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Risk Management for Financial Managers

Notes to Lectures 6 & 7

Gone Concern Analysis and Tactics for the Credit Workout

As long as a company is expected to meet its obligations as they come due, the company's liabilities will retain their face value for creditors. However, when the risk of a bankruptcy filing becomes material – a point that often comes well before any filing – the market values of the company's obligations begin to drop, often precipitously. [1]

The purpose of this note is twofold. First, it examines the timing and nature of this drop in market values, as well as the impact on these values caused by the tactics often used by the distressed debtors in the period before the filing. Second, it examines the tactical responses that creditors can adopt in response to the moves by their debtor.

1. Reasons for Bankruptcy Filings

Companies become bankrupt for a variety of reasons. These reasons can be categorized under three headings – business cycle, industry characteristics, and firm-specific problems. Problems arising in each of these areas can contribute to a company's demise. [2]

The timing of the filing for bankruptcy protection is driven by one or both of two conditions:

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[1] In this context, the term 'filing' is the normally accepted abbreviation for 'filing for protection' under either the Companies Creditors Arrangement Act or the Bankruptcy Act in Canada, or the *Bankruptcy Code* in the United States. A good outline of the legal aspects of the U.S. Bankruptcy Code can be found in Baird, Douglas G., *Elements of Bankruptcy*, Foundation Press, Third Edition, 2001. The analysis presented in this note refers to the bankruptcy process under the US *Bankruptcy Code*. While the provisions of the Canadian *Companies Creditors Arrangements Act* (which is used for most large corporate insolvencies) and the Canadian *Bankruptcy Act* present significant differences of detail, the basic tactics and considerations for creditors and debtors are not significantly different in the two countries. The main difference in Canadian practices is that the Courts are much more active in urging the parties toward a consensual agreement than in the US.

[2] For an analytical approach to evaluating the composite firm-level risk, see the Corporate Risk Evaluation Checklist – Notes to Lecture 4.

a) Insolvency: when the value of the company's assets fall below the value of its liabilities; and

b) Illiquidity: when the company no longer has access to sufficient cash (or access to banks or the markets) to pay its obligations as they come due.

As long as a company retains liquidity, it may be possible for the company to avoid bankruptcy even though on a market valuation it is insolvent. To illustrate such a situation, consider the example of a company that produces a product subject to severe cyclical swings. Many commodity producers and manufacturers fit such a description. During the downswing, the market value of the assets of the company may drop to the point where they are worth less than the total liabilities. The company, however, continues to record its assets at book value. It does not violate any borrowing covenants. It retains access to the cash on its balance sheet and retains access to committed and unused bank lines. These cash resources are sufficient to cover its operational costs – including losses – and the liabilities that mature over the likely duration of the cyclical downswing. The company is therefore in a position to continue in operation during the down cycle, even though – on a current valuation basis – it is insolvent. As the business cycle returns to more normal conditions, the value of the company's assets will recover and the company will again become solvent. In such circumstances, avoidance of a bankruptcy, along with the attendant costs, will be in the interests of the company's lenders, its management and its shareholders.

In some circumstances, companies which maintain reasonable liquidity will decide that it is in their interest to file for protection even though they are well short of a technical insolvency. Examples include companies faced with very high potential legal obligations from asbestos litigation (eg. Johns Manville) or faced with obligations stemming from breast implantation litigation (eg. Dow Corning). Such companies concluded that their total debt burden – including the likely future damages awarded by the courts – exceeded their equity and likely earnings capacity in the medium term. They therefore filed for bankruptcy to obtain a negotiated plan of arrangement, approved by the court, under which their creditors - including the class of future litigants - agreed to a 'compromise' under which the company transferred a sum of money and a significant proportion of its equity to a trust which would take responsibility for all current and future legal settlements. Both legal claimants and other liability holders suffered a 'haircut' in the value of their instruments, as did the current equity holders. Under the bankruptcy plan of reorganization, the firm was able to cut its remaining obligations to a specific level, and its equity could trade without the overhang of large and unspecified legal liabilities. Stelco, with its large overhang of pension and health care liabilities, also fitted into this category. However, such examples of filings for pure insolvency – as opposed to illiquidity – are relatively infrequent.

In contrast, should the company become illiquid it will almost certainly be forced by pressure from its creditors to immediately file for protection, even though the value of its assets may exceed its liabilities. [3] Indeed, the timing for most filings is driven by liquidity pressures. For this reason, liquidity analysis is usually the most pertinent early warning indictor for a potential filing and for the timing of this filing.

Once there is a material threat that the company will file, its regular financial statements cease to present a fair picture of the company's financial condition. In some cases, the auditors may provide a flag to the potential insolvency. Where the auditors judge that there is a material possibility that the company may file over the coming fiscal year, they will include a "going concern" qualification in their Opinion on the year end statements. This qualification will note that the financial statements have been prepared on the assumption that the company will remain a 'going concern' and, by implication, that the statements being presented are an appropriate representation of the company's financial position only on the assumption that a filing will be avoided during the year. [4] Auditors, however, cannot be relied upon to provide such warnings, and analysts must perform their own tests to evaluate the likelihood of a filing.

2. Gone Concern Analysis

If a company exhibits a material risk of filing, and if as a result its statements no longer fairly present the financial condition of the company, how should a creditor assess the value of the various assets and liabilities of the company?

