3.1.2 Leverage as the Main Component of Financial Strategy

Unit: Unit 1 – Treasury Strategy

Module: Module 3 – Financial strategy

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Summary: Leverage is the proportion of debt in the financial structure and this chapter looks at how that decision might be made, from traditional corporate financial theory, through to current market practices such as multiples.

Keywords: leverage, gearing, strategy, Modigliani and Miller, trade-off, adjusted present value, pecking order theory, multiples, CAPM, debt capacity, multiples, life cycle

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Learning outcomes:

1. High leverage leads to higher risk for shareholders.
2. The work of Modigliani and Miller, together with the Capital Asset Pricing Model, underpins most conventional approaches to the leverage decision.
3. The cost of capital approach leads to: (a) An ideal leverage for a firm, and (b) a hurdle rate for investments.
4. The use of geared and un-geared β is crucial to getting the best from the model.
5. For conventionally quoted firms, models often show a minimum WACC at about 50% debt finance, but management often prefer lower levels to give them flexibility (and an easy life?). Structured deals tend to have higher proportions of debt.
6. There are many criticisms of the approach, notably
7. around the assumptions used in key variables such as β and the equity premium
8. around the difficulty of applying it in complex multinational groups
9. earnings are not a direct component of the approach
10. Adjusted present value is an alternative approach to the leverage decision.
11. Debt capacity is a useful concept against which to consider leverage.
12. The Tradeoff model is a useful understanding of debt.
13. The Pecking Order theory can describe real behaviour.
14. The use of multiples, e.g. of EBITDA, has become widespread as a means of describing leverage and approaches the use of credit risk metrics to establish leverage, as used in credit ratings and their targeting.
15. Other facets of credit risk, including concepts of life cycle of the firm and products, and earnings volatility and leverage combinations are useful indicators for the leverage decision.
16. There are many reasons to borrow and the leverage decision may in some cases take second place to these reasons.

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1 Introduction

Financial leverage, however defined, is the first and most important element of financial strategy. It broadly defines credit risk and therefore pretty much defines the availability and cost of debt capital, as well as having an influence over the risk and returns available to shareholders and hence the type of shareholder who might invest in the firm.

The broad principle of leverage is that the return on equity is improved as long as the return on assets exceeds the costs of debt comprising that leverage – assets and equity both being measured at market value. But debt involves risk for the company and its shareholders because lenders have a prior claim on assets, earnings and cash flow for payment of interest and for repayment of loans, that is independent of whether the company can afford it or not. Hence, gearing results in higher volatility of after-tax earnings and free cash flow to shareholders.

This reading looks at the basic theory about decisions on leverage, which stem largely from Modigliani and Miller's work. Students should be competent in the calculations in this area, as, along with valuation questions, they form the core of many calculations seen in exams. While they may sometimes seem removed from life in a day to day treasury, they put a context to the strategy which impinges directly on a treasurer, namely how much debt to have and where it should come from.

While it is really the main theory of capital structure, the Modigliani and Miller approach does have weaknesses and there are plenty of alternatives on offer, including Tradeoff models, Adjusted Present Value, Pecking Order Theory and, most practically, accounting and cash flow measure multiples, which have become so important in the real world.

2 Modigliani and Miller

Read Chapter 7, pp 320 - 327 from Applied Corporate Finance, by Aswath Damodaran, 4th edition (from 'No optimal capital structure').

This reading covers the background to the theory of Modigliani & Miller together with ideas on other influences. This reading is crucial to understanding where the theory comes from, leading to the ideas about firm value maximisation and capital structure choices.

3 CAPM / Cost of capital approach

Read Chapter 8, pp 343 - 359 from Applied Corporate Finance, by Aswath Damodaran, 4th edition (From 'Cost of Capital Approach')

This reading shows in detail how the Capital Asset Pricing Model (CAPM) can be used to calculate the WACC and how it can be minimised. In particular, the concept of gearing and un-gearing β is explained and must be understood. It goes into some detail on the cost of debt which is useful to understand in a practical situation.

A more simplified example is also shown here, more in the form that might be seen in an examination.

