

The Fixed Interest Investor: Is He Sufficiently Informed?

Introduction:

A number of basic principles are used in measuring the safety of investment in fixed interest securities. These are well-known to security analysts and are adequately stated and discussed in a number of text books.

Having established that the business of the borrower is well established, is competently managed, and is in a sound competitive position, the acid test of the safety of the investment in a fixed interest security of the borrower is whether the borrower will be able to meet all of its obligations under all foreseeable conditions. The primary aim of the investor is to avoid trouble rather than to protect himself in the event of trouble and thus the question of the assets charged as security for the investment is of secondary importance. If the investor is satisfied that the borrower has established a reasonable debt policy he has no fear of it being unable to meet its obligations when conditions are normal. He must, however, make an informed decision that the company can meet its debt obligations even in difficult times, including recession. I propose to discuss in this article whether the investor is provided with sufficient data to make an informed decision on this question. I will also deal with certain other aspects of the decision to invest in fixed interest securities which relate to this question.

“New Framework for Corporate Debt Policy”

In the March issue of this journal, Messrs. Williams and Hopkins explained and commented upon the proposals of Professor Gordon Donaldson which were published under

• *The opinions set out in this article are personal to the author.*

the above title in 1962 in the Harvard Business Review. That article summarised Donaldson's approach, accepted his criticism of the methods commonly used by the management of companies in reaching borrowing decisions, and considered at some length his suggested technique for making a more logical and useful analysis.

Donaldson discusses corporate debt capacity from the standpoint of the management of the borrowing corporation and concedes that other groups might have a different concept of the appropriate limit on debt. The article, however, is not limited in its application as the underlying concepts are valid regardless of how one looks at the problem. In my opinion Donaldson's article does

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suggest directions for improvement in the external as well as the internal analysis of the risk of debt financing and his views deserve careful study by all concerned in the analysis of a borrower's debt capacity.

In the article by Williams and Hopkins, there was only passing reference to Donaldson's statement that the decision to incur debt could not adequately be expressed in terms of asset cover and that an earnings coverage provided only a slightly better indicator. I would therefore like to deal a little more fully with Donaldson's basis for criticism as it is unlikely that his article is generally available to the readers of this journal.

Donaldson's Approach to the Conventional Rules Expressing Debt-Capacity

The primary deterrent to using debt finance to the limit of its availability is the ultimate hazard of

running out of cash resulting in fixed obligations being defaulted. Donaldson uses the term “cash inadequacy” to cover all the various problems involving the inability of the company to make cash payments when they become due and stresses that the most likely time for this to happen is when sales decline in a period of recession. Donaldson's recommendation to management is that a detailed analysis of projected cash flows should be prepared and that a positive assessment be made that there will not be cash inadequacy during a period of simulated recession. It is not the purpose of this article to analyse the technique for making that assessment which is fully set out in Donaldson's proposals and is explained and commented upon by Williams and Hopkins in their article.

Donaldson considers that the conventional form for expressing debt-capacity rules is of very little assistance in assessing the risk of cash inadequacy. I believe that his criticism is justified and that the reasons for his view are valid.

Balance Sheet Relationship

Debt capacity is most commonly expressed in terms of the balance sheet relationship between secured and total liabilities and total tangible assets. Trust Deeds in Australia for borrowing companies, other than finance companies, almost all limit secured liabilities to 40 per cent. and total liabilities to 60 per cent. of total tangible assets. I think there is good reason to accept that this method of assessing debt-capacity simply ignores the key problem of cash inadequacy; in addition, the selection of these percentages for a wide variety of companies seems to be unjustified. Donaldson cites some of the more obvious weaknesses of relating the debt-capacity to historical asset values as a way of looking

at the chances of running out of cash:

