legally registered name) transferred from the company into a subsidiary and therefore out of the reach of creditors. This type of problem can be avoided by better legal drafting by the lawyers.

[15] See "Financial Shenanigans—How to Detect Accounting Gimmicks and Fraud in Financial Reports" by Howard M. Schilit, Jeremy Perler and Yoni Engelhart, 4th Edition, McGraw Hill, 2018.

"Guide to Analysing Companies" by Bob Vause, Economist Books, Sixth Edition, 2014

"Corporate Finance" by Jonathan Merkel and Peter DeMarzo, Pearson, 2020

"Stress Test-Negotiations in Financial Crisis" Timothy F. Geithner, Crown Publishing, 2014

"The LSTA's Complete Credit Agreement Guide" by Michael Belluci and Jerome McCluskey, McGraw Hill, Second Edition, 2016

Also various other books on high yield bonds, leverage loans and credit analysis are helpful.

**Seminars and Webinars**

These include NYU Stern School of Business, CFA Institute, Risk Management Association, Capital Market Credit Analysts Society. In addition, seminars and webinars given by major law firms are very informative.

## APPENDIX ONE- MICHAEL PORTER'S FIVE FORCES MODEL

Porter's Five Forces model consists of five competitive forces that shape every industry. The model helps determine an industry's and a business's weaknesses and strengths. It was created by Harvard Professor Michael E. Porter more than 40 years ago. (See Michael Porter's "Competitive Strategy: Techniques for Analyzing Industries and Competitors", 1979)

Porter's 5 forces are:

**1. Competition in the Industry**

The larger the number of competitors, the less power the company has in an industry unless a company dominates the industry and has a good deal of very small, specialized competitors.

**2. Potential of New Entrants Into an Industry**

The higher the barriers to entry in an industry, the less likelihood that the potential entrants will succeed.

**3. Power of Suppliers**

An extreme example is if there are one or few suppliers in the industry and the company is very reliant on them. In general, suppliers are more powerful to the extent that: (1) they are providers of key inputs or services, (2) how unique these inputs are and (3) how much it would cost a company to switch from one supplier to another.

**4. Power of Customers**

An extreme example is if a company is reliant on one or very few customers for its business. In general, the power of customers is affected by (1) how many buyers or customers the company has, (2) how significant each customer is and (3) how much it would cost a company to find new customers or markets for its products or services.

**5. Threat of Substitutes**

Substitute goods or services that can replace a company's products or services are always a possible problem. Companies which produce goods or services for which there are no close substitutes will have more power to increase prices and lock in favorable terms. When close substitutes are available customers can easily switch.

Understanding the Five Forces can help a company to adjust its business strategy to make a more powerful business. Understanding the Five Forces also can help an analyst understand a business.

There are other tools to use to understand what makes a business tick. One is called a SWOT analysis. This consists of understanding a company's strengths, weaknesses, opportunities and threats.

Nevertheless, Michael Porter is the king of Strategy. He was, by the way, responsible for creating a Health Care plan for Governor Mitt Romney in Massachusetts which was copied at the Federal level and is known as Obamacare. People who have gone to Harvard Business School are often in awe of Michael Porter.

**APPENDIX TWO-FULL SET OF COVENANTS**

a. AFFIRMATIVE COVENANTS

- Fully audited financials- annually; unaudited financials quarterly; consolidated and consolidating statements
- "No default" certificate quarterly
- Adequate Insurance Coverage
- Projections/budgets to be submitted periodically
- Restricted Payments; dependent on net income: includes excess compensation, dividends, buyback of shares, and subordinated debt.

b. NEGATIVE COVENANTS

- Limitations on secured debt
- Limitations on unsecured debt; annual bank cleanup
- Limitations on loans, advances and investments
- Limitations on leases
- Limitations on insider transactions
- Limitations on M&A, etc.
- No major changes in shareholders
- No major changes in management
- No sale of assets outside the normal course of business
- No factoring of receivables.
- No material change in business

FINANCIAL TESTS

Minimum Net Working Capital

Total Debt/Tangible Net Worth max (this was the traditional leverage test)

Total Debt/EBITDA[16] max (this is the present-day leverage test)

Senior Debt maximum as a percentage of Capitalization

It is not necessary to review the foregoing list in detail. It is important though to understand that if one really wants to mitigate risk, these are the types of covenants which are required. Unfortunately, market conditions make it difficult to have a "full plate" of covenants. I cannot in good conscience opine that a lender which does not get a "full plate" of covenants is fully mitigating its risks. Lenders have to make a decision as to how much risk they are willing to take. Lenders know very well that they are not fully protected in this "covenant lite" environment. They reluctantly "go along" because the only other alternative is no business. "Covenant lite" is simply the result of too much money chasing too few deals. These deals to some extent have been "protected" by near zero interest rates (so-called "free money"). With higher rates, we are now in a very different economic climate and it is expected that defaults and bankruptcies will increase.