Example 1: Gearing and un-gearing WACC

Consider the WACC calculation where;

Cost of debt, gross	=	6% and where debt comprises 30% of the enterprise value
Tax rate	=	40%
Risk free rate	=	4.5%
Equity premium	=	5.0%
Current β	=	1.2

Then

Kd	=	gross cost of debt x (1-t)			
	=	6.0 x (1 – 0.4) =	3.6%		
Ke	=	Rf + (βg x Equity premium)			
	=	4.5 + (1.2 x 5.0)	=	10.5%	
WACC	=	(0.7 x 10.5) + (0.3 x 3.6)		=	8.43%

What happens if we now increase the gearing to 60% debt 40% equity?

First un-gear the beta to find the 'asset beta', i.e. the underlying beta of the un-geared firm:

ßu = ßg / (1+ ((1-t) x d/e))

ßu = 1.2 / (1+ (0.6 x 3/7)) = 0.955

Then re-gear the beta for the revised gearing:

ßg = 0.955 x (1 + (0.6 x 6/4) = 1.815

New cost of equity = 4.5 + (1.815 x 5) = 13.575%

Assume also that at this level of gearing the debt costs an extra 50 basis points;

New WACC = (0.4 x 13.575) + (0.6 x (6.5 x 0.6))

= 5.43 + 2.34 = 7.77%

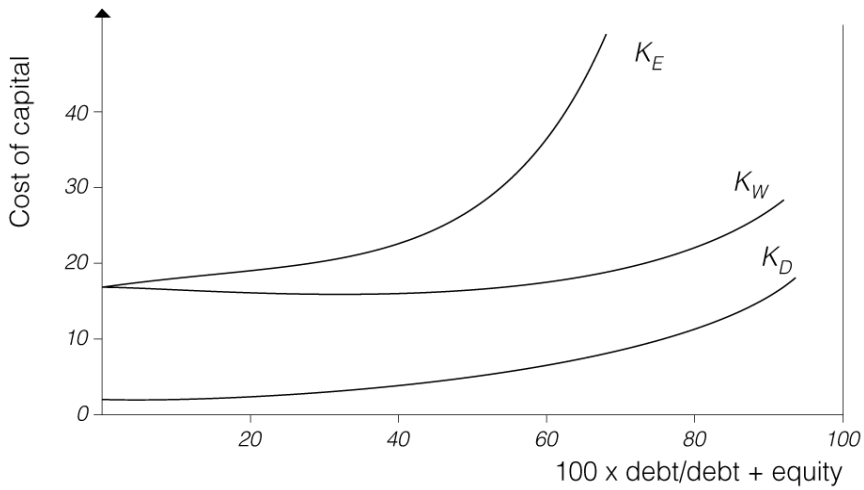
The WACC is lower than it was before because of the larger tax effect ('tax shield') and despite the higher costs of both debt and equity. In practice the higher costs of debt and equity keep the WACC curve fairly flat as gearing is changed. But note that focusing only on the cost of debt, which some treasurers, CFOs and advisors tend to do, or only on the cost of equity, will lead one to the wrong conclusions about gearing up.

Attempt Exercise 3.1.3 to practice how to find a minimum WACC for a typical firm. This shows how to maximise firm value and tells management an ideal debt / equity mix.

4 Conclusions from the Modgliani & Miller / CAPM / Cost of capital approach

The CAPM is one of the most common approaches to the deciding of a broad outline for a capital structure. Exhibit 1 below (where K_w is WACC) is very typical of the curve for many industrial or 'normally'[1] financed larger firms. It can seem that almost every example used in textbooks and in teaching material seems to come to an ideal solution of about 50% of the capital being financed by debt, albeit for largish firms. There is no reason why such an answer should be correct for every firm. A common feature is that the curve slopes down slowly (from no gearing) before turning up and then coming quite steep very quickly, as in Exhibit 1. Thus the ideal structure of around 50% leverage (debt / debt + equity) is actually very risky, because there is not much room for manoeuvre until the WACC rises steeply. Many firms therefore choose a lower level of debt than is ideal to avoid this very risk, and this also has the advantage of allowing a temporary gearing up – perhaps to achieve that deal so keenly sought by the CEO. Interestingly, however, structured transactions generally come out with much higher leverage, either to deliberately seek high returns or to discipline management.