- There is a wide variation in the relation between the principal of the debt and the annual obligation for cash payments under the debt contract. The annual cash outflow associated with a particular amount of debt on the balance sheet obviously varies in relation to the basis of repayment and will be different where interest only is paid until maturity or the case where both principal and interest are repayable over the period of the loan.
- Where sinking fund provisions exist the principal amount of the debt will decline and will represent a lower percentage of the total assets of the borrower but despite this the annual cash flow to provide for repayments may remain the same until maturity of the debt. The term "sinking fund" is used in this article to describe the periodic retirement of a certain portion of the principal amount of the debt.
- Depreciation policies and stock valuation procedures can result in substantial changes in asset values that clearly have no bearing on the borrower's capacity to meet its fixed obligations.
- The conventional ratios take no cognizance of certain fixed term contracts that do not appear in the balance sheet. One important example is that payments under lease contracts have a significant impact on cash flows.

Overall, the balance sheet values of assets do not necessarily represent their realisable values and a surplus of those assets does not guarantee solvency.

Earnings Coverage Ratio

The earnings coverage ratio discussed by Donaldson is the ratio of net income available for debt servicing to the total amount of annual interest plus sinking fund charges. This formulation for expressing the limits of debt-capacity

provides that no new debt capital shall be raised unless the income available for debt servicing charges is equal to or in excess of some multiple of the debt servicing charges. A multiple, say, three to one, is chosen with a view to establishing that the borrower can cover the debt charges even during a period of reduced earnings.

Donaldson concedes that this standard does provide a better basis of measuring risk in terms of factors which bear directly on cash adequacy. It is implicit that a higher ratio is required for a borrower which could reasonably face great fluctuations in earnings.

Donaldson considers that this basis of assessing internal debt policy also has limitations.

- The term cash flow is differently interpreted by analysts and accountants. Generally, and particularly in times of rapid change, including recessions, one cannot safely assume that net earnings as disclosed in the accounts are equivalent to net cash flow. This is even the case when adjustments are made for non-cash items such as depreciation.
- The establishment of a proper ratio is a significant problem in itself. Should the ratio for a specific borrower be three to one or ten to one? Perhaps the best approach is to work backward from the data of previous unfavourable periods, which would indicate the low points of earnings, towards a ratio between this experience and some measure of "normal" earnings. The intention would be to ensure a slightly better than one-to-one ratio between net earnings and debt servicing at all times. Unfortunately there are serious deficiencies in applying historical data to future situations. One obvious problem is whether one must assume that a company that has recorded losses in the past must be re-

garded as having no debt-capacity.

In Australia, sinking funds are rarely provided and the use of an interest cover ratio fails to take into account that provision is not being made to repay the debt on maturity. In addition, borrowing limitations have normally been restricted to balance sheet relationships and it is only recently that some limitation in terms of cash adequacy has been incorporated in the trust deed. It follows that Donaldson's criticism of this formulation of debt-capacity would be more severe in relation to borrowings in Australia.

The Application of Donaldson's Technique in Australia

Donaldson accepts that very considerable effort in the collection of data is required and much expertise is necessary in processing it to establish debt-capacity. I agree that a new and better technique is necessary but I do not consider that borrowers generally, at this point of time, have the resources to make the effort or have the expertise necessary to utilize that technique. Williams and Hopkins state that it is their expectation that borrowing propositions will shortly be backed by the type of calculations described by Donaldson and that security analysts and other investors must prepare themselves so as to be able to judge the predictions contained in the analysis and the conclusions drawn from them. I think the authors are over optimistic in making this assumption and that it will take some considerable time before any effort is made to attempt the Donaldson technique. I do hope, however, that sometime in the future the Donaldson type of technique will receive wide acceptance.

Since I agree with Donaldson's criticism of the present form for expressing debt capacity rules I am suggesting that the rules require immediate revision and that adequate

information should be made available to security analysts and investors to enable them to establish better tools to make an informed assessment of a company's debt-capacity. This is an essential step until such time as techniques as sophisticated as that offered by Donaldson are widely accepted and used in Australia. Perhaps Donaldson's type of technique will be more readily used when it has been refined and modified to make its application more practicable.