[16] To repeat: EBITDA is Earnings Before Interest, Taxes, Depreciation and Amortization

**APPENDIX THREE--SYNDICATED LOANS**

A syndicated loan generally is a term loan financing offered by one or a very small group of bank lenders. In the US the major banks are typically JPMorgan Chase, Bank of America, Citibank and Wells Fargo. Syndicated loans occur when a financing requires too large a loan for a single lender or when a project needs a specialized lender with particular industry expertise.

There is usually a lead bank or underwriter with a syndicated loan known as the arranger, the agent or the lead lender. Syndicated loans are often for leveraged buyouts. Interest rates are typically floating rate formerly traditionally based on LIBOR (London Interbank Offering Rate) but now based on SOFR (Secured Overnight Funding Rate). Interest rates are usually reset either monthly, quarterly or annually with the choice made by the borrower. Syndicated loans are mostly secured by a first priority position on a company's assets.

Syndicated loans became popular in the 1970s and 1980s. For many years, they consisted of loans put together by commercial banks and sold to other banks. Syndicated loans originally were truly bank loans. Over time, several changes occurred:

-A secondary market for syndicated loans developed primarily from the efforts of the LSAT (Loan Syndications and Trading Association) as previously mentioned. Trading was facilitated by the fact that the loans were rated by major credit rating entities.

-The market for buying these loans gradually expanded to include other institutional investors including insurance companies, pension funds, hedge funds and other types of funds. Therefore, syndicated loans can no longer be considered a commercial banking product. Despite this, syndicated loans are still considered as loans, not securities.

## APPENDIX FOUR--CASE STUDY ON APPROPRIATE DUE DILIGENCE

Over 30 years ago, the bank where I worked was invited to take a piece of a loan put together by a well-known financial institution. The loan was for the completion of a troubled casino in Atlantic City. The owner of the project put in no equity into the project. The owner was well known and it became obvious that this person would raise funds on the basis of his reputation. This is called "name lending." There was no track record on the project, no equity and no guarantees from the sponsor. Also, the financing was not credit rated.

On what basis was this financing to be justified? The answer was favorable projections. I asked the Agent for a copy of the appraisals. I was told by the Agent that I was the only one that asked for these appraisals. This was a red flag. It was obvious that the project would raise funds because of the then-high reputation of the owner/sponsor.

When I received the appraisal, I read it very carefully paying attention especially to the assumptions underlying the projections. One of the assumptions especially caught my eye—that the casino industry in Atlantic City in the coming years would grow at twice the rate of Las Vegas. The assumptions did not explicitly state this but that was the obvious conclusion from the numbers presented for both Atlantic City and Las Vegas. I knew very little about casinos except that the house usually wins. I did know something about Atlantic City and about Las Vegas and I knew it was total nonsense that Atlantic City would outshine Las Vegas as a gambling center. I turned down the proposal without hesitation.

The financing was a complete success. But I knew that the Agent had not done its homework. The appraisals were not serious and could not be taken seriously by anyone who cared to carefully analyze the situation. The Agent had not provided complete disclosure and made it difficult for me to get the appraisals when I asked for them. It was only after I insisted on seeing the appraisal that I had enough information to make a decision.

Not surprisingly, the project was in Chapter 11 bankruptcy in less than a year. The creditors, including those financing the project and also other creditors including suppliers, lost about 1/3 of what was owed to them. It could be said that the creditors took a "haircut." But the sponsor kept control of the project which was eventually completed. He was the only one who did not take a haircut.

The lesson here is that one cannot solely rely on the Agent to do the work. So-called sophisticated investors are mostly institutions buying "paper" from others and must do their own homework. This should be obvious. I maintain that anyone who approved this credit was derelict in their responsibility.

I can also state from my years of experience that so-called sophisticated lenders and investors do not always follow the standards outlined in this paper. And this is also the case with Agents. This case study is intended to highlight what can and does happen in the real world.

REMEMBER:

THE JOB OF THE LENDER IS TO AVOID BAD LOANS.