Exhibit 1: Minimising WACC



An interesting extension of the approach can be seen in ***pages 362 – 363 from Applied Corporate Finance, by Aswath Damodaran, 4th edition***, where the effect of increased risk of financial distress is incorporated into operating performance.

5 Criticisms of the Modigliani & Miller / CAPM / cost of capital approach

The criticisms of the CAPM model are generally:

[1] The concept of 'normal' financing is of course open to interpretation but in this context can best be thought of as a company with diverse sources of finance which are unsecured and where refinancings are occasional and of just one part of the debt. This contrasts with, for example, private equity type financing where finance is arranged on day one and broadly left in place for five years, unless an event happens.

- Weakness of the underlying theory and especially the issues around calculating β.
    - β is very much a theoretical concept, describing returns against the market average of β = 1. However, this can be calculated over different periods, and at different times, often with very different answers. Those that are calculated show very low statistical reliability.
    - The cost of capital depends heavily on the accuracy of β as well as on the equity risk premium, which is also subject to debate.
- The assumptions around cost of debt which are often heavily simplified and never really known until actually tried (e.g. the bankruptcy cost of higher debt).
    - The cost of debt can be volatile, both the underlying rate and the margin.
- Difficulty in dealing with firms which operate over more than one business line or in different countries.
    - Many firms comprise different businesses which will each have different β characteristics.
    - Many firms finance themselves in different currencies, each of which may have a different risk free rate and different corporate borrowing rate. In addition firms have choices over currency and location of debt, each of which might change the model.
    - Country risk is not easily catered for.
- The fact that changing gearing causes firms to switch between credit ratings with a resulting effect of making debt easy / difficult to access or cheap / expensive depending on where the borrower sits.
    - This is most notable in the investment grade / sub investment grade jump (fall) (High Grade v High Yield), i.e. from BBB to BB.
- CAPM apparently takes no account of any volatility in earnings / cash flows which may make a firm a good or bad borrower (Stable earners are good borrowers). However, firms with volatile earnings are likely to have a higher β than those with stable earnings, although the link is through a calculated β rather than a direct connection.
- It takes no account of asset protection in that high value and marketable assets allow for higher borrowing.
- It takes no account of the added disciplines required from borrowing, the costs of ensuring that managers act properly as the agents of shareholders in the leveraged / riskier firm, or the loss of flexibility (acquisitions / investments etc) by taking on high debt and thus potentially giving more control to lenders.
- On a similar theme, it takes no account of fashion or the pressure from investors and analysts and the tendency to need to stick to what the peer group does.
- It makes no requirement for any assumptions about earnings. For instance, according to CAPM theory a firm with no earnings could be persuaded to have a higher debt than one with high earnings, whereas in practice a firm with no earnings would probably not be permitted to borrow by any lender.

It is probably this last issue which causes the greatest problem with relying on the CAPM, and market practice has moved on to consider earnings as a key component to establish leverage.
However, the theory has broadly stood the test of time and crucially gives management guidance on two vital issues:

- It indicates a hurdle rate (i.e. a risk-weighted required minimum rate of return) for a given capital structure
- It estimates a minimum WACC and hence an ideal gearing ratio

It is also a good source of education and examination material!

6 Alternative approaches to the financing decision

There are alternatives to the CAPM model available, which enable the finance professional to make up for its shortcomings.

6.1 Multiples

Firstly, and probably most importantly, is the concept of deciding debt levels by multiples. This concept is borrowed from the principles of valuation, where a firm or business segment of a firm can be valued according to standard multiples.

Most practitioners have come across conversations with investment bankers where they value a business or division by multiples of some measure of the business, typical ones being turnover, profits or EBITDA. Such valuations are usually based on the latest deal, thus making the technique heavily influenced by fashion. Many businesses of course are routinely valued in such ways, with smaller businesses in particular valued by turnover multiples. The same approach can be used in terms of debt capacity and tranches of debt can be proposed based in terms of EBITDA.