The first rule of 'gone concern analysis' relates to the appropriate timing for such analysis. Gone concern analysis should be undertaken as soon as the risk of a filing becomes material – and in all cases well before an actual default occurs. The analysis should be updated periodically as the financial condition of the company evolves. Early recognition of the company's problems opens up avenues for protecting the value of the bank loan, including negotiation with the debtor or, as a worst case, a potential sale of the loan.[5]

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[3] Should the company have a significant excess of market value over its liabilities, it will, of course, continue to have access to new bank loans and other borrowings and will therefore not be illiquid. To have access to such new funding, lenders must be satisfied that there exists a reasonable chance that on a gone concern basis their new advances will be covered.

[4] When a bank Loan Agreement contains financial covenants which are tight and therefore are at risk of being violated over the coming year, auditors will normally refuse to give a 'clean opinion' on year-end statements. In such a situation, the firm will normally approach the bank to accept revisions to covenants sufficient to make the auditors comfortable the company will be able to operate within the new covenants during the next year. Once they are comfortable, auditors will normally then agree to provide a 'clean opinion'. When negotiating such a loosening of covenants, the bank has significant leverage with the customer to take new security, increase pricing, to fix any documentation deficiencies and to take other steps to improve its position. The intelligent banker will always use such bargaining leverage.

[5] Prudent lenders should undertake a complete legal review of their lending and security documentation at the earliest stage of the workout. Documentation deficiencies can frequently be cured at this stage, although negotiation and agreement with the borrower will normally be required. When the documentation review is not done, experience teaches that lenders will almost always discover a variety of security and other documentation deficiencies when the company files for protection. Such deficiencies can often significant

To perform a gone concern analysis, the creditor begins with an assumption that the company will file for insolvency within some specified time frame. The creditor develops a worst-case scenario for the company's performance over the likely course of the bankruptcy, estimates the market value of the company at the point a plan of reorganization is presented, and forecasts how the value of the company will be divided in this eventual plan of reorganization. [6]

The analysis must consider the Balance Sheet, the Income Statement and the Statement of Cash Flows. The analysis begins with the most recent statements issued by the company and makes adjustments to reflect what typically happens just before and at the point of filing. This yields pro forma statements that reflect the company's position when the filing has taken place.

The first set of adjustments will reflect the significant measure of control the company has over the timing of the filing. Using this flexibility, the company will adopt tactics that maximize the resources available to the firm following the filing. A seasonally cyclical firm, for example, can choose to file at the point in the cycle where its working capital is highest. Retailers and clothing manufacturers, for example, reach a peak of receivables and inventory around the Christmas season. If such a company files in November – before the seasonal inventory and receivables have been turned into cash and applied to pay down bank debt – bank loans will be frozen at a high level when the

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impair the lender's ability to recover loans. Some prudent banks require that each proposal for a higher risk loan be accompanied by a gone concern analysis at the time the initial lending decision is being taken. This analysis takes a worst case view of the outcome of the loan and estimates potential recovery options and valuations. This procedure ensures that the downside risks of the loan are well understood before the loan is underwritten, and ensures that the pricing and structuring are set to reflect and minimize the downside risks.

[6] Where the company has a viable core to its business – ie an operation or group of operations that generate positive cash flow – there will be a business to protect. In such a circumstance, there is probably some plan of reorganization that will be acceptable to creditors. This plan of reorganization will specify how the firm will be run on exiting from protection, will estimate the firm's value, and will lay out in a plan of reorganization how this value is to be allocated between the various creditors and other claimants such as shareholders. The plan will divide the creditors into separate groups holding similar types of claims (eg. secured creditors, unsecured creditors, etc.) in a fashion that is acceptable to the court. The plan will be voted on by creditors in each class. A class is considered to have given its consent to the plan when 50% of the creditors by number in the class, and holders of at least 66% of the value of liabilities vote in favour of the plan. For a more detailed outline of the requirements that must be met for a plan of reorganization to be accepted under the US Bankruptcy Code, see Baird, [2001], chapter 11, pp. 198 – 222. An alternative 'exit' for assets of the company is through a sale or auction under Section 363 of the Code. In the US, approximately 93% of firms achieve a negotiated plan. Should the company not be viable, or should the creditors fail to approve the plan of reorganization, the company will be liquidated under Chapter 7. Should there be a material probability of such a liquidation, the gone concern analysis should reflect liquidation values. Distribution in such a case is done according to strict priority where creditors are paid in strict order of seniority. Only when a senior class has been fully repaid with any payment be made to creditors in a more junior class. See Crean, J.F., "Credit Risk, Default Loss, and the Economics of Bankruptcy", Working Papr 354, 2009, Department of Economics, University of Toronto, at http://repec.economics.utoronto.ca/files/tecipa-354.pdf

filing takes place, and the cash falling in from the sale of inventory and collection of receivables will be trapped by the company.

In the month or two before the filing, a company planning a filing will typically order more goods from its suppliers than it strictly needs. At the same time it will delay payment of trade payables as far as is possible without triggering a bankruptcy petition to by creditors. These tactics will give the company more cash to work with during the insolvency. As a result, both inventory and trade payables are likely to be higher at the point of filing than the amounts shown in the most recent financial report prior to the filing.

Similarly, just before the filing, the company will normally draw down all committed but undrawn bank lines of credit. The resulting cash will be placed with banks not otherwise connected to the company so that no bank can exercise a right of set-off against outstanding loans (ie. bank deposits being offset against drawn loans to reduce the lending bank's exposure to the company.) As a result, liabilities and cash levels will be higher than at date of the previous statement.

Once these actions have been completed, the company can be expected to file promptly.

When the analyst is preparing the gone concern analysis, the pro forma projections of the balance sheet at the assumed time for the filing should be adjusted to include estimates of the results of these tactical actions by the company in the period just before filing.

It is likely that further adjustments will be required for the pro-formal balance sheet to properly reflect the real values at the time of filing.