Can the Security Analyst or Investor Assess Debt-Capacity on the Information Furnished

Consideration of the traditional form of prospectus or placement letter for a fixed interest issue reflects the paucity of the information furnished to the security analyst and investor to enable him to make an informed decision on the borrower's debt-capacity. At best it can be said that the prospectus will contain an analysis of profits over the preceding five years and details of the balance sheet at a particular point of time. In some instances placement documents do provide a comparison of the balance sheet items over a five-year period. The terms of the issue are then stated and a calculation is made, based on the figures reported in the last audited accounts, of the asset backing and interest cover in relation to the debt security offered.

A study of this information and the company's history recorded in the Stock Exchange Service enables some assessment to be made of the nature and location of the business, the size of the enterprise, and its reported financial history. This may enable a skilled analyst to establish as a first and basic judgment that the business is established, has competent management, and is in a sound competitive position. Having come thus far it is necessary to assess in much greater detail the company's ability to meet all of its obligations under all foreseeable conditions and thereafter to con-

sider the nature of its charge against the assets. The latter consideration should be put in its proper perspective and the older view of relying on the assets for payment in the event of the company being unable to effect payments may be regarded as of secondary importance; this reliance on the assets under those conditions is very questionable in relation to the holder of an unsecured note.

The key question is the company's ability to service its debt charges, even in unfavourable conditions, as all too often the falling back on the assets proves to be less feasible in practice than in theory. The reasons for this are the shrinkage of reported asset values when the business fails, the difficulty of asserting the secured creditor's rights until it is often too late, and thereafter the delays and other disadvantages incident to receivership or liquidation.

If it is therefore accepted that the investment offered is in a well-established and properly managed company in a sound industry, it becomes necessary only to decide the most important question of all. That decision is that this investment will be able to withstand adversity and one therefore has to make some calculation as to whether in difficult times the cash flow will be sufficient to pay all of the borrowing company's fixed charges. Cash flow in this context means the total flow of cash available to service all the borrower's fixed obligations and not profits plus non-cash items, such as depreciation, extracted from the revenue statements. As an extreme, if a company has an inherent lack of stability, so as to make its solvency doubtful in unfavourable conditions, the security is simply unsound as a fixed interest investment. In the more stable type of enterprise the question is the degree to which a company's future cash flow will be affected by depression and whether when so affected it is still sufficient to cover the total burden of obligatory cash outflows.

The optimum analysis is clearly

that proposed by Donaldson as a sound and reasoned estimate is made of the cash coverage available during a depressed period to meet the fixed charges. I stated that I consider this approach impossible at the present time in practical terms and therefore propose to offer suggestions as to the information which should be provided as a matter of course to enable a balanced judgment to be made as to the risk of the borrower being faced by cash inadequacy.

An Assessment of Adequate Cash to Pay All Fixed Charges

It is traditional in Australia to regard fixed charges and interest charges as identical, taking these interest charges as the total debt burden of the borrower. This is inappropriate as it is obvious that fixed charges are not identical with interest but include far more widely all charges which the company is obliged to make under the various contracts it has concluded in the course of its business. Those most important, perhaps, are—

- The interest on all interest-bearing obligations which are secured or unsecured.
- Rentals or other lease payments.
- In the case of holding companies, the dividend requirements on underlying preference share issues as well as fixed charges on subsidiary debt when computing coverage from a consolidated statement.
- Any other charges, whatever their nature, in respect of which the company has incurred a fixed obligation. This category would cover payments under contracts of sale or under hire purchase agreements.
- Contingent liabilities which are likely to become actual obligations.
- Payments due under a sinking fund or other obligation of redemption.

The sinking fund has not found favour with the Australian investor and borrowing companies do not

therefore concern themselves very greatly with this question. It is my view that there is good reason for the provision of a sinking fund and I have no doubt that, in time, the Australian investor will follow the lead of the international investor in requiring a sinking fund to be provided as a matter of course in a fixed interest issue. This question is, however, a matter for discussion on its own.