Example 2: Multiples

Amalgamated Engineers Inc (AEI) is a global business supplying a variety of engineering solutions to a wide variety of customers, from consumer products to control systems for capital installations. It needs to refinance and needs to know how much debt finance it can raise. It has EBITDA of USD 310 million and its bankers tell management that deals have recently been transacted successfully as follows:

Senior bank debt (secured on real assets) at	3 X EBITDA
Junior bank debt (2nd charge on secured assets) at	3.5 X EBITDA
High Yield bonds (heavily subordinated and only senior to equity) at	6.5 X EBITDA

As well as maximising bank debt AEI also requires a guarantee facility (to allow issuance of instruments such as advance payment guarantees and performance bonds), although these are not counted as debt by the senior bank lenders or indeed the other lenders.

Maximum funds available are therefore USD 2,015 million and calculated as follows:

	Multiple of EBITDA	USD millions	Actual drawn debt		Facility
EBITDA		310			
SENIOR					
Drawn senior	3	930			
made up as					
Term loan		800	800		800
Revolver drawn		130	130		130
Revolver undrawn		120		doesn't count as debt	120
plus					
Guarantee Facility		400		doesn't count as debt	400
JUNIOR					
Capacity for total drawn debt	3.5	1,085			
less drawn senior		(930)			
Possible amount		155			
Actual amount (2nd charge Facility)		150	150		150
DEEPLY SUBORDINATED					
Capacity for total drawn debt	6.5	2,015			
less drawn senior		(930)			
less drawn junior		(150)			
Possible amount		935			
Actual amount - High Yield		900	900		900
TOTAL			1,980		2,500

In this case AEI can arrange facilities totalling USD 2,500 million based on these multiples, in fact exceeding the theoretical maximum of USD 2,015 million because part of the revolving credit facility and all of the guarantee facility have been excluded from the multiples calculation. The total actual debt counted in the calculation is USD 1,980 million, i.e. within the USD 2,015 million debt capacity limit.

In this case, Amalgamated Engineers plc have used this approach to calculate their maximum

debt capacity (by multiples) and then they would use equity financing as a plug to fill in any remaining gaps. The cost of capital and β and debt / assets are nowhere to be seen!

The multiples approach can be applied to many different situations and indeed one method of using it is to treat the approach as an extension of ratio analysis. In that case all sorts of ratios or multiples can be brought into the equation. Typical ratios for debt capacity or credit quality will then include:

- Multiples of EBITDA
- Interest cover compared to EBIT or EBITDA
- Debt as percentage of assets or equity (book or market) (Leverage / gearing)
- Funds flow / debt
- Cash flow / debt

The relevance of each will depend on the nature of the business. For example, a property company might focus on debt as a percentage of assets as its key ratio. You might recognise some of the ratios as those used by credit rating agencies and indeed some statistics around these can be seen on ***page 80 of Applied Corporate Finance, by Aswath Damodaran, 4th edition***. One possible approach to deciding the leverage in a business is to target a credit rating and this may well imply that certain ratios are also therefore targeted.

While the validity of these ratios can be criticised (e.g. EBITDA as a proxy for cash flow does not take account of capital expenditure) nevertheless if the market uses them, we must understand their influence.

6.2 Adjusted present value

Read Chapter 8, pp 376 - 381 from Applied Corporate Finance, by Aswath Damodaran, 4th edition.

This introduces Adjusted Present Value. Damodaran shows how APV can be a key alternative to the CAPM approach and goes from valuation to optimisation of capital structure.

Like the CAPM approach APV finds the ideal capital structure by considering at what point the valuation of a firm is maximised, i.e. at what point the cost of capital is minimised. APV thus uses a valuation method to find an optimum capital structure – similar in principle to the CAPM approach.

Value of the firm using APV comprises:

	The value of the *unlevered* firm
Add	The value of the tax benefits of debt
Less	Expected bankruptcy costs / costs of financial distress

Where:

Value of the unlevered firm = $\dfrac{(\text{After tax operating cash flow to the firm})}{K_{eu} - g}$

Value of the tax benefit of debt = Tax rate x debt

Expected bankruptcy cost = Probability of bankruptcy x cost of bankruptcy

As leverage rises, both the tax shield and the cost of bankruptcy go up, but at different rates. There will be a point where value is maximised. Although APV is an excellent tool when gearing is expected to change (e.g. a project which pays down debt over the project life, or if acquisitions are anticipated) it suffers from broadly the same weaknesses as the CAPM as it borrows some principles from it. One of its strongest concepts, however, is the use of the value of the unlevered firm, using un-geared β, as it picks out the financial risk so well.