Certain asset categories for companies that have been operating under considerable pressure will often turn out to be overstated. The inventory accounts, for example, often include some measure of value overstatement in obsolete goods. Other asset current accounts may have been insufficiently reserved. The 'opening balance sheet' forecast for the insolvency should include adjustments to reflect the likely requirement for the correction of such misstatements.

No adjustments need to be made to the value of fixed assets. The book value of fixed assets and intangibles at the point of filing will irrelevant to the value of the company at the end of the bankruptcy. [7] The value placed by the market on the company's assets under a consensual plan of arrangement which sees the company remaining as a going concern will be driven by forecast cash flows and the value generated by these cash flows when the company exits from protection under its plan of

[7] In the United States, assets over which lenders hold security may be valued on a liquidation basis for establishing value for 'adequate protection'. See, *inter alia*, Baird, *op. cit.* pp 178 – 180. Prudent secured lenders will remember, however, that courts can be capricious in discharging their obligations to provide 'adequate protection' to security holders under the US Bankruptcy Code.

reorganization. Book values at the time of filing will not be relevant to this valuation process. In the initial phases of the gone concern analysis, then, no attempt at fixed asset valuation or net enterprise value need be made.

As a result, no estimate will be possible at this stage of the equity value of the company.

Liabilities are also likely to require adjustment. Companies operating under financial pressures are often dilatory in paying sales taxes and other statutory obligations, and slow in accruing benefits such as holiday pay. Bringing these statutory obligations up to date will often add to the stated liabilities.

Once the company has filed, various other liability accounts are likely to require substantial re-statement. Many companies have 'contingent liabilities' (ie liabilities that are only crystallized on the occurrence of specified events and are not therefore shown on the balance sheet) which become triggered by the filing. Letters of credit (L/C's) issued for purchasing goods and L/C's supporting commitments to perform specific obligations can become direct money obligations by reason of the filing. Similarly, bonds that have been issued to guarantee performance are also likely to be triggered. Figures to allow for these items should be added to the pro-forma liabilities forecast for the point of filing. Potential liabilities of the company for environmental remediation, lawsuits and other contingent expenses should be carefully considered and appropriate allowances added to liabilities. There may also be other liability accounts that have been hidden or understated, and it may be prudent to allow for such problems.

Many companies operating under financial pressures will have adopted very aggressive accounting practices with the objective of boosting their reported income during the periods prior to the filing. Some companies stray into accounting practices that are fraudulent. With the filing, these practices are normally unwound. A prudent analysis will make allowance for some level of restatements reflecting the possibility of such practices.

These adjustments to various balance sheet accounts (other than fixed assets and goodwill and, of course, equity) will provide an estimate of what the 'true' value of these balance sheet accounts would look like at the time a filing takes place. Such analysis will be based as much on intuition as on formal analysis. Precision cannot be expected. A lively sense of pessimism will provide a good guide. Almost always the value of assets will drop and the value of liabilities will rise – often by material amounts. The analyst should remember that rough accuracy is preferred to erroneous precision.

At this stage, the gone concern analyst will also build a 'debt book', or detailed listing of all of the creditors, along with their exposure, any security, and any other relevant information, so that the likely bargaining position of individual groups of creditors can be identified. Care should be taken to include all leases, including operating leases. The company may reject some of these leases; others it will keep. Payments on retained leases will have to be brought current. The detail on the position of other creditors recorded in this 'debt book' will be an important source of information in estimating the likely bargaining strategies of other parties to the bankruptcy. Such evaluation of the likely positions to be adopted by these parties is essential to the maximization of bank recoveries.

Creditors must expect that all claims will be rigorously examined for validity by other creditors and any Trustee. Any failures in security or other documentation can lead to the security – or the claim itself – being set aside. Any payments within the 'preference periods' (90 days for most items) which were not in the 'normal course' will be repayable by the recipient in exchange for a claim on the company that will be dealt with through the plan of reorganization. Each creditor should rigorously examine his own documentation to ensure that it cannot be successfully challenged by other creditors or the Trustee. If security interests are not likely to be defensible due to documentation errors, the lender should recognize its weakness in its position.

Immediately following the filing, the court can be expected to issue an 'order' under which creditors are 'stayed' from pursuing the company for repayment of its pre-filing obligations. The order will also provide that only the debtor can present a plan of reorganization – precluding creditors from presenting and voting on their own plan of reorganization. The court order will normally entrust the running of the company to management and its board of directors operating as the 'debtor in possession'. The court order will normally provide the company with new borrowing powers – access to 'debtor-in-possession loans' or DIP loans. Many financial institutions provide such loans.

The automatic stay will remain in effect until the court disposes of the case usually through a consensual agreement between the company and its creditors, sometimes through a conversion to a Chapter 7 wind-up, and sometimes through some other provision under the *Code*. [8] As long as the company can argue that it has not yet had sufficient time to prepare for and negotiate an acceptable plan with its creditors, and as long as there is a reasonable chance of a negotiated plan, the court is likely to allow the stay to remain in place and to provide extensions in the exclusivity period. As a result, bankruptcies can often last for a matter of years. [9]

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[8] The most common of such alternate arrangements is the Section 363 auction of the company or its assets and the division of the proceeds to creditors in order of their seniority.