Where a sinking fund is not provided I think that a notional periodic redemption of the principal, or sinking fund, should be assumed in fixed interest issues and should be part of the total fixed charges which are required to be covered annually. In appropriate circumstances this notional calculation might be made to allow for a large balloon payment on maturity because of the amount of the estimated uncommitted cash flow in relation to the amount of the maturing debt. I accept that this notional concept is novel and its assessment may create further difficulties of analysis. It is, however, a thought to be researched and discussed.

It may be mentioned in regard to any such assumed capital repayment that errors are often made in computing coverage by not calculating all items consistently on a before or after tax basis. If all the calculations are made on an after-tax basis the notional sinking fund requirement is simply added to the other fixed charges. If, as is normal, the computation is made on a pre-tax basis it is essential to express the sinking fund payment in before-tax terms by grossing up the amount in relation to the borrower's tax rate.

There may be resistance to the provision of all of this information but I do not think the resistance will be well founded as the fixed interest investor is entitled to know all of the fixed charges which the company has obligated itself to bear. The equity investor has requested this type of information without success but the fixed interest investor

is in a more powerful position.

In my view it is not proper to make a calculation of cash adequacy based on a single year's earnings or on an average of the last and earlier years—often three or five. It is essential to consider all the fixed interest charges in relation to the simulated cash flow during a period of depressed earnings and even recession. In other words, the coverage should be assessed in relation to cash flow in an unfavourable period and for this purpose, where possible, one should have regard to the history of the major flows of cash over a period of, say, seven to ten years, and in particular the coverage during the worst year during that period. A detailed study of all companies in the industry might assist in arriving at a balanced decision on the simulated cash flow that could result from depression or recession.

I believe that the traditional calculation of interest cover does not give a true indication of cash adequacy and that it should be replaced by an assessment of total fixed obligation coverage.

Asset Backing

It is the very basis of this article that the primary aim of the investor in fixed interest securities is that he should avoid trouble rather than protect himself in the event of trouble. It therefore seems appropriate to consider the question of asset backing as secondary to the coverage for the total debt burden. This is more obvious in relation to an unsecured note. This does not mean, however, that asset backing is of no importance but merely that it should take its proper place in the assessment of the soundness of a fixed interest security.

Traditionally, one finds the question of asset backing regarded with unnecessary importance and this is seriously questionable when one realises the method that is used in making that calculation. Trust deeds for companies (excepting finance companies) generally include a limitation that the secured borrowings

should not exceed forty per cent. of the tangible assets and that all liabilities should not exceed sixty per cent. of the tangible assets. This "rule of thumb" is of doubtful significance when one appreciates that the value of the assets for this purpose are historical balance sheet values and that there is no real assessment of what the assets will realize on either a going-concern basis or upon their forced sale.

These ratios are also applied indiscriminately to companies of varying types where the underlying assets are of an entirely different nature. All tangible assets simply cannot be treated on a similar basis and it is pleasing to note the approach of an issuing house in a recent issue in the United Kingdom where the borrowing limitations were geared to the aggregate of specified percentages of various carefully categorised assets. Recognition was given to the distinction between the various assets of the business and in so far as the borrower invested in the various types the power to borrow was regulated.

If the limitations on borrowers is realistic in relation to the nature of the assets and one has to fall back on the underlying security to obtain payment of the fixed interest investment, no loss should be suffered.

Conclusion:

It is my overall view that the fixed interest investor is not provided with adequate data to reach an informed decision. In addition the tools of analysis known as interest cover and asset backing are inappropriate measures of the borrower's debt-capacity in their present form.

In the place of the interest cover calculation there is clearly a need for the assessment of a total fixed obligation coverage. This coverage must be calculated realistically and must indicate that even in difficult times the company will generate a sufficient cash flow to meet the obligations. As far as asset backing is
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of obtaining support for loan programmes.