6.3 Debt capacity

One approach to this problem which is probably not very fashionable is to use the concept of debt capacity in a business. The broad principle here is to establish a number for the amount of debt that a particular business can support. At the absolute maximum, there is a borderline situation between control remaining with shareholders and control falling to lenders (as the firm defaults, being over its debt capacity). We presume that the maximum limit is the maximum the lenders are happy to lend on the basis that they expect to recover their money if the borrower fails and becomes unable to meet its payment obligations to its lenders and control falls to the lenders. At that stage the share value is likely to be at or near zero (the shares are worthless because debt holders are due all the remaining cashflows from the business), with perhaps just some optionality remaining in the share price.

At the maximum limit, while shareholders are in control and with a workable business model, the business will continue to meet its payment obligations. There is in fact a chance of high equity returns. Note that this is almost the model for the highly structured private equity approach to funding.

The debt capacity concept is then useful for strategic decisions around debt levels. If management can establish their company's debt capacity, then they can choose a level below this as a target, aware that they should be able to raise further funds if necessary to meet a liquidity crisis.

It is not easy to establish debt capacity, although there are several techniques available which could be used. Here are some examples, which are expanded on in the following sections.

Exhibit 2: Debt capacity

Cash flow available to service debt	A given annual cash flow can service a certain amount of debt. Standard financial formulae can be used to approach this, such as using a yield to maturity as an IRR% to calculate debt principal based on the maximum amortisation a company can afford.
Percentage of asset value	If the firm owns certain marketable assets, such as property, transport assets (aircraft, vehicles etc.), plant and equipment, brand names and so on, these can easily be sold in the event of borrowers taking control, allowing debt to be supported.
Break up of a conglomerate	If a firm comprises several different business lines, each with a distinct value which can be ascertained by looking at its competitors and peers, this could allow debt to be supported.

Multiples	Certain multiples are common in debt markets

Example 3: Debt capacity

Water Water Everywhere plc (WWEP) supplies water to consumers and businesses in its catchment area. It has steady cash flows and a long investment programme so that a typical annual cash flow would be as follows:

Pre financing cash flows	£ millions
Profit	80
Depreciation	20
Taxation	(25)
Capital expenditure	(30)
Working capital movement	(5)
Cash generated from operations	40

It thus has £40 million cash flow to service investors. If we assume that all of this is available to pay interest, then debt capacity (ignoring tax relief) is as follows:

Interest rate, all in	Debt capacity in £ million
1%	4,000
2%	2,000
5%	800
10%	400

It would not be able to repay any debt under these extreme conditions, but on the basis that as a utility its revenues are almost certainly inflation linked, then over time and assuming that real interest rates are positive; its debt will fall in real terms, a de facto repayment of debt. WWEP therefore only needs to be able to roll over its debt as it matures. WWEP would have taken a conscious decision not to pay any dividends but here we are looking at the absolute limit. The levels of debt shown give a boundary to inform decision making around debt levels.

Example 4: Debt capacity

Preppy Property Inc (PPI) is a property company specialising in renting apartments to recent graduates from top universities. Its business model is to buy portfolios of properties with mortgage finance on the portfolio, typically of about 20 properties in each one. The rental stream off the properties comfortably exceeds the cost of debt although there is clearly a large interest rate risk in this model. Most lenders will permit mortgages of 80% of loan to value, but PPI has a policy of raising loans to 70% of value, raising the funds from a mixture of retained profit, property value increases (allowing re-mortgaging) and new equity. It is aware that its debt capacity is higher than this but the approach gives flexibility in times of stress and allows time for decisions to be made if actual borrowing needs increase. Note that in times of stress, lenders will

reduce loan to value limits.

For PPI, we can see that this approach has become a financial strategy, as it will borrow more in boom times, but may have to de-leverage if property values fall, by selling properties.

6.4 Trade off model

Read Chapter 7, pp 310 - 320 from Applied Corporate Finance, by Aswath Damodaran, 4th edition

This reading introduces the advantages and disadvantages of debt and is a qualitative introduction to the Tradeoff model. Issues such as the discipline of debt, agency costs and financial flexibility all creep in, elements which are difficult to quantify.
Some issues such as the tax benefit of debt and bankruptcy cost are adopted in the Cost of Capital approach but the disciplines of debt and financial flexibility are not.