[9] Forecasting the likely length of the stay and exclusivity period is often difficult. Secured creditors can petition the court for the return of the assets over which they have security. However, if the court is persuaded that these assets are required by the company for its operations and that there is a significant likelihood of a consensual plan ultimately emerging, the petition by secured creditors will be turned aside. Through their petitions for release of security, secured creditors may have some influence with the court in ensuring the automatic stay does not carry on for an excessive period. A significant percentage of large companies achieve agreement with their creditors on a plan of reorganization prior to filing for bankruptcy. Such 'pre-packaged' (or 'pre-pack') filings contain all the documents, including voting documents, in a fully negotiated and agreed form that enables the court to process the filing and approve the plan of arrangement within a couple of months. Such outcomes are more likely where all parties have realistic expectations and where a consensus on a reorganization strategy can be reached. In contrast, where there is significant business uncertainty, where creditor groups are fragmented, where the shareholders have unduly optimistic expectations, and where management has a strong interest in prolonging the protection period, it will be realistic to project a long period of stay and exclusivity.

The next stage in the gone concern analysis is the estimation of the likely movements in the income statement, cash flow statement and balance sheet for the company during the period forecast for bankruptcy protection. As the objective is to estimate a ‘reasonable case’ outcome, a protection period lasting for up to two or more years may be prudent.

The simple forecasting model outlined in final section of the Corporate Risk Evaluation Checklist may be used as the framework for forecasting.

Revenues should be forecast on a conservative basis to reflect the caution of customers dealing with a company that faces significant reorganization. Margins should also be forecast on a conservative basis.

Particular care must be taken to identify the ownership of intellectual property such as patents, trademarks and other intangible assets that are used the running of the business. The role of licenses and other permits that are held by the company should also be reviewed. The potential for cancellation of these licenses and permits on an event of default or at the point of exit from bankruptcy should be assessed, and the implications for the company and its value should be estimated.

In many cases, receivables may prove more difficult to collect as customers delay final payment for goods until such time as they become fully confidant that they will have no subsequent claims for inadequate quality. Claims are likely to rise and the rate of bad receivables increase. This can lead to inflation in accounts receivable and the required reserves.

During the protection period, no interest will be payable on pre-petition debt, although interest will accrue on secured debt.

The analyst should consider the various reorganization alternatives that the company might undertake during the period of protection to improve its results - including downsizing and the sale of assets. In assessing the likelihood of such alternatives, the analyst should focus on the likely impact of any particular restructuring alternative on the likely values attributable to the shareholders at the end of the potential bankruptcy period - not the impact on the value of the company. Management and shareholders will only undertake those alternatives that add expected value to their likely recovery from the bankruptcy. Management will focus on alternatives which add to the potential net upside for equity. Programs of downsizing and asset sales which reduce the potential for equity recoveries will be rejected, even though they may add to the expected overall value of the company.

The analyst should assume that the company will draw down on its available DIP credits to meet the costs of any restructuring, as well as to cover losses during the protection period. The company may also use such funding for investments that could not be undertaken due to cash flow constraints prior to the filing.

Once the income and cash flow statements have been projected up to the time when the company is forecast to achieve agreement on a plan of arrangement, the balance sheet (apart from fixed asset and equity accounts) at the time the firm is forecast to exit protection can also be projected. This balance sheet will identify all the liabilities that have to be dealt with by the company's reorganization plan. These will include the DIP loans along with other liabilities incurred during the stay period which will have to be paid on a priority basis. It will also identify the pre-petition liabilities and, as summarized in the 'debt book', their order of seniority.

The forecast of the income statement will provide the basis for estimating the value of the company at the time it exits from protection. Normal valuation methods can be utilized. The industry can be examined to identify the normal valuation multiple to be applied to EBDIT for a company with characteristics similar to the bankrupt company. Multiplying the forecast EBDIT at the time of the plan of reorganization by this industry multiple will yield an estimate of the company's value at exit from protection.

The plan of reorganization will propose a division of this value between the various creditors and, in many cases, shareholders. The division that is ultimately accepted will depend crucially on the nature of the particular insolvency and the characteristics of the claims of the various interested groups, as well as the bargaining dynamics among all the interested parties.

Despite the wide variations in the plans observed in the marketplace, some general comments can be made.

First, it is likely that senior creditors will be prepared to see junior debt holders and equity retain some value. [10] An early agreement can lessen the deterioration in the value of the company that often takes place during a protracted insolvency. This can lessen the losses that senior creditors will ultimately suffer. Junior creditors and equity can extract a portion of this preserved value from senior creditors as their price for voting in favour of the earlier exit from protection.

Second, the reorganized company is likely to borrow funds from the market or a new bank syndicate on emerging from bankruptcy. This borrowing will provide cash which can be used by the company to provide the cash element of the payment to senior and other creditors.

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[10] It is a normal feature in bankruptcy reorganization that junior levels of debt and even shareholders receive value despite significant losses being accepted by senior creditors. See, *inter alia*, Franks, J., and Torous, W., "An Empirical Investigation of US Firms in Reorganization", *Journal of Finance*, Vol. 44, July, 1989, pp. 747 – 769. For an examination of how the bargaining works under the shadow of the Bankruptcy Code, see Crean, J.F., "Credit Risk, Default Loss and the Economics of Bankruptcy," Working Paper No. 354, Department of Economics, University of Toronto, March, 2009. http://repec.economics.utoronto.ca/files/tecipa-354.pdf

Third, the total of new debt issued by the company and therefore the overall level of leverage chosen by the company on exiting bankruptcy will probably mirror the levels of leverage typically found in fully solvent companies in its particular industry.

Fourth, the pre-bankruptcy claims are almost certain to be 'compromised' – often significantly. Only through the writing off of significant amounts of pre-petition indebtedness will the plan of reorganization be viable. The 'haircut' represented by the debt compromise must be sufficient that the company will have a reasonable level of equity on exiting protection and will have sufficient cash flow after debt servicing obligations to meet its obligations as they come due.

The non-compromised portion of pre-petition debt may be settled through cash payments, through the issuance of new securities and through the issuance of equity in the reorganized firm – and often a mix of the three.