It was to be part of the function of each Authority's Sinking Fund to provide open market support. However, with the decline in public response, many Authorities have looked to their Sinking Funds as a source of private loan money and purchases of stock on the open market have become so limited as to be ineffectual. The problem is a cumulative one in that the less public response, the greater the underwriting shortfall, the more discounted stock available and the less relative open market support that can be provided.

The Government agency that would be responsible for open market support is difficult to ascertain. Few, if any, of the State Treasuries would have sufficient funds available for such transactions. However, some method of controlling the yields available on the open market is required and it is possible, given higher interest rates and greater public participation, the individual sinking funds will be in a position to bring about this situation.

In any event, some provision could be introduced for the prior redemption at par of loans in amounts up to say a maximum of \$10,000 where extenuating circumstances are involved.

The Future of Underwriting

Assuming action is taken to raise Semi-Governmental loan rates to more realistic levels, Authorities must seriously reconsider the merits of underwritten public loans.

Although it is possible, even under current conditions, to achieve a return in excess of 6 per cent from sub-underwriting Semi-Governmental public loans, this result has rarely been achieved. In fact, the current crop of disastrous shortfalls is resulting in sub-underwriters receiving stock on returns far less than are available from private loans, after

allowing for the maximum underwriting commission.

It seems probable that sub-underwriters, who invariably come from the ranks of the "30/20" lenders, would be more satisfied with a guaranteed realistic return on Semi-Governmental stock (let us assume 6 per cent per annum under current conditions) than the vagaries of the present underwriting system or the better though still not competitive private loan rates.

Such a move should also benefit the borrowing authority. The present system of public loan underwriting is, in many instances, involving the borrowing Authority in costs, which in relation to the amount raised, are out of all proportion. Taking into account costs of underwriting, printing and promotion and amortising this amount over the average period of the loan raised, the net cost per annum to the borrowing Authority must, in many cases, exceed 7 per cent per annum.

Given the more attractive rates of interest it should be possible for the borrowing Authorities to make public loans without resorting to external underwriting arrangements. The results are likely to be satisfactory and the cost cheaper.

The problems associated with the disposal of heavily discounted shortfall commitments should largely be overcome if the present system of underwriting is abandoned.

Conclusion

The solutions mentioned are by no means exhaustive and explore only some of the avenues open to ease the present Semi-Governmental financial problems.

In some instances, such as a revision of the regulations relating to trustee investments and the removal of stamp duty on the transfer of Semi-Governmental stock, the States can assist themselves. However, as explained, only with the co-operation of the Federal authorities can any real benefit be achieved.

The financing of national works is vital to the economic structure of the country at the present time

and by design or default it is the responsibility of certain State authorities to perform part of this work.

The arrangements under which the necessary finance is being raised are inadequate and outdated.

It is time for a change.

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concerned, much more information is needed in relation to each of the various assets in the balance sheet. The investor should be given some idea of the realizable value of these assets and trust deed limitations should be related to what these assets might realize in depressed conditions.

I do not believe that the suggestions that I have offered are in themselves an answer to the questions I have discussed. I think there will come a time when management will have both the resources and the expertise to make the calculations proposed by Donaldson, and it will be possible to allow security analysts and investors the opportunity to judge the calculations before making their decisions as to the soundness of fixed interest securities. Perhaps Donaldson's technique will be more readily used when its application has been made more practicable by refinement and modification.

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that might be occurring in sections of the group.

Finally, there is in my view a great need for more accurate information on the causes of company "failures" in the past. "Failures" in this instance covers "declines" as well as actual bankruptcy. Those cases which have received considerable press publicity in recent years have usually had a flavour of over-borrowing. It would be of great value if members who have had the opportunity of making post-mortems could submit their findings in writing for the Society's library, even if the companies concerned remain anonymous.