6.5 Pecking order theory

This is a relatively straight forward description of a practical approach that managers have for raising funds. After Myers (1984)[2] managers raise funds in the following order:

1. Internal financing from retained profits, adjusted by dividend payouts
2. Draw down of cash balances
3. First step at borrowing, with relatively risk free debt (Investment grade characteristics, High Grade)
4. Further borrowing, resorting to riskier debt as leverage rises, going as far as the markets allow (i.e. using the firm's entire debt capacity) (Speculative grade characteristics, High Yield)
5. Beyond this point - when all else fails, the firm raises equity

This is an approach of least effort, so that managers do the next easiest thing. Its problem is that is not predictive and does not give us an answer as to what debt levels should be. We don't know how much debt we can raise until we try and then we might resort to a different model. It is however, possible to construe this as a financial strategy, with managers simply doing the easiest possible thing to finance the business. From a practical perspective it should also fit with shareholders' aims, providing them with a dividend stream, reinvesting excess cash in the business, and borrowing as appropriate and asking shareholders to put their hands in their pockets only if really necessary.

7 Credit risk-related issues on the leverage decision

In this reading so far, we have seen how leverage can improve the return to shareholders, which is a good thing, at the expense of making that return more risky. The leverage decision is very much about getting that balance right but in striking that balance, many constraints are put in our way. We have seen several of these in the reading, mostly in the examples, ranging from interest rates, to constraints by lenders in the form of some leverage limit. Leverage, however

[2] S. Myers, the capital structure puzzle, Journal of Finance, 12 (3), 575-592, 1984.

defined, is just one measure of credit risk that can be used as a constraint and it is useful at this stage to consider some other constraints on the leverage decision.

7.1 Life cycle of the product / market and the firm

Read Chapter 7, pp 294 - 300 and pp 328 - 329 from Applied Corporate Finance, by Aswath Damodaran, 4th edition

This reading covers how the life cycle of the firm affects the financing decision, an often forgotten dimension to the issues. One interesting point to come out this analysis is that it might not always be appropriate to copy the financing structure of your peers and competitors if they are at a different stage of their life cycle.

A similar analysis can be taken from the product / market life cycle. Exhibit 3 shows the revenue and profit profile of a typical successful product introduction. A risky development stage is followed, if the product is successful, by an expansion and then a maturity phase. The phases which can support borrowing are broadly only the maturity and decline phase. At any stage during introduction and expansion, the product could fail, thus risking lenders funds. Of course, the product could fail at any stage, but then no future sales are certain for any product.

Exhibit 3: Product / Market Lifecycle

Example 5: Product / market life cycle

A new shopping centre is planned by GFH plc (a small developer with no reputation as a borrower) to replace old office buildings in the centre of post industrial town Highfields. Large capital expenditure is required to clear and then build on the site but it is expected that many good brand name retailers will wish to have units on the site. Lenders decline to advance funds during the risky construction phase, but when a certain number of retailers confirm their occupation (and hence a certain rental cash flow), the project is deemed safe enough to justify debt advances.