A highly simplified numerical example will illustrate the operation of these forecasts.

Consider a company that is forecast to be under protection for two years has the following characteristics (income statement figures are on an annualized basis):

a) <u>On filing:</u>

Pre-filing EBDIT	17
Debt recorded at filing	140
Claims that were off-balance-sheet and are newly recognized	10
Total claims at filing	150

(Assume that we are dealing with a firm where all claims rank equally, and that all claims are unsecured.)

b) <u>Forecast at date of Plan of Reorganization two years later</u>:

EBDIT	15
DIP loans, etc.	10
Pre-Petition Debt	150
Total debt	160

c) <u>Estimate for the Plan of Reorganization</u>:

Multiple of EBDIT for Valuation purposes	8x
Normal industry Debt/Equity	1:1
Forecast ongoing EBDIT	15
Forecast Firm Value	120
Forecast New Debt on Exiting Protection	60
Forecast equity value	60

Composition of Forecast new Debt

New borrowings cash	30
New securities issued to old creditors	30

Distribution of cash:

payment to DIP, etc.	10
Cash to creditors	20

Assume that shareholders propose to receive ¼ of the equity in the reorganized venture to compensate them for agreeing to bring plan at an earlier date than necessary by law or under bankruptcy proceedings.

All pre-petition debt is cancelled, and in return creditors then receive:

- cash	20
- new debt	30
- ¾ of the equity	<u>45</u>
Total	95

Accordingly, two years after filing, the debtor will informally present this proposal to creditors without calling for a formal vote. If creditors do not signal their acceptance of these terms, the debtor has a credible threat to continue the bankruptcy for a further period – with all the attendant costs. Creditors suffer most of the downside of bankruptcy and share the upside with shareholders. Creditors will prepare their forecasts. Should the present value of potential creditor recoveries from a prolongation of the bankruptcy fall below the recoveries proposed by the debtor, creditors will indicate their acceptance of the proposed plan of reorganization. The minimum recoveries can be estimated by assuming the maximum period the court will allow the bankruptcy to run, by forecasting the expected values of the company at that time, and looking at the recoveries to creditors under a liquidation scenario where distribution is done on a strict priority basis. If the expected present value of creditor recoveries falls below the value of the recoveries in the plan proposed by the debtor, creditors have an interest in accepting the proposal. Once all parties have agreed, a formal vote will be held, and the company will ask the court to approve the reorganization plan.

Just before filing, each of the creditors will do this type of estimate of their likely recoveries. The creditor calculus surrounding a pre-pack just before the filing will depend on this analysis. Suppose that the creditors' 'gone concern' analysis has forecast a successful plan of reorganization at the end of two years along the lines just described. The present value of this plan to creditors is:

\$95 million recovery, present valued for 2 years at 4%		84.5
Pre-petition debt		150
Recovery:	84.5/150 =	56.3%
Loss ratio	=	43.7%

Should the pre-pack propose a recovery in excess of \$84.5 million to creditors, despite the fact that shareholders walk away with some value, creditors will be better off if they accept the proposed pre-pack. This is not to say that creditors will not argue for a higher share of the value, and they may achieve a higher share. However, the ultimate division of value will depend on the relative bargaining influence of the debtor and its creditors. If all parties to the impending bankruptcy share the same analysis, creditors are unlikely to recover much above \$84.5 million – and possibly below this figure.

While most stakeholders go through calculations such as these, there are frequently wide variations in the projections developed by creditors and by management and by shareholders. Different assumptions lead to different conclusions about recoveries. As a result, creditors and shareholders will not always agree. Where they are unable to agree, a pre-pack will be impossible.

While this reasoning reflects the logic behind most decision-making in bankruptcy, two modifications must be made for it to reflect most real-world situations.

First, the assumption of a known EBDIT on the exit from protection must be modified. In fact, parties to a bankruptcy will usually model EBDIT - and the other variables such as the appropriate multiple for valuation purposes - as a range of values. The range of expected values – base case, upside and downside – will be calculated, and estimated probabilities assigned to each of these values. It is on the basis of such expectations that the recoveries on a downside case under an extended bankruptcy will be estimated by each of the parties to the bankruptcy.

Second, the assumption of a single class of creditor must be modified. There are often several classes – secured creditors of various types (working capital secured creditors, fixed asset secured creditors, lessors, junior secured creditors, etc.), plus unsecured creditors which will always include trade creditors and may include various levels of senior and junior unsecured creditors. The potential recoveries of each of the classes of creditor must be estimated under the assumption of an extended bankruptcy. Often, there may be some potential, however small, for the value of the firm to rise to a point where it covers all liabilities and all creditors can be paid off – in which case equity will recover some value. In such cases, each of the players will have some positive expected value for their anticipated recoveries, and they will expect some positive pay-off in return for accepting a consensual agreement. The minimum pay-off for each creditor class will depend on its expected recoveries under an extended bankruptcy with distribution of the firm's value being done under strict priority.

The logic makes it clear that equity - or management through the board of directors - controls the game. Prior to the filing, banks may have some control over the timing of the filing through the covenants in their lending agreements. When the firm's performance deteriorates to the point that one or more of these covenants is tripped, the bank may have an incentive to force an early bankruptcy to prevent further erosion in the firm's value and the bank's recoveries. Covenants are therefore extremely important tools in workouts. We will return to this point in the next section.