7.2 Combination of volatility and leverage

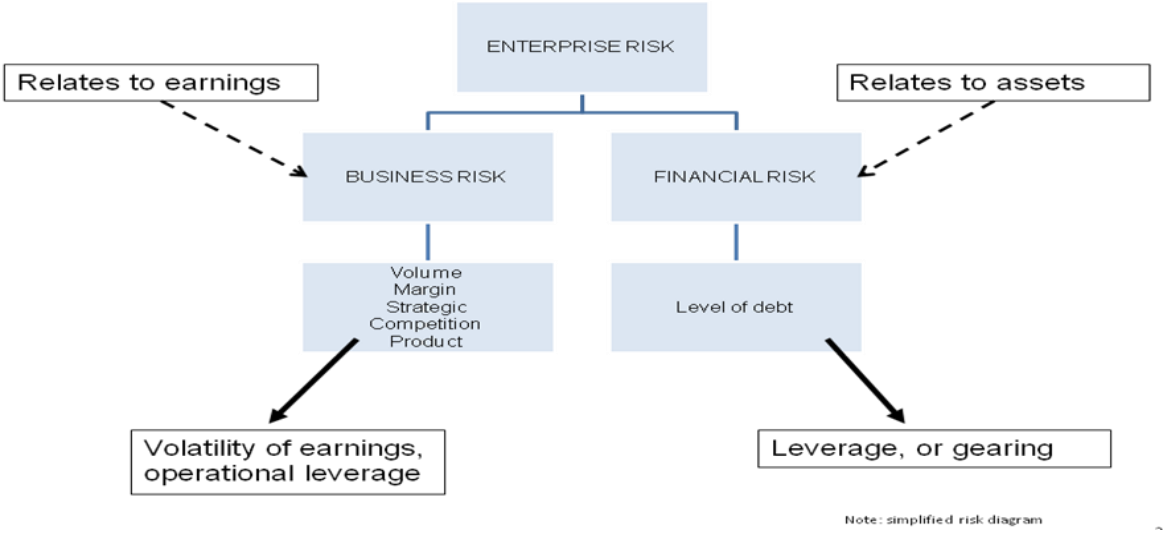
A starting point for credit risk, when viewed from the lenders' side, is that there are two aspects to viewing a customer:

- Going Concern
- Gone Concern

This is simply a shorthand representation of the two ways that there for a customer to repay their loan. A borrower can either use its assets to generate cash which will be used to repay the loan or else the borrower (or the lender following bankruptcy) can sell its assets to repay the loan. Lenders often want to be satisfied that both alternatives are possible in any borrowing case. We are familiar with the argument from a personal point of view when mortgagors want to know that our income can pay off the loan (Going concern) and that the house can also be used to pay off the loan, following default (Gone concern).

A useful way to see this is as part of a simplified risk categorisation diagram (Exhibit 4).

Exhibit 4: Simplified risk categorisation

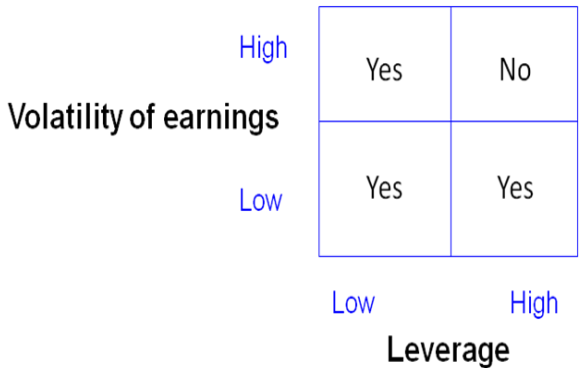


The Going Concern dimension is all about business risk and how reliable those earnings are. Clearly reliable, or less volatile earnings, are preferred by lenders, even if they might not show much growth.

The Gone Concern dimension is all about leverage or gearing and relates to the quality of the assets of the borrower, but also to the relative value of assets compared to debt.
We return to this core theme later in this module.

If a borrower has one of high volatility of earnings or high leverage, then a case for borrowing can usually be made, but it is much more difficult if a borrower has both high earnings volatility and high gearing, as shown in Exhibit 5, which shows bankable combinations of the two:

Exhibit 5: Bankability – yes /no? Combinations of earnings volatility and leverage



8 Debt market liquidity

In deciding the leverage level another factor that should always be taken into account is the availability of debt as a function of the level of leverage. Thus if debt is scarce at a particular level of leverage then this should be a factor in the leverage decision itself.

There are several factors which can be considered an influence on the availability of debt, as well as the actual level of leverage.

Exhibit 6: Factors affecting access to debt markets

Factor	Comment
Leverage	Generally, the higher the level of leverage, the less liquid are the debt markets.
Rating	Generally, the lower the rating, the less liquid are the debt markets. The most obvious distinction is between investment grade (High Grade) and sub investment grade (speculative grade or High Yield or Junk). There are periods when the High Yield markets are shut or very illiquid whereas investent grade markets are usually open. The 2000s decade was notorious for some markets swinging quickly between open and shut, the High Yield market being shut in the early and late years and very liquid in the middle years. In the mid 2010s, the High Yield market is showing very high levels of liquidity. However there are differences in market capacity within the two major categories. In High Yield, a CCC borrower will have less capacity than a BB borrower and in High Grade, a AA borrower will have more capacity than a BBB- borrower. Note that leverage is just one factor in the rating and so they are technically different issues, although targeting a rating will often start with a leverage

	target, perhaps for debt as a percentage of assets or a multiple.
Sector	Some sectors will find access to debt easier than others. For example property companies often cycle in and out of fashion: sometimes it is easy to borrow and sometimes very hard.
Size	Larger companies traditionally find it easier to borrow than smaller ones and since the financial crisis this is all the more so. (The market sees an implicit correlation between size and creditworthiness, although there can only be a limited basis for the implication.)
Ownership	This issue is closely related to size, as family owned companies tend to be less sophisticated (size implying sophistication and vice versa) and hence find it difficult to access debt whereas publicly owned companies are generally larger and find debt easier to access. However, private equity firms go through phases of being in favour and out of favour.

This debt liquidity issue is one major factor in deciding leverage and a strategy to target a credit rating is all about deciding on access to this liquidity.

We also see that certain types of borrowers from different sectors are natural occupiers of certain debt markets. For example, utilities are common issuers in high grade bond markets and especially in index linked issuance.

9 Other influences on the leverage decision

There are other reasons for firms to borrow other than to deliberately gear up to improve the return on equity. These can therefore have an influence on the leverage decision as the main component of financial policy.

Exhibit 7: Influences on the leverage decision

Reason for borrowing	Comment
Improve return on equity through leverage	This has been discussed as a major reason to borrow
Discipline	The trade-off model shows how borrowing can improve management discipline. Discipline is generally a key feature in the Private Equity model, where managers are also shareholders and gain personally from proper control of debt.
Flexibility, e.g. repayable, currency	Debt can easily be repaid and can therefore comprise temporary capital. In addition it can be raised in a wide and flexible range of different currencies, unlike equity.
Fashion	There have been periods in history when debt has been fashionable, and contrary times as well. The 2000s decade had both of these. At the start, debt was unfashionable, reversing into a 'debt party' prior to the credit crisis, before going out of fashion again at the end of the decade.
History	Managers come to firms where debt is already in place and have to manage it as they find it.

Scarcity of equity	Equity is scarce by its very nature and so its use has to be maximised, by maximising the amount of debt in the capital structure. And for private or family-owned firms, access to additional equity capital can be very limited indeed.
Tax effect	The interest on debt is generally tax deductible, thus encouraging debt and in the case of multinational firms, encouraging them to make huge efforts to ensure the maximum tax deduction in the most favourable tax regimes.
Easiness	This is partly a representation of the Pecking Order Theory. Many managers will see the need for extra capital and simply assume that they can raise it from debt, whether as part of a thought out financial strategy or not.
Confidentiality	Issuing equity is very public (at least for quoted companies) but obtaining debt is often a contract between consenting adults, thus suitable for transactions such as takeovers, where confidentiality is key.
Last resort finance	Equity cannot be raised quickly, except perhaps for subsidiaries or in private arrangements and equity is often not suitable or available as a last resort. There is often a way that further debt can be structured, to provide a last ditch chance for an ailing firm.

10 Conclusion

We have seen several ways to find the ideal capital structure, and the CAPM approach that computes a WACC will probably always be the corporate financier's favourite, chiming as it does with other approaches to corporate finance and with its academic / technical pedigree. That approach has the benefit of giving a hurdle rate for investment decisions, but also has many disadvantages. Practicalities, as always, start to creep in, and in dealing with the real world, we have to deal with its fashions and trends and so several alternative methods of deciding leverage have been described. A key takeaway is that no one method is necessarily 'right'. No treasurer can escape multiples and ratios but the best treasurers will probably calculate ideal leverage from several different directions and make recommendations to management on that basis.

However, the main conclusion from this reading is that leverage is very much the starting point for all elements of financial strategy. Only when leverage is decided can the level of credit risk be considered, credit ratings targeted, debt markets identified, pricing ranges understood, corporate structures assessed, investment benchmarks established, dividend policy unleashed, bank relationship policy worked out and so on.