Under this logic, it becomes clear why banks are almost always are prepared to allow junior creditors - and often equity - to walk away with significant value. This analysis of the value of the bank's loans stands in stark contrast to the typical loan valuation done by banks holding secured loans. The standard bank analysis takes the book value of the assets over which security is held and applies standardized 'haircuts' to estimate the recovery value. Under 90 day trade receivables, for example, are usually valued at 75% of book value, current inventory at 50% of book value, and fixed assets at some type of 'appraised' value. In many cases, these rules of thumb yield security values which suggest full recovery. Bankers are routinely surprised that when the insolvency occurs they are unable to recover their loans which they had estimated were fully covered by security value.

The flaw in the bankers' logic is the proposition that they can obtain access to the assets over which they hold security, and that they can dispose of these assets at around the estimated security values. Bankruptcy laws act to frustrate this simple proposition. The stay and exclusivity provisions prevent creditors from seizing the assets over which they hold security when the default occurs. The consensual plan acts to override the terms of the original loan and security agreements. In other words, the value of the secured bank loan is no more than the bank can negotiate through the consensual plan of reorganization. As a result, losses on bank loans to insolvent debtors typically run at around 40% of principal and interest – even though the banker had calculated that his loan was secured by assets that provided full cover and promised no losses.

3. Tactics for the Credit Workout

'Workout' is a term applied to a distressed credit where the banker or other creditors attempt to 'work out' the problem to minimize losses. The 'workout' commences at the point the particular creditor recognizes a material probability that the credit is going to be a problem. The workout involves designing and implementing those steps that can be adopted to minimize losses.

When bonds or credits are first negotiated between the company and its lenders, the borrowing agreements are almost always structured to contain various covenants which set bounds on the permissible range of activities and financial performance of the company. These covenants normally include one or more financial covenants. If the borrower's condition deteriorates significantly and one or more covenants is breached, the bank can "call a default". Under the terms of the loan agreement, a formal default "accelerates repayment" – ie. requires the firm to immediately repay all bank indebtedness. Since the firm does not have the liquidity to repay the bank, calling a default forces the firm to file for bankruptcy protection. As a result, when there is a potential breach of a covenant, the bank can bring the borrower back to the table to renegotiate the terms of the agreement. Failure to reach an agreement can result in the loans becoming immediately payable in full (acceleration).

Bond debentures for weaker firms normally contain financial covenants. Such covenants, however, are almost always weaker than the covenants in bank loan agreements. Further, since the bonds are usually widely held, it is rare for a firm facing a bond covenant breach to be able to negotiate effectively with the dispersed group of bond holders. As a result, a violation of a bond covenant normally results in the bond Trustee calling an automatic default and acceleration.

Corporations understand the extent of power these covenants give to creditors in the event of a significant deterioration in the company's performance. For that reason, the corporation will always resist covenants. The extent of covenants contained in any agreement will be determined by the financial strength of the company when it negotiates the agreement and by the state of credit markets at that time. Companies which are financially very strong will achieve indentures and loan agreements which have no financial covenants or minimal financial covenants. Weaker companies will have to accept stricter covenants as lenders insist that bounds be set on the risks that they will tolerate in buying the bonds or establishing the credit.

To explain how the various sets of covenants in different layers of debt affect a workout, it is useful to begin the analysis with a consideration of bonds.

Bonds are typically held by a number of uncoordinated investors. Bonds are issued under an 'Indenture' which sets out the terms of the bonds and appoints a trustee (often a Trust Company) that monitors the compliance of the company with the terms of the indenture. The typical bond indenture for a solid investment grade company (say BBB and above) will include relatively few and weak covenants, if any. There may be a tangible net worth covenant (book equity less ‘intangibles’ such as goodwill), and often an ‘issuance’ test which restricts the company from issuing new debt if the resulting debt-to-equity would be above some specified threshold. The indentures for debt of weaker companies, say BBB- (the lowest ‘investment grade rating) and BB or BB+, are likely to contain additional covenants such as ceilings on debt and maximum debt to equity ratios. These covenants can be viewed as restricting the borrower to a band of risk. They are rarely useful in workout negotiations as banks usually have tighter covenants which will trigger before these bond indenture covenants.

Indentures rarely include a mechanism for changing their material terms other than through a 100% vote of bondholders. With bonds distributed to a variety of unconnected holders, the likelihood of any compromise with bond holders when the company’s affairs deteriorate is remote. Bond holders are not therefore in a position to negotiate 'workout' compromises with the borrower. If they are dissatisfied with the condition of the company, their main recourse is simply to sell the bond. Bondholders who are unhappy will normally recognize the loss and sell the bond on the open market to investors who have a higher risk tolerance. In such circumstances, the market price of the bond will drop to the point where the higher yield is commensurate with the new risk level. If the financial condition of the company continues to deteriorate to the point where a covenant in the indenture is violated, the trustee will call a default and accelerate the bonds. At that point, if not before, the issuer of the bond will file for bankruptcy protection.

Bonds for companies underwritten at a rating below investment grade (sometimes called high yield bonds) will typically include a series of stronger covenants. Financial covenants can include requirements such as minimum tangible net worth, a maximum debt-to-equity ratio, a minimum EBDIT-to-debt ratio, and an issuance test. Holders of such bonds will have better covenant protection than holders of bonds that have fallen from investment grade quality.

Bond indentures will always include cross default & cross acceleration clauses. These clauses specify that if an event of default or acceleration has occurred in any other indebtedness of the company, the bonds immediately acquire the right to call a default and accelerate bonds. (Acceleration means any term debt becomes immediately payable, whatever the repayment schedule in the bond indenture.) These cross default clauses are extremely important in protecting the recoveries achieved by bond holders. It means that as soon as the bank or banks declare a formal event of default, bond holders can immediately do the same. It ensures that once a formal default has been declared, bond holders will also be able to force negotiations with the firm.

The contracts for off-balance sheet obligations such as swaps, options and letters of credit also contain similar cross-default language. If a default is triggered in any other agreement, options contracts normally allow the financial institution holding the option to ‘mark-to-market’ the option and crystallize this amount into a direct money obligation of the company. (To keep its options book balanced, the financial institution will enter into a similar option with another counterparty which it can do at the same market price it used to crystallize the obligation of the defaulting corporation.) [11] Similarly, on the occurrence of a default, most letters of credit immediately become direct liabilities of the company with a requirement that the company to post cash collateral. The cross-default provisions in the contracts covering all such liabilities are extremely important to protecting the recoveries on such contracts.

These cross default and cross acceleration clauses are extremely important since they ensure that once a formal default in one layer of debt has occurred, any qualified group of creditors can immediately petition the company into bankruptcy. To this extent, once a default has occurred, all creditors are put onto the same footing.

Many high yield bonds are issued by companies which are newly acquired in a Merger or Acquisition transaction. (M&A.) In such cases, the different layers of debt are simultaneously negotiated. Frequently there are several tranches of debt for a highly leveraged transaction: senior secured bank debt; senior secured bonds; and sometimes one or more layers of junior bonds which may or may not carry security interests. The underwriters for each of these layers of debt jockey for position with the other debt layers.

In negotiating the senior debt, the senior debt underwriters wish to obtain as strong security and covenants as possible. They also wish to see the other debt holders provided with as weak protections as possible so that in a workout situation the senior lenders can effectively control the workout. In particular, the senior debt holders wish to ensure the ability of junior debt holders to call a default is as weak as possible. If they succeed in this, and if the company becomes a workout, the senior debt holders will be able to extract the maximum improvement in their position through accelerated repayments, new security, tighter covenants and increased fees without allowing the junior debt holders the opportunity of objecting. While the junior debt indentures will always include some level of financial covenants, senior debt holders are often able to insist that the company will have up to 180 days of 'grace period' within which it can correct any default situation without triggering the acceleration clause in the junior debt indentures.

At the same time, the underwriters for the junior debt wish their debt to have as many of the attributes of senior debt as possible. They will push aggressively for a junior position on security, financial covenants and other protections for their position. Their objective is to achieve bargaining strength with the debtor as early as possible and to restrict the ability of senior creditors in achieving any relative improvement in their position.

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[11] The financial institutions which were prepared to inject funds into Long Term Capital management when it ran into trouble insisted that the banking syndicate (whose loan agreement contained the only financial covenant over LTCM's operations – a minimum net asset value covenant) pass a resolution stating that there had been no covenant violation. Passage of this resolution ensured that there could be no argument by trading counterparties to LTCM that there had been a covenant violation and therefore that their trading contracts could be crystallized. This ensured there would be no collapse in the trading book of LTCM.

Where the negotiations on the interrelated structures of these lending agreements ends up depends on the strength of the company, the relative size of the different issues of debt, and the state of the lending markets when the underwriting is done.

Having described how the relative pre-petition positions of the various groups of creditors have been negotiated, the structure of typical bank credit agreements must be examined.

Bank debt has traditionally been very different from bond indebtedness. Since low risk, high investment grade companies can borrow inexpensively in the public markets, bank credit tend to be used by companies which are somewhat higher in risk or companies that are too small for the public markets. Banks are therefore often in a position to require significantly tighter covenants, including covenants that specify minimum cash flow coverage over interest or fixed charges and covenants that specify minimum security value coverage for outstanding loans under the credit.

The original term to maturity of term bank debt is, on the average, shorter than the term of most bonds. The lender is normally a single bank or a ‘syndicate’ of banks. The loan agreement binds the bank or group of banks in a contract with the borrower, with each bank being named in the loan agreement. Bank credits are frequently ‘revolving credits’ – in other words they provide an availability of credit and the company can draw down and repay these loans as they wish. Banks typically have privileged access to the customer and benefit from ‘inside’ information. They are therefore in a position to react more quickly to deteriorating credit conditions. Moreover, with their more intimate knowledge of the company and its affairs, banks are in a position to provide further liquidity (or loans) to a company to assist it over temporary financial difficulties. Neither of these functions is played by the bond investors.

Loan Agreements typically contain a further set of provisions which enable the appropriate majority of lenders to vary the covenants in the loan agreement. It is normal, for example, for 50% of the lenders by number and lenders collectively accounting for 66 2/3 % of the committed credit to be able to bind all institutions in the syndicate to changes in the financial covenants. Further, such agreements are structured so that a violation of a financial covenant does not provoke a formal default (which triggers the cross-default provisions in bond indentures and other financial contracts of the company). Instead, a formal vote by the syndicate – often with the same double majority required for changes to the financial covenants – is required to declare a default and trigger acceleration. These mechanisms allow bank syndicates to respond in a tactical manner to emerging default conditions rather than relying on a mechanical response as is typical in bond indentures. By avoiding default yet pressuring the company into better conditions, the bank lenders can improve their position without allowing junior lenders a similar opportunity to improve their position.

With this background, we can now turn to an examination of the tactics that can be used by banks in conducting a workout of a troubled credit.

Bankruptcies rarely happen overnight. There is usually a period of slow deterioration. Experienced bankers normally can spot the emerging trends.

It is useful first to consider workouts where there is a single banker to the troubled company, or at most there are two or three banks which together can control changes to the loan agreement.

Losses can be significantly reduced or even avoided through prompt and effective workout tactics. The key lies in the establishing an effective covenant package at the time the loan is negotiated, and then spotting any deterioration at an early stage. Spotting the emergence of a material risk of default is not so easily accomplished. Few bankers have practical training in workouts. Most bankers prefer to believe in the success of their customers and therefore have difficulty in accurately 'reading' the early warning signs of distress.

It is also worth noting that the managers of most companies that get into trouble themselves are slow to react to difficulty. Few managers have experience in running a distressed company. They do not recognize the warning signs and fail to understand the costs of bankruptcy.

Management and shareholders of distressed firms frequently wish to maintain underperforming divisions and assets. This wish is often quite rational. If the company's markets improve, and if such assets often have high profit leverage, the increased profits from these assets will accrue to management and shareholders. On the other hand, if the markets fail to improve, the costs of maintaining these assets will fall to the creditors through higher losses. It is for this reason that the closure and sale of underperforming assets is usually the most hotly contested area of negotiations between distressed companies and their bankers.

As the financial fortunes of a company, there are usually two points at which banks can bring pressure to bear on the company. First, at some point most companies require further funds, and second, if deterioration continues, covenants will be broken.

The losses posted by the troubled company usually involve some level of cash drain. Few distressed companies have access significant amounts of spare liquidity they can draw on, and most have to rely on new loans from their bankers to replace their cash losses. Advancing such loans can often be rational for the banker even when the 'gone concern' analysis indicates that the bank faces a likely loss on the account. The test is whether the fresh loan will lead to a drop in the expected loss estimated through the 'gone concern' analysis.

As a condition to advancing new funds, the banker has the opportunity to re-negotiate the loan and security agreements with the customer. If the customer objects, the customer has the option of seeking a loan from a new banker. However, if the current banker has security over the company's assets, the only way the new banker could obtain new security would be take over the entire relationship and pay out the old banker. Most new bankers are extremely reluctant to 'take out' an existing banker because of the risk that the old banker may be aware of problems that the new banker is unable to identify before taking over the connection.

If no new banker can be found, the customer also has the option of filing for an immediate bankruptcy. However, as long as there is a possibility that a filing might be avoided, most companies exhibit a reluctance to seek protection due to the costs of bankruptcy. Consequently, for most practical purposes, the customer finds himself obliged to meet the terms requested by his current banker if he is to obtain an increased to his loans.

The second point at which the banker can exert pressure over the customer occurs when the customer is about to violate one or more of the covenants in the loan agreement. Again, the customer has the options of trying to find a new banker or of filing for protection. However, if the negotiations are begun at an early enough stage, and if the demands of the banker are reasonable, some negotiated accommodation is likely.

In some cases, the bank will benefit from a third point at which pressure can be brought on the company. If, when preparing the year end statements, the company's auditors judge that there is some likelihood that the company may default on its credits during the forthcoming year, they will tell the company that they will have to put a 'going concern' qualification into their formal auditors' opinion. Such a qualification is a 'red flag' to creditors generally – including trade creditors – that the company is in financial difficulty.

When the auditors tell the company that they are considering a 'going concern' qualification, the company can approach the bankers to obtain a relaxation of covenants to the point that the auditors will no longer have to include a going concern qualification. At this point, the banker has negotiating power over the borrower to obtain improvements in the bank's position in return for covenant relaxation.

There are four major areas in which the banker can seek to improve the terms his or her arrangements as a prior condition to advancing any new funds or agreeing to covenant relief.

First, if there are any assets over which security has not been taken, the banker can insist on taking new security over these assets. Increased security protection – particularly where the value of the security well exceeds the extent of the new loans – can reduce the overall expected losses for the banker.

Second, the banker can insist on the closure or sale of underperforming assets. Closure of underperforming assets that act as a financial drain on the company can improve the terminal value of the company at the point it exits any insolvency. This will improve the recoveries of the banker. A requirement for the company to sell assets will usually be accompanied by requirements that the sale be completed by a particular date and that a significant portion of the proceeds be applied as an early pay-down against the credit. This reduces the banker's exposure and the size of likely losses. However, as pointed out above, most customers will react strongly against the closure or sale of underperforming assets. Negotiation of these issues can become extremely difficult.

Third, the banker can insist on fees and increased spread on his or her lines. These income streams also reduce expected net losses.

Fourth, the banker can obtain corrections to any errors in the original documentation which threaten to reduce recoveries.

In performing these workout tactics, bankers will keep a close eye on the default triggers embodied in the covenants of bond indentures and any other agreements between the company and its creditors. The objective of the bankers will be to maximize their expected recoveries before any default occurs under the agreements with other creditors. It is for this reason that when financing for an LBO is negotiated, junior creditors will press for covenant levels that are set as close to those of the bankers as possible. They want to minimize the scope bankers have in a workout to leave the junior creditors to one side without a default trigger as the bankers maximize their recoveries before a default.

These considerations emphasize the negotiated nature of most defaults. Default is a choice variable endogenous to the workout process. The relative bargaining positions of all creditors enter into the tactical and strategic decision making of the debtor and each class of creditor.

Typical workouts can last over a period of years. Not surprisingly, the majority of defaults occur at the trough of the credit cycle. In many cases, the affairs of the troubled companies are at the lowest point. Simply waiting for the cycle to turn and the affairs of the company to return may well be a viable alternative for both the bank and its customer. Firms in the commodities and materials processing industries face cyclical product pricing patterns which are reasonably predictable. If the banker provokes a default at the bottom of the cycle and thereby forces realization at the asset values obtainable at this low point in the cycle, he can face considerable losses. In such cases, the financing of losses though the trough of the cycle may well significantly reduce or even eliminate losses. Bankers can insist on considerable remuneration for such forbearance.

When these various strategies are employed by well trained bankers and applied early in the deterioration cycle of troubled customers, the recoveries made by the bank can be very significantly enhanced